PLANNING AND BUILDING DEPARTMENT

PLANNING DIVISION

https://www.edcgov.us/Government/Planning

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(530) 573-3330
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NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

NOTICE IS HEREBY GIVEN that the County of El Dorado, as lead agency, has prepared a Mitigated Negative Declaration (MND) for the below referenced Project. The Draft MND analyzes the potential environmental effects associated with the proposed Project in accordance with the California Environmental Quality Act (CEQA). This Notice of Intent (NOI) is to provide responsible agencies and other interested parties with notice of the availability of the Draft MND and solicit comments and concerns regarding the environmental issues associated with the proposed Project.

LEAD AGENCY: County of El Dorado, 2850 Fairlane Court, Placerville, CA 95667

CONTACT: County Planner: Evan Mattes, 530-621-5994

PROJECT: CCUP21-0008/Archon

PROJECT LOCATION: The property, identified by Assessor's Parcel Number 095-030-036, consisting of 114.69 acres, is located on the south side of Omo Ranch Road and east of Paul Summer Road, in the Somerset area, Supervisorial District 2.

PROJECT DESCRIPTION: Commercial Cannabis Use Permit (CCUP) for the construction and operation of a cannabis cultivation facility on a 114.69-acre parcel. The project would consist of approximately 10,000 square feet (sf) of mixed-light mature cannabis canopy grown in six greenhouses of various sizes and 17,640 sf of outdoor nursery cultivation area. Additional support structures include 1,200-sf pesticide and agricultural chemical storage area, 1,200-sf harvest storage area, 625-sf compost area, and a 1,200-sf parking area. The applicant would access power from an on-site solar photovoltaic panel array and energy storage system.

PUBLIC REVIEW PERIOD: The public review period for the Draft MND set forth in CEQA for this project is **30** days, beginning **June 24, 2024**, and ending **July 23, 2024**. Any written comments must be received within the public review period. Copies of the Draft MND for this project may be reviewed and/or obtained in the County of El Dorado Planning and Building Department, 2850 Fairlane Court, Placerville, CA 95667, during normal business hours or online at https://www.eldoradocounty.ca.gov/Services/Businesses/Cannabis-Information/Cannabis-Current-CEQA-Documents

Please direct your comments to: County of El Dorado, Planning and Building Department, County Planner: Evan Mattes, 2850 Fairlane Court, Placerville, CA 95667 or EMAIL: planning@edcgov.us

PUBLIC HEARING: A public hearing before the Planning Commission has not been scheduled. Once that date has been determined, a public notice will be issued.

COUNTY OF EL DORADO
PLANNING AND BUILDING DEPARTMENT
KAREN L. GARNER, Director
June 21, 2024

DRAFT MITIGATED NEGATIVE DECLARATION

FILE: CCUP21-0008

PROJECT NAME: Archon

NAME OF APPLICANT: Kevin McCarty

ASSESSOR'S PARCEL NO.: 095-030-036-000 **SECTION:** 1 **T:** 8N **R:** 12E

LOCATION: The property, identified by Assessor's Parcel Number(s) 095-030-036-000, consisting of approximately 114.69 acres, is located on the south side of Omo ranch Road, east of Paul Summer Road, in the Somerset area.

☐ **GENERAL PLAN AMENDMENT: FROM: TO:**

☐ **REZONING: FROM: TO:**

☐ **TENTATIVE PARCEL MAP** ☐
SUBDIVISION (NAME):

☒ **SPECIAL USE PERMIT TO ALLOW:** Commercial Cannabis Use Permit (CCUP) for the construction and operation of a cannabis cultivation facility on a 114.69-acre parcel. The project would consist of approximately 10,000 square feet (sf) of mixed-light mature cannabis canopy grown in six greenhouses of various sizes and 17,640 sf of outdoor nursery cultivation area. Additional support structures include 1,200-sf pesticide and agricultural chemical storage area, 1,200-sf harvest storage area, 625-sf compost area, and a 1,200-sf parking area. The applicant would access power from an on-site solar photovoltaic panel array and energy storage system.

☐ **OTHER:**

REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:

☐ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

☒ **MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

☐ **OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and determined that the project will not have a significant impact on the environment. Based on this finding, the Planning Department hereby prepares this MITIGATED NEGATIVE DECLARATION. A period of thirty (30) days from the date of filing this mitigated negative declaration will be provided to enable public review of the project specifications and this document prior to action on the project by COUNTY OF EL DORADO. A copy of the project specifications is on file at the County of El Dorado Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

This Mitigated Negative Declaration was adopted by the _____on _____.

_____
Executive Secretary

Archon Farms
Cannabis Cultivation Project
Public Review Draft
Initial Study/Mitigated Negative Declaration

Prepared for:

County of El Dorado Planning and Building Department
2850 Fairlane Court
Placerville, CA 95667

Prepared by:

HELIX Environmental Planning, Inc.
1180 Iron Point Road, Suite 130
Folsom, CA 95630

May 2024

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TABLE OF CONTENTS

Section **Page**

TABLE OF CONTENTS (cont.)

LIST OF TABLES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AEU	Amador El Dorado Unit
ADT	average daily trips
AFY	acre-feet per year
amsl	above mean sea level
APCD	Air Pollution Control District
ATV	all-terrain vehicles
AST	above-ground storage tank
Bcf/year	billion cubic feet per year
BMP	Best Management Practices
BRA	Biological Resources Assessment
BTU	British thermal units
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
CalARP	California Accidental Release Prevention
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CCUP	Commercial Cannabis Use Permit
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
cf	cubic feet
CFR	Code of Federal Regulations
CH_4	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIWMB	California Integrated Waste Management Board
CNPS	California Native Plant Society
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
County	El Dorado County
CPUC	California Public Utilities Commission
CUP	Conditional Use Permit
CRHP	California Register of Historic Places
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act

ACRONYMS AND ABBREVIATIONS (cont.)

dB	decibels
dBa	decibels with A weighing
dbh	diameter at breast height
DCC	Department of Cannabis Control
DPM	diesel particulate matter
DT	Detection Threshold
DTSC	Department of Toxic Substances Control
EDC ALUC	El Dorado County Airport Land Use Commission
EDCAQMD	El Dorado County Air Quality Management District
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
EPS	Environmental Permitting Specialist
ESA	Endangered Species Act
°F	degree Fahrenheit
FAA	Federal Aviation Administration
FDCP	Fugitive Dust Control Plan
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FPA	Forest Practices Act
Ft	Feet
FPR	Forest Practice Rules
GHG	greenhouse gas
GWP	Global Warming Potential
GWh	gigawatt hours
H2S	hydrogen sulfide
HAPs	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons
HMBP	Hazardous Materials Business Plan
HR-6	House of Representatives Bill 6
IPCC	Intergovernmental Panel on Climate Change
IBC	Important Biological Corridor
In/sec	inches per second
IS/MND	Initial Study and Mitigated Negative Declaration
kWh	kilowatt hours
LDR	Low Density Residential
LCFS	Low Carbon Fuel Standard
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
mPa	micro-Pascals
MR	Mineral Resource
MS4	Municipal Separate Storm Sewer Systems
MT	metric tons
MRZ	Mineral Resource Zone

ACRONYMS AND ABBREVIATIONS (cont.)

NAAQS	National Ambient Air Quality Standards
NEHRP	National Earthquake Hazards Reduction Program
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NFIP	National Flood Insurance Program
NF_3	nitrogen triflouride
NHT	National Historic Trails
NHTSA	National Highway Traffic Safety Administration
NIC	Natural Investigations Company
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOA	naturally occurring asbestos
NPPA	Native Plant Protection Act
NPDES	National Pollutant Discharge Elimination Program
NR	Natural Resources
NRCS	Natural Resources Conservation Service
NRT	National Recreation Trails
NRHP	National Register of Historic Places
NSAQMD	Northern Sierra Air Quality Management District
NST	National Scenic Trails
NTS	The National Trails System
NSF	National Science Foundation
O_3	ground-level ozone
OEHHA	Office of Environmental Health Hazard Assessment
ORMP	Oak Resources Management Plan
Ozone Attainment Plan	Ozone Attainment Plan and Reasonable Further Progress Plan
OSHA	Occupational Safety and Health Administration
PFCS	perfluorocarbons
PG&E	Pacific Gas and Electric
$PM_{2.5}$	Particulate Matter 2.5
PM_{10}	Particulate Matter 10
PPV	peak particle velocity
PRC	Public Resources Code
QSD	Qualified SWPPP Developer
RCRA	Resource Conservation and Recovery Act
RF	radio frequency
RL-20	Range Land 20 acres
RMP	risk management plan
RMS	root means square
RPF	Registered Professional Forester
RR	Rural Residential
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
sf	square feet
SF6	sulfur hexafluoride
SHMA	Seismic Hazards Mapping Act
SMAQMD	Sacramento Metropolitan Air Quality Manage District

ACRONYMS AND ABBREVIATIONS (cont.)

SMARA	Surface Mining and Reclamation Act of 1975
SMP	Site Management Plan
SO_2	sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SRA	State Responsibility Area
SUV	sport utility vehicles
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCR	Tribal Cultural Resources
THP	Timber Harvest Plan
TPZ	Timber Production Zone
UAIC	United Auburn Indian Community
UBC	Uniform Building Code
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USFS	United States Forest Service
USGS	United States Geological Survey
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Travelled

EL DORADO COUNTY PLANNING SERVICES
2850 FAIRLANE COURT
PLACERVILLE, CA 95667

INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Project Title: Commercial Cannabis Use Permit CCUP21-0008/Archon Farms, Inc.

Lead Agency Name and Address: El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

Contact Person: Evan Mattes, Senior Planner | **Phone Number:** (530) 621-5355

Applicant's Name and Address: Kevin W. McCarty; 701 12th Street, Suite 201, Sacramento CA 95814

Project Agent's Name and Address: Same as applicant

Project Engineer's Name and Address: RFE Engineering; 2260 Douglas Boulevard, Suite 160, Roseville CA 95661

Project Location: The project site is located in central El Dorado County at 5600 Omo Ranch Road, Somerset, CA, 95684. The project site is located southwest of the community of Somerset, and it is generally situated south of Omo Ranch Road and east of Paul Summer Road. See Figure 1 for the Site and Vicinity Map and Figure 2 for an Aerial Map of the project site.

Assessor's Parcel Number (APN): 095-030-036-000 **Acres:** 114.69

Sections: USGS Omo Ranch 7.5-minute Quadrangle, Section 1 of Township: 8N, Range: 12E

General Plan Designation: Natural Resources (NR)

Zoning: Rural Lands, 160-acre Minimum (RL-160)

Description of Project: The project applicant is seeking a Commercial Cannabis Use Permit (CCUP) for the construction and operation of a cannabis cultivation facility on a 114.69-acre parcel. The project would consist of approximately 10,000 square feet (sf) of mixed-light mature cannabis canopy grown in six greenhouses of various sizes and 17,640 sf of outdoor nursery cultivation area. Additional support structures include 1,200-sf pesticide and agricultural chemical storage area, 1,200-sf harvest storage area, 625-sf compost area, and a 1,200-sf parking area. The applicant would access power from an on-site solar photovoltaic panel array and energy storage system.

Surrounding Land Uses and Setting:

	Zoning	General Plan	Land Use/Improvements
Project Site	Rural Land (RL-160)	Natural Resources (NR)	Undeveloped, wooded to densely wooded land
North	Forest Resource (FR-40)/Transportation Corridor (TC)	NR	Omo Ranch Road, timber production land
South	Rural Land (RL-160)/Open Space (OS)	NR	Wooded to densely wooded land
East	Forest Resource (FR-160)/Rural	NR	Undeveloped, timber production land

	Lands (RL-160)		
West	Rural Land (RL-160)	NR	Paul Summer Road, timber production land

Environmental Setting: The project property is located in a mountainous region with land that generally slopes downward from northeast to southwest. The project would include one cannabis cultivation area located in the central portion of the project property. The cannabis cultivation area gently slopes from northwest to southeast, and vegetation in the area proposed for cultivation is undeveloped sparsely wooded land. The project property has a small watercourse/ riparian edge located approximately 350 feet northwest of the proposed cultivation area. Site elevations range from approximately 3,445 ft above mean sea level (amsl) in the northeast area of the property to approximately 3,120 ft amsl in the southern edge of the property. The southern half of the parcel drains west into Brownsville Creek, then Cedar Creek. The northern half is drained by an ephemeral watercourse approximately 350 feet north of the project area which flows west into Cedar Creek and then into Scott Creek, eventually flowing into the Cosumnes River. The project property is bordered to the east by undeveloped timber production land; to the south by wooded to densely wooded land; to the west by open space; and to the north by Omo Ranch Road and timber production land. The project site contains two terrestrial vegetation communities: Mixed Oak/Conifer Forest and Woodland and Chaparral. These vegetation communities are discussed in further detail in Section 7.IV, Biological Resources.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

1. El Dorado County – Grading permits, Building permits, Commercial Cannabis Operating Permit
2. Pioneer Fire Protection District – Building plan review
3. Department of Cannabis Control (DCC) – Cultivation License
4. State Water Resources Control Board (SWRCB) – Notice of Applicability under the Cannabis General Order
5. California Department of Fish and Wildlife (CDFW) – General Permit, Lake or Streambed Alteration Agreement

1.0 INTRODUCTION

This document is an Initial Study and Mitigated Negative Declaration (IS/MND) that has been prepared in accordance with the California Environmental Quality Act (CEQA) for the proposed Archon Farms Cannabis Cultivation Project (proposed project). This IS/MND has been prepared in accordance with the CEQA Public Resources Code (PRC) Sections 21000 et seq., and the State CEQA Guidelines. Pursuant to the State CEQA Guidelines Section 15367, El Dorado County (County) is the lead agency for CEQA compliance.

An Initial Study is conducted by a CEQA lead agency to determine if a project may have a significant effect on the environment. In accordance with the State CEQA Guidelines Section 150649(a)(1), an Environmental Impact Report (EIR) must be prepared if the Initial Study indicates that the proposed project may have a potentially significant impact on the environment. According to State CEQA Guidelines Section 15070, a Negative Declaration or Mitigated Negative Declaration shall be prepared when either:

a) The Initial Study shows there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or

b) The Initial Study identified potentially significant effects, but:

    1) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

    2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

If revisions are incorporated into the proposed project in accordance with the State CEQA Guidelines Section 15070(b), a Mitigated Negative Declaration is prepared. This document includes such revisions in the form of mitigation measures. Therefore, this document is a Mitigated Negative Declaration, and it incorporates all of the elements of the accompanying Initial Study.

2.0 PROJECT LOCATION AND SURROUNDING LAND USES

The proposed project would be located on an approximately 114.69-acre property in south-central El Dorado County at 5600 Omo Ranch Road, Somerset, California (38°34'35.0"N 120°35'58.3"W). The property consists of one parcel, APN 095-030-036-000 (114.69 acres), and construction and operation of the cannabis cultivation premises would occupy approximately one acre of the project property which is hereafter referred to as the "project site". The proposed project would consist of a cannabis cultivation facility that would be situated on gently sloping land and would be located in the central portion of the property. The project site is accessible via an existing gravel driveway located in the northeast portion of the property, off of Omo Ranch Road. The property is designated Natural Resource (NR) in the County's General Plan, and it is within the Rural Lands, 160-acre Minimum (RL-160) zone district.

The project property is bordered to the north by Omo Ranch Road and open space, and to the east, south, and west by densely wooded land. The project property consists of mountainous terrain with elevations ranging from approximately 3,120 ft amsl in the northwest area of the property to approximately 3,455 ft amsl along the southern edge of the property. The project would include two cannabis cultivation areas within the northeast portion of the project site, with the 17,640-sf western portion to be used as a nursery cultivation area for immature plants and the approximately 10,000-sf eastern portion to be used for mature cannabis cultivation. The project property gently slopes downward from northeast to southwest, and some grading would be required prior to development of the cannabis cultivation areas. The southern half of the parcel drains west into Brownsville Creek, then Cedar Creek. The northern half is drained by an ephemeral watercourse approximately 350 feet north of the project area which flows west into Cedar Creek and then into Scott Creek, eventually flowing into the Cosumnes River.

3.0 PROJECT DESCRIPTION

Archon Farms, Inc. is applying for a Commercial Cannabis Use Permit (CCUP21-0008) for the construction and operation of a commercial cannabis cultivation facility. The proposed project would include the construction and operation of a mixed light and outdoor cannabis cultivation facility (also referred to as the cannabis cultivation premises or premises) that would include approximately 10,000 sf of flowering mixed-light cannabis canopy and 17,640 sf of immature nursery cultivation in a fenced, designated cannabis cultivation area; a water well and tank for irrigation and storage; storage structures; parking spaces; and compost area. See Figure 3 for the site plan and Figure 4 for the site plan detail.

The components of the proposed project are described in more detail below.

Cannabis Cultivation Areas

The proposed project would include the cultivation of up to 10,000 sf of flowering mixed-light cannabis canopy within six (6) greenhouses with the following dimensions:

Table 1: Mature Cannabis Cultivation

Greenhouse	Total Area (sf)	Dimensions (feet)
Greenhouse F-1	1,680	84 x 20
Greenhouse F-2	1,440	72 x 20
Greenhouse F-3	1,440	72 x 20
Greenhouse F-4	1,800	60 x 30
Greenhouse F-5	1,800	60 x 30
Greenhouse F-6	1,440	48 x 30
Total	**9,600**	

Both immature and mature cannabis would be grown in raised beds and fabric pots and would use drip irrigation. The greenhouses would be roughly 8 ft tall and would be used for cultivation of up to 10,000-sf of mature cannabis cultivation, while immature plants would be grown in a 17,640-sf designated nursery area (Figure 4, all figures are included in Appendix A). The project would cultivate one harvest cycle per year. Cultivation soil beds would be tilled seasonally. The cannabis would be sun grown from seed to maturity on the premises, with a plan to eventually use six greenhouses for mature plant cultivation and harvest on-site. The mature plants would be transported to an off-site, third-party licensed manufacturing facility for trimming, packaging, and processing.

Construction would take place in two phases. The first phase would establish the outdoor growing area, while the second phase would convert the outdoor mature cannabis cultivation area to greenhouses. Hoop houses may be used during phase one, but the hoop houses would be for light deprivation and would not include supplementary lighting. During both phases, the nursery area would be outdoors.

Support Structures and Infrastructure

A fenced 625-sf compost area would be located just north of the cannabis cultivation area. The fence would be 6 ft high, and the compost pile would be covered with plastic and not piled higher than 5 ft. Cannabis waste would be chipped, shredded, and mulched on-site before being added to the compost pile. Additionally, two 1,200-sf structures would be constructed immediately east of the mature cultivation area and would be used for harvest storage and pesticide/agricultural chemical storage. Flammable storage would be kept in a secure, designated area. A parking area with eight (8) spaces would be located immediately north of the premises entry point (Figure 4).

Water would be obtained from an existing on-site well and water filtration system located on-site northeast of the proposed cultivation area at latitude 38° 34’ 35.8428” and longitude -120° 35’ 48.4152”. The well was constructed on-site in July 2022. The well is 480 ft deep and can provide an initial flow rate of 10 gallons per minute. This well would provide the main water supply for up to 10,000 sf of flowering outdoor cannabis canopy and miscellaneous

support and sanitary needs. The proposed project is estimated to demand approximately 159,000 gallons of water annually. A 5,000-gallon water tank would be installed just north of the cannabis cultivation area.

Power for the project site would be provided by a proposed on-site solar photovoltaic panel array and energy storage system. A generator may be used as a secondary or back-up power source.

Employees, Daily Trips, and Hours of Operation

Day-to-day operations would be handled by an on-site manager who would oversee project employees. These employees would include 4 to 5 full-time workers and 7 to 8 part-time, seasonal employees to be present during harvest. The total number of employees present on-site is not expected to exceed 12 at any point in time. The project is expected to generate at most 8 truck deliveries per day to supply nutrients, soil, or other growth medium, supplies for cultivation operations, etc. Therefore, the project is conservatively expected to generate up to 36 daily commuter trips and 8 daily truck trips under busiest assumptions but would generate far fewer trips on most days. The hours of operation for the project would be 7:00 a.m. to 4:00 p.m., with extended hours during harvest.

Security Plan

Perimeter security to secure the cultivation premises from natural wildlife and provide visual obscurity from the existing private road would be provided by 6-foot-high wildlife exclusionary fencing topped with barbed wire and a locked gate. Security cameras would be installed on the fence and on buildings and would stream live video to a service that would be watched 24/7. Motion-sensor security lighting would be mounted on the fence and on buildings. Any potential temporary employees, government personnel with business on-site presenting valid identification, and any other visitors would be escorted through the limited access areas of the site. In the case of an armed robbery, the applicant would cooperate to the extent necessary to maintain safety while deescalating the situation and would report the incident to authorities as soon as it is safe to do so.

Site Access/Parking

The site can be accessed from the north via a 12-ft wide gravel driveway that leads south from Omo Ranch Road to a parking area northeast of the cannabis cultivation area, and the project applicant would improve and maintain quality of the private road leading to the premises. These improvements would include laying down gravel and providing for the clearing and leveling of the premises area. The existing road has been widened from 12 to 20 feet, and proposed improvement activities would include leveling and adding gravel. Two emergency vehicle turnouts would be located along the access road, and the driveway area near the street would be improved with gravel. A knox box would be located at the entrance to the property. There is an existing turn-around area adjacent to the cultivation area along the internal dirt road that would facilitate turnarounds as needed, including for emergency vehicles.

The cannabis cultivation area would be adjacent to the parking area. Eight (10 ft x 22 ft) parking spaces would be constructed northeast of the cannabis cultivation area between the property entrance and the cultivation site along the gravel road.

Hazardous Materials and Cannabis Waste

All cannabis waste would be stored and disposed of in accordance with applicable County and State regulations. Any organic materials would be chipped, shredded, or otherwise broken down so that it could not be used for any purpose except compost. Cannabis waste would be composted in the on-site designated, secured compost area. The 625-sf compost area, north of the cultivation area, would be enclosed with a 6-foot-high fence. Most waste would be composed. Recyclables and trash would be hauled off by the usual trash service in the area. Anything too large would be self-hauled by the applicant to one or more of the following:

- A staffed, fully permitted solid-waste or transformation facility
- A staffed, fully permitted composting facility or staffed composting operation
- A staffed, fully permitted in-vessel digestion facility of staffed in-vessel digestion operation
- A staffed, fully permitted transfer/processing facility or staffed transfer/processing operation

- A staffed, fully permitted chip-and-grind operation

Hazardous materials proposed for on-site use would include organic pesticides and soil amendments, which would be handled and used in accordance with California Department of Food and Agriculture. Soil amendments would be mixed as part of the cannabis operation. Petroleum products, such as gasoline, diesel fuel, and engine oil used on-site would be stored in a proposed 1,200 sf storage area located east of the cannabis cultivation area. Flammable storage materials would be kept in a designated area within the proposed storage buildings.

Construction Schedule and Equipment

Project construction would occur in two phases: the first phase would occur immediately upon project approval and acquisition of the required permits from the County and would establish an outdoor cultivation area with hoop houses. Phase two would include the construction of six greenhouses for cultivation of approximately 10,000 sf of mature mixed-light cannabis. As part of the project, a 6-foot-tall fence topped with barbed wire would be constructed around the cannabis cultivation area, including approximately 10,000 sf of mature mixed-light cannabis and 17,640 sf of immature cultivation. A 5,000-gallon water storage tank would be installed north of the cultivation premises and west of the 625-sf compost area. Two 1,200-sf sheds for harvest and agricultural chemical/pesticide storage would be located immediately east of the proposed mature canopy area. Eight gravel parking spaces would be constructed immediately north of the proposed cultivation area in a 1,200-sf parking area. Minimal grading would be necessary as all proposed cultivation areas would be developed in previously-disturbed areas (i.e. cut less than 4 feet, fill less than 3 feet). Grading would only occur at the edges of the project site and would be balanced on-site. The owner/applicant would till the planting areas and maintain the gravel driveway and parking spaces as necessary using a small tractor with a box scraper. Heavy equipment, including a bulldozer, would be used along with chainsaws during site clearing/development. Total ground disturbance from implementation of the proposed project would not exceed 1-acre, and each construction phase would have an estimated duration of approximately 3 months.

4.0 PUBLIC REVIEW AND REQUIRED APPROVALS

This IS/MND is being circulated for public and agency review for a 30-day period. Written comments on the IS/MND should be submitted by mail or e-mail to the following:

Evan Mattes, Senior Planner
2850 Fairlane Court
Placerville, CA 95667
Evan.Mattes@edcgov.us

Following the close of the written comment period, the IS/MND will be considered by the lead agency (El Dorado County) in a public meeting and will be adopted if it is determined to be in compliance with CEQA.

Public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement) include the following:

- **El Dorado County** – Grading permits, Building permits, Commercial Cannabis Operating Permit;
- **Pioneer Fire Protection District** – Building plan review;
- **Department of Cannabis Control** – CalCannabis Cultivation License; and
- **State Water Resources Control Board** – Notice of Applicability under the Cannabis General Order.
- **California Department of Fish and Wildlife (CDFW)** – General Permit, Lake or Streambed Alteration Agreement

5.0 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and 2) has been addressed by Mitigation Measures based on the earlier analysis as described in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards; and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or Mitigation Measures that are imposed upon the proposed project, nothing further is required.

Signature: Evan Mattes Date: 6-5-2024

Printed Name: Evan Mattes, Senior Planner For: El Dorado County

Signature: Date: 6/5/24

Printed Name: Aaron Mount, Planning Manager For: El Dorado County

6.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources		Cultural Resources		Energy
	Geology / Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Hydrology / Water Quality		Land Use / Planning		Mineral Resources
	Noise		Population / Housing		Public Services
	Recreation		Transportation / Traffic		Tribal Cultural Resources
	Utilities / Service Systems		Wildfire	**X**	Mandatory Findings of Significance

7.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and

    b. the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL IMPACTS

I. AESTHETICS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			**X**	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				**X**
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			**X**	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

Environmental Setting

The project property is situated in the mid-elevations of the northern Sierra Nevada, in an area of chaparral and mixed oak/conifer forest and woodland. The cannabis cultivation premises consists of mainly undeveloped, sparsely forested land. The project would include one cannabis cultivation area located within the central portion of the project property containing one area for 17,640 sf of immature nursery cultivation and one area for up to 10,000 sf of mature cannabis cultivation in 6 greenhouses. Site elevations range from approximately 3,445 ft amsl in the northeast area of the property to approximately 3,120 ft amsl along the southern edge of the property. The project property is bordered to the east by undeveloped timber production land; to the south by wooded to densely wooded land; to the west by open space; and to the north by Omo Ranch Road and timber production land. The setting is very rural and is not visible from any public vantage points.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the proposed project.

State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans 2023). The State highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

The nearest officially designated or eligible State scenic corridor in the vicinity of the project site is designated US Route 50, approximately twelve miles north of the project site (Caltrans 2023). The project site is not visible from any point on US Route 50.

Title 3 Section 8304(c) of the California Code of Regulations states: "All outdoor lighting used for security purposes shall be shielded and downward facing."

Section 8304(g) states: "Mixed-light license types of all tiers and sizes shall ensure that lights used for cultivation are shielded from sunset to sunrise to avoid nighttime glare."

Local Laws, Regulations, and Policies

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply in particular districts based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines. Included are requirements for setbacks and allowable exceptions, the location of public utility distribution and transmission lines, architectural supervision of structures facing a state highway, height limitations on structures and fences, outdoor lighting, and wireless communication facilities. See below for Section 130.14.170, Outdoor Lighting, of the County Code:

> "All outdoor lighting, including residential outdoor lighting, shall be hooded or screened as to direct the source of light downward and focus onto the property from which it originates and shall not negatively impact adjacent properties or directly reflect upon any adjacent residential property."

Visual resources are classified as 1) scenic resources or 2) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the County's scenic views and resources is presented in Table 5.3-1 of the El Dorado County General Plan EIR (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of SR 89 within the County, and those portions of SR 88 along the southern border of the County.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the United States Forest Service (USFS), which, under the Wild and Scenic Rivers Act, may designate rivers or river sections to be Wild and Scenic Rivers. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

Impact Analysis:

a. **Scenic Vista:** A scenic vista is defined as a viewpoint that provides expansive views of a highly-valued landscape (such as an area with remarkable scenery or a resource that is indigenous to the area) for the benefit of the public. The project property is adjacent to wooded lands in all directions, and no designated scenic vistas exist in the vicinity of the project site. Additionally, the project site would not be visible from any public road or other public viewpoint as views of the cannabis cultivation premises from any public vantage point would be obscured by vegetation and topography of the site. Therefore, while the proposed project

would introduce a new cannabis cultivation facility to the project site, it would not result in a substantial adverse effect to a scenic vista. Impacts would be **less than significant**.

b. **Scenic Resources:** US-50 is classified as an officially designated scenic highway in El Dorado County from Placerville to South Lake Tahoe (Caltrans 2023) and is located approximately 12 miles north of the project site. Therefore, the proposed project would not be visible from any designated or eligible scenic highway, and the project would have **no impact** to scenic resources within the proximity of a State scenic highway.

c. **Visual Character:** The proposed project would result in the construction of a new commercial cannabis cultivation facility. The proposed project would approximately 10,000 sf of flowering mixed-light cannabis canopy and 17,640 sf of immature nursery cultivation in a fenced, designated cannabis cultivation area; a water well and tank for irrigation and storage; storage structures; parking spaces; and compost area. The fence would be 6-feet-high and topped with barbed wire installed around the cannabis cultivation site and associated facilities. Under phase two of the proposed project, the outdoor cannabis cultivation area would be converted to six (6) mixed-light greenhouses with approximately 10,000 sf of cannabis cultivation. The proposed development may result in a change to the visual character of the site by constructing a cannabis cultivation facility on undeveloped, wooded land. However, the project site is surrounded by other wooded, privately-owned lands and is not visible from public vantage points. Therefore, the construction of the proposed project would not substantially degrade the character of the site or its surroundings or degrade the quality of views from publicly accessible vantage points, and impacts would be **less than significant**.

d. **Light and Glare**: The proposed project would result in the development of a new cannabis cultivation facility. Potential sources of light and glare include external new security lighting. Solar powered security lighting and cameras would be concentrated on select portions of the site, including the entrances of the property and cannabis cultivation area, and would be motion activated. The security lighting would be fully shielded and downward facing and would activate only when motion sensors detect movement as a means to deter and observe any potential intruders. The hours of operation for the proposed project would be from 7:00 a.m. – 4:00 p.m. with extended hours during harvest, so the potential for any nighttime light or glare related to project operations would be minimized. The operation would involve the use of supplemental lighting for mature plants. Greenhouses F-1, F-2, and F-3 would have sixteen (16) 600-Watt LED grow lights; Greenhouses F-4 and F-5 would have thirty-six (36) 600-Watt LED grow lights; and F-6 would have fifteen (15) 600-Watt LED grow lights for a total of ninety-five (95) 600-Watt LED lights. All greenhouses will be equipped with light deprivation curtains to eliminate light spillage from the supplemental lighting. With the implementation of the design standards discussed above and the requirement for the project to comply with County design standards and El Dorado County Code of Ordinances (County Code) Section 130.14.170 (Outdoor Lighting), impacts from the introduction of new light and glare would be **less than significant.**

FINDING: The proposed project would result in less than significant or no impacts to scenic vistas, scenic resources, the visual character of the project area, and from new light and glare sources. Additionally, with adherence to the County Code (Section 130.14.170 – Outdoor Lighting), any potential aesthetic impacts from nighttime light pollution would be less than significant.

II. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			**X**	
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				**X**
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			**X**	
d. Result in the loss of forest land or conversion of forest land to non-forest use?			**X**	
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Environmental Setting

There are over 100,000 acres of active farmland in El Dorado County (NIC 2020). Major crops include fruits, and there are over 80 active vineyards in the County (NIC 2020). Cattle grazed on rangeland also comprise a considerable portion of the County's agricultural production.

According to the custom Soil Resource Report for this project (NRCS 2023), the following soil map units occur on the project property:

- Aiken cobbly loam, 3 to 30 percent slopes (AgD): covers 17.3 percent of the parcel;
- Argonaut loam, seeped variant (AoB): covers 2.3 percent of the parcel;
- Cohasset loam, summits, 2 to 20 percent slopes, dry (CmB): covers 3.9 percent of the parcel
- Cohasset cobbly loam, 15 to 50 percent slopes (CoE): covers 66.2 percent of the parcel
- Josephine silt loam, 15 to 30 percent slopes (JtD): covers 7.3 percent of the parcel
- Sites loam, 15 to 30 percent slopes, C low montane (Skd): covers 3 percent of the parcel

According to the Farmland Mapping and Monitoring Program (FMMP), no Prime or Unique Farmlands or Farmlands of Statewide Importance have been identified on the project site or project property. The project site is classified as Farmland of Local Importance (CDC 2023a).

The project site contains two terrestrial vegetation communities: Chaparral and Mixed Oak/Conifer Forest and Woodland. The property has not been recently used for agriculture. The area of the property proposed for development contains mostly chaparral and forest.

Timber harvesting has historically been a major component of El Dorado County's economy (NIC 2020), and commercial timber harvesting remains locally important in portions of the County. Historically, the site has been used for commercial timber harvesting. The property is designated for Natural Resources (NR) in the County's General Plan, and it is within the Rural Land, 160-acre Minimum (RL-160) zone district.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural and forestry resources in relation to the proposed project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The FMMP, administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2023c). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2023d):

> ***Prime Farmland:*** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.
>
> ***Farmland of Statewide Importance:*** Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.
>
> ***Unique Farmland***: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.
>
> ***Farmland of Local Importance:*** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

The project site is classified as Farmland of Local Importance (CDC 2023a).

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2023e). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'Berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and charged the Board of Forestry to oversee their implementation. CAL FIRE works under the direction of the Board of Forestry and Fire Protection and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on non-federal timberland, with limited exceptions.

Local Laws, Regulations, and Policies

El Dorado County General Plan Agriculture and Forestry Element

Adopted in 2004 and amended in 2015, this element sets the County's priorities for the continued viability of agricultural and forestry activities. Goals of this element include agricultural land conservation, agricultural production, forest land conservation, and sustainable and efficient forest production (El Dorado County 2015b).

Impact Analysis:

a. **Farmland Mapping and Monitoring Program:** According to the FMMP, no Prime or Unique Farmlands or Farmlands of Statewide Importance have been identified on the project site or project property (CDC 2023a). As a result, implementation of the proposed project would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as defined by the FMMP (CDC 2023a). The site is designated as Farmland of Local Importance, but the project would involve the cultivation of cannabis, which is consistent with agricultural use of the site. The project would not involve the construction of large buildings or other pieces of infrastructure that would render the site unusable for agriculture in the future. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and impacts would be **less than significant**.

b. **Agricultural Uses:** The property is zoned as Rural Land, 160-acre Minimum (RL-160) and not under Williamson Act Contract. Cannabis cultivation is allowed on parcels zoned RL-160 with County approval of a CCUP. Therefore, the proposed project would not conflict with existing zoning for agricultural use and would not impact any properties under a Williamson Act Contract. There would be **no impact**.

c.-d. **Loss of Forest land or Conversion of Forest land:** The site contains two terrestrial vegetation communities: Chaparral and Mixed Oak/Conifer Forest and Woodland. The site is not zoned or designated as Timber Production Zone (TPZ) or another forest land use. The cannabis cultivation premises would be developed on Mixed-Oak/Conifer Forest and Woodland habitat with ground disturbance for the development of the commercial cannabis cultivation project limited to less than 1 acre. The applicant has future plans to establish various non-cannabis crops on the parcel including an orchard, food garden, and vineyard, Establishment of these crops, including the up to 1 acre cannabis cultivation project, would require the clearing of approximately 8 acres of timberland. However, small tree and shrub removal would be limited to less than 1 acre (approximately 31,865 sf) for the proposed project. Areas that are not identified as Mixed Oak/Conifer Forest and Woodland within the cannabis cultivation premises are classified as chaparral. No commercial or oak tree species have been removed for development of the site, and no oak trees are proposed for removal (14 CCR Section 895.1). Approximately 1-acre of brush and small trees would be removed as part of the project. Potential impacts to non-commercial oak resources (which are protected by the County Code) are addressed in Section 7.IV, Biological Resources. Therefore, the proposed project would not conflict with the zoning for, or cause rezoning of, forest land or timberland or result in a substantial loss or conversion of forest land, and there would be a **less than significant impact** for questions c) and d).

e. **Conversion of Prime Farmland or Forest Land:** The proposed project would develop less than 1 acre (approximately 31,865 sf) of undeveloped land into a cannabis cultivation facility on an approximately 114.69-acre property, leaving over 113 acres of the property as undisturbed. Implementation of the proposed project would not involve other changes in the existing environment which, due to their location or nature,

could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, the proposed project would not result in a substantial conversion of agricultural or forest land to non-agricultural or non-forest uses, and impacts would be **less than significant.**

FINDING: The proposed project would not conflict with existing zoning for agricultural use, TPZ, or other forest land, impact any properties under a Williamson Act Contract, or result in a substantial loss or conversion of agricultural land or forest land. Less than significant or no impacts would occur for impacts related to Agriculture and Forestry Resources.

III. AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
c. Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

Regulatory Setting:

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels designed to protect the most sensitive persons from illness or discomfort. The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for the following criteria air pollutants: particulate matter of aerodynamic diameter of 10 micrometers or less (PM_{10}), particulate matter of aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), ground-level ozone (O_3), sulfur dioxide (SO_2), and lead. Of these criteria pollutants, particulate matter and ground-level O_3 pose the greatest threats to human health. The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide (H_2S), sulfates, and vinyl chloride.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

The proposed project is located within the Mountain Counties Air Basin (MCAB), which is comprised of seven air districts: the Northern Sierra Air Quality Management District (NSAQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and El Dorado County Air Quality Management District (EDCAQMD).

Air quality in the project area is regulated by the EDCAQMD. CARB and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required to comply with CEQA. The EDCAQMD regulates air quality through the federal and State Clean Air Acts, district rules, and its permit authority.

The USEPA and State also designate regions as "attainment" (within standards) or "nonattainment" (exceeds standards) based on the ambient air quality. El Dorado County is in nonattainment status for both federal and state O_3 standards, for the state PM_{10} standard, and for the federal 24-hour $PM_{2.5}$ standard (only western El Dorado County is nonattainment for federal $PM_{2.5}$ standard) and is in attainment or unclassified status for all other pollutants (CARB 2021).

California Code of Regulations Title 3, *Food and Agriculture*, Division 8, *Cannabis Cultivation*, contains the following sections applicable to the project and relevant to the air quality analysis:

> Section 8102(s) states: [Each cultivation license application shall include the following, if applicable:] For indoor and mixed-light license types, identification of all power sources for cultivation activities, including but not limited to, illumination, heating, cooling, and ventilation.
>
> Section 8304(e) states: [All licensees shall comply with all of the following environmental protection measures:] Requirements for generators pursuant to section 8306 of this chapter.
>
> Section 8306 provides requirements for stationary and portable generators greater than 50 horsepower. It requires these to comply with the appropriate Airborne Toxic Control Measure (e.g., USEPA Tier 4 certified engines or equivalent CARB certified engine retrofits) for stationary or portable generators and includes certificates or permits that are acceptable to prove compliance. Additional compliance options are provided for generators below 50 horsepower by 2023, including limiting hours of operation, meeting certain emergency use requirements, or filter and engine requirements.

Impact Analysis:

a. **Air Quality Plan:** As mentioned previously, the MCAB is currently in non-attainment for O_3 (State and federal ambient standards), PM_{10} (State ambient standard), and $PM_{2.5}$ (federal ambient 24-hour standard). The Sacramento Regional 2008 NAAQS (National Ambient Air Quality Standards) 8-Hour Ozone Attainment Plan and Reasonable Further Progress Plan (Ozone Attainment Plan) was developed for application within the Sacramento region, including the MCAB portion of El Dorado County (EDCAQMD et al. 2017). The EDCAQMD and other Sacramento region air districts have submitted a $PM_{2.5}$ Implementation/Maintenance Plan and Re-Designation Requests to fulfill CAA requirements to re-designate the region from nonattainment to attainment of the $PM_{2.5}$ NAAQS (EDCAQMD et al. 2013).

Projects within the MCAB portion of the County must demonstrate Ozone Attainment Plan consistency with the following four indicators:

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), or projected emissions of ROG and NO_x from a project equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
2. The project does not exceed the "project alone" significance criterion;
3. The project would be consistent with the control measures for emissions reductions in the Ozone Attainment Plan; and
4. The project complies with all applicable district rules and regulations.

Regarding the first criterion for compliance with the Ozone Attainment Plan, the proposed project does not require a change in its current land use designation. Therefore, the project would not conflict with or exceed the assumptions of the Ozone Attainment Plan.

Regarding the second criterion, as discussed above, MCAB is currently in non-attainment for O_3 (State and federal ambient standards), PM_{10} (state ambient standard), and $PM_{2.5}$ (federal 24-hour ambient standard). As discussed under question b), below, the project would not exceed EDCAQMD significance criteria.

The third criterion is consistency with control measures in the Ozone Attainment Plan. Most of the control strategies in the Ozone Attainment Plan include measures in the categories of transportation and stationary

sources. The non-regulatory control measures include on-road and off-road mobile incentive programs, and an emerging/voluntary urban forest development program. These are followed by the regulatory control measures, which include indirect source rules and a variety of stationary- and area-wide source control measures. The control measures for reducing mobile source emissions include the following statewide measures: new engine standards, reducing emissions from in-use fleet, requiring the use of cleaner fuels, supporting the use of alternative fuels, and pursuing long-term advanced technology measures. The project would not conflict with or hinder any of the control measures for emissions reductions in the Ozone Attainment Plan.

The final criterion is compliance with the EDCAQMD rules and regulations. The EDCAQMD has adopted rules designed specifically to address a variety of air quality impacts through measures that reduce construction and operational related air quality emissions. The project would be required by law to comply with all applicable rules and regulations. Rules designed to control air pollutant emissions, and which may be applicable to the project include:

- Rule 210 related to the discharge of air contaminants;
- Rule 223 related to fugitive dust;
- Rule 223-1 related to construction generated fugitive dust;
- Rule 223-2 related to asbestos; and
- Rule 224 relates to application of cutback or emulsified asphalt for paving.

Notably, pursuant to Rule 223-1, any activities associated with plans for grading and construction would require a Fugitive Dust Control Plan (FDCP). Such a plan would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level.

In summary, the project would not conflict with the land use designation, would not exceed the "project alone" significance criterion, would be consistent with all control measures of the Ozone Attainment Plan, and would comply with applicable EDCAQMD rules. Based on these considerations, the project would not conflict with or obstruct implementation of an applicable air quality plan. The impact would be **less than significant**.

b. **Air Quality Standards and Cumulative Impacts:** The following discussion evaluates the potential for the project's construction and operational emissions to result in a considerable contribution to the region's cumulative air quality impact.

Construction

Construction of the project would result in the addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials and worker vehicles commuting to and from the project site. Downed tree branches and brush would be burned in the offseason according to CAL FIRE and Pioneer Fire District rules and regulations.

The EDCAQMD has adopted screening criteria for determining the significance of a project's construction period ozone precursor and particulate matter emissions in Chapter 4 of the Guide to Air Quality Assessment (EDCAQMD 2002).

> Screening of Construction Equipment Based on Fuel Use: If the average daily diesel fuels use for one quarter (3 months) would be less than 337 gallons (from Table 4.1 in the Guide to Air Quality Assessment), ROG and NO_X emissions from construction equipment may be deemed not significant. If ROG and NO_X emissions from diesel equipment are deemed not significant based on fuel usage in Table 4.1, then exhaust emissions of CO and PM_{10} from construction equipment, and exhaust emissions of all constituents from worker commute vehicles, may also be deemed not significant.

> Screening of Fugitive Dust Emissions Based on Incorporation of Mitigation Measures: Mass emissions of fugitive dust PM_{10} need not be quantified, and may be assumed to be not significant, if the project includes mitigation measures that would prevent visible dust beyond the project property lines, in compliance with Rule 403 of the South Coast Air Quality Management District (included in Appendix C-1 of the Guide to Air Quality Assessment).

Construction would occur immediately upon project approval and acquisition of the required permits from the County and other public agencies and would be conducted in two phases. Phase I would establish approximately 10,000 sf of mature outdoor cannabis, with a plan to eventually construct six (6) greenhouses for mature cannabis cultivation as part of Phase II. Heavy equipment, including a bulldozer, would be used along with chainsaws during site clearing/development. As described in Section 3.0, above, the project would disturb up to 1 acre which would involve the tilling of the cultivation areas (including 17,640 sf of nursery cultivation area), construction of six (6) proposed greenhouses, and construction of two 1,200-sf processing structures. Total square footage of ground disturbance for the project would be approximately 31,865 sf.

The EDCAQMD Rule 223-1 requires any construction or construction related activities, including the project construction, to submit a Fugitive Dust Control Plan to the EDCAQMD prior to the start of any construction activity for which a grading permit was issued by El Dorado County (EDCAQMD 2005). The project would require a grading permit for minimal grading on the property, and a Fugitive Dust Control Plan would be required.

Operation

The EDCAQMD has adopted screening criteria for determining the significance of a project's operational ozone precursor emissions in Chapter 5 of the Guide to Air Quality Assessment (EDCAQMD 2002):

> For development projects whose only operational emissions come from increased vehicular traffic, screening based on project size or activity may be used to determine whether the project would exceed the threshold of significance for total emissions from project operation. Table 5.2 from the Guide to Air Quality Assessment provides size or activity cut-points for various types of land uses that the EDCAQMD has determined, based on conservative assumptions, would, if exceeded, result in emissions above the EDCAQMD's thresholds of significance for ROG and NO_X.

The project's proposed commercial cannabis cultivation facility is not included in Table 5.2 of the Guide to Air Quality Assessment. Examples of the development types and sizes in Table 5.2 include 230 single-family residences, 620,000 sf of manufacturing, and 260,000 square ft of general office space. As described in Section 7.XVII, Transportation, the project is expected to generate a total of up to 36 commuter round trips per day during peak conditions, as well as up to 8 delivery trips per day for supplies. The regular project traffic anticipated during operation is up to 3 trips per employee each day. During harvest season, the temporary employees would also be on site for a maximum of 5 full-time employees and 7 part-time employees during seasonal harvest (total of 12 employees at any one time). Therefore, the project is conservatively expected to generate up to 36 daily round trips and 8 truck delivery trips under busiest assumptions but would generate far fewer trips on most days. For comparison, in transportation planning, the trip generation for typical single-family residences is 9 to 10 daily trips (2,070 to 2,300 daily trips for 230 residences). The Policy TC-Xe threshold for El Dorado County is 100 daily trips, therefore, the project trip generation of 36 daily trips would be far less than the expected trip generation for any of the development types listed in the SMAQMD Operational Screening levels table. Therefore, the project's operational emissions of ROG and NO_X would be less than significant.

Impact Conclusion

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard, and impacts would be **less than significant**.

c. **Sensitive Receptors:** The State CEQA Guidelines (14 CCR 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Residences, hospitals, schools, and convalescent facilities are examples of sensitive receptors. The discussion below reviews the significance of emissions within the context of potential impacts to sensitive receptors. The closest sensitive receptor is a single-family rural residence located approximately 0.46-mile northeast from the cannabis cultivation premises. There are no daycare centers, schools, or hospitals, or convalescent facilities located within 1 mile of the project site.

Criteria Pollutants

Specific adverse health effects on individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and characteristics of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_X) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone are, therefore, the product of emissions generated by numerous sources throughout a region. Emissions of criteria pollutants from vehicles traveling to or from the project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these criteria pollutant emissions cannot be meaningfully correlated to the incremental contribution from the project.

Toxic Air Contaminants

TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. Health effects from carcinogenic air toxins are usually described in terms of cancer risk. The EDCAQMD recommends an incremental cancer risk threshold of 10 in 1 million (with implementation of best available control technology for toxins). "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard California Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2020). In addition, some TACs have non-carcinogenic effects. EDCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects. The TAC that would potentially be emitted during construction activities associated with development of the proposed project would be diesel particulate matter (DPM).

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as DPM. Almost all DPM are 10 microns or less in diameter and 90 percent of DPM is less than 2.5 microns in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, the CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. Due to the relatively short period of construction, the substantial distance to the nearest sensitive receptor, and minimal exhaust PM_{10} emissions generated, project construction would not expose sensitive receptors to substantial concentrations of DPM.

Asbestos dust is a known carcinogen and is classified as a TAC by CARB. Naturally occurring asbestos (NOA) most commonly occurs in ultramafic rock (i.e., igneous and metamorphic rock with low silica content) that has undergone partial or complete alteration to serpentine rock (or serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, is associated with ultramafic rock, particularly near geologic faults. Some areas of El Dorado County are known to contain NOA. Earthmoving activities in areas containing NOA could result in potentially significant levels of NOA in fugitive dust. El Dorado County provides a map which shows the locations of known areas of NOA, areas likely to contain NOA, and buffer zones for known and likely NOA areas (El Dorado County 2015a). The project site is not located within any area known or likely to contain NOA, or within any NOA buffer zone. In addition, the project would be required to comply with the EDCAQMD Rule 223-2 (Fugitive Dust - Asbestos Hazard Mitigation) which requires either a site-specific Geologic Evaluation or an Asbestos Dust Mitigation Plan if NOA, serpentine, or ultramafic rock is discovered by the project owner/operator, a

professional geologist, or the Air Pollution Control Officer prior to or during construction activity. Therefore, the project construction would not expose sensitive receptors to substantial concentrations of NOA.

Operation of the project would not result in any non-permitted direct emissions of TACs (e.g., those from a stationary source such as diesel generators) or result in substantial diesel vehicle trips (i.e., delivery trucks). Therefore, the project would not result in exposure of sensitive receptors in the vicinity of the project site to substantial TAC concentrations due to operations.

In summary, the project would not expose sensitive receptors to substantial pollutant concentrations, including DPM and NOA, and the impact would be **less than significant**.

d. **Objectionable Odors:** The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contributes to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress, and generate citizen complaints.

Common sources of odors include wastewater treatment plants, landfills, transfer stations, composting facilities, refineries, chemical plants, and food processing plants (EDCAQMD 2002). The proposed project would construct a cannabis cultivation facility. During project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from the tailpipes of construction equipment. However, such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. There is an increased potential for odor emanating from project operation due to the strong fragrance of cannabis. Environmental Permitting Specialists (EPS) conducted a review of potential odors associated with the proposed project and prepared an Odor Report (see Appendix B). EPS relied on odor intensity measurements at other greenhouses in Northern California and on odor modeling at several locations in El Dorado County, including in the project vicinity. EPS conservatively estimated that the maximum odor intensity adjacent to the hoop houses used during Phase 1 would be in the range of 4 to 8 DT. During Phase 2, with the use of greenhouses, odors are anticipated to be lower. Odor modeling results show that odor intensity declines by 88% over 100 meters or 26.7% every 100 feet. Due to the project's 800-foot setback, the maximum odor intensity at the property lines is estimated to be 0.67 DT. Since the odor intensity would be well below the 7 DT threshold, no odor mitigation is required.

The El Dorado County Cannabis Ordinance, Section 130.41.200 contains a minimum setback of 800 ft from the property line of the site or public right-of-way for allowing cultivation and processing activities. The project components would be setback by at least 800 ft from the northern, southern, eastern, and western property lines. Compliance with the County Cannabis Ordinance for odor control would ensure that impacts associated with odors would be **less than significant.**

FINDING: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard or expose sensitive receptors to substantial pollutant concentrations, and impact would be less than significant. With adherence to the EDCAQMD applicable rules, the proposed project would have less than significant impacts on air quality and odors.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
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 or U.S. Fish and Wildlife Service?		**X**		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			**X**	
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	
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?			**X**	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
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?				**X**

This biological resource section is based on the project-specific Biological Resources Assessment (BRA) prepared by Natural Investigations Company (NIC), Inc (2021) to assess the project's potential impact to federal and State special-status plant and wildlife species and their habitats and is included as Appendix C of this Initial Study. The results of that report are summarized in this section.

Environmental Setting:

For the BRA, the project area was defined as the cultivation area plus the ancillary facilities, and this 8-acre area was the subject of the impact analysis. The entire 118-acre property was defined as the study area. The study area is defined to identify biological resources in and adjacent to the project area and is the area subject to potential direct and indirect effects from project implementation.

The study area is located within the cis-montane Sierra Nevada mountains geographic subregion, which is contained within the Sierra Nevada geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). The study area and vicinity are in climate Zone 7 - California's Gray Pine Belt, defined by hot summers and mild but pronounced winter without severe winter cold or high humidity (Sunset 2021).

Natural hydrologic sources for the project area include precipitation and surface runoff from adjacent lands. The project site receives an average of 45.69 inches of precipitation per year (CNPS 2021). Most precipitation is concentrated in the winter and early spring months, with summers being almost completely dry.

Survey Methods

Consulting biologist Tim Nosal, MS, conducted a reconnaissance-level field survey on October 27, 2021. 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 CNDDB within the vicinity of the study area and those species on the USFWS species list (Appendix 1 in Appendix C). See Appendix C for a more detailed discussion of survey methods and results; results are summarized below.

Vegetation Communities

The BRA (Appendix C) identified the following terrestrial vegetation communities on the property:

- Chaparral: Although chaparral species are common throughout the Study Area, chaparral habitat is found only in the eastern half of the parcel. The dominant species within the chaparral vary based upon soils, aspect and site history. Typical species include wedgeleaf ceanothus (Ceanothus cuneatus), deer brush (Ceanothus integerrimus *var.* macrothyrsus), and whiteleaf manzanita (Arctostaphylos viscida *ssp.* viscida). Other woody species found in the chaparral include ponderosa pine (Pinus ponderosa), California black oak (Quercus kelloggii) and poison oak (Toxicodendron diversilobum*).* Various grasses and herbs were observed in the understory of the shrub canopy. This vegetation type can be classified as the Holland Type "Buck Brush Chaparral" or as "37.211.00 Wedge Leaf Ceanothus Chaparral" (CDFW 2021e).

- Mixed Oak/Conifer Forest and Woodland: Historically, the parcel has been utilized for timber production. Stands of forested habitat within the Study Area vary in age, composition and canopy cover. Ridges and south-facing slopes are characterized by an open canopy of plantation-planted ponderosa pine and California black oak. However, the creeks and north-facing slopes support a maturing, dense canopy of a variety of conifers and hardwoods. In addition to ponderosa pine and black oak, other commonly observed species in the pine forest and woodland include incense cedar (Calocedrus decurrens), Douglas fir (Pseudotsuga menziesii), sugar pine (Pinus lambertiana*),* white fir (Abies concolor), gray pine (Pinus sabiniana) and canyon live oak (Quercus chrysolepis). The understory is highly variable and includes typical chaparral species as well as Sierran mountain misery (Chamaebatia foliolosa). This vegetation can be classified as the Holland Type "Sierran Mixed Conifer Forest" or as "87.015.02 Pinus ponderosa - Calocedrus decurrens - Quercus kelloggii Ponderosa pine - Incense Cedar - California Black Oak Forest and Woodland (CDFW 2021e).

Wildlife Observations and Habitat Types

The following animals were detected within the study area during the field survey: northwestern fence lizard (*Sceloporus occidentalis occidentalis*); American black bear (*Ursus americana);* Botta's pocket gopher (*Thomomys bottae*); California ground squirrel (*Otospermophilus beecheyi*); Columbian black-tailed deer (*Odocoileus hemionus columbianus);* gray fox (*Urocyon cinereoargenteus*); western gray squirrel (*Sciurus griseus*); acorn woodpecker (*Melanerpes formicivorus*); American robin (*Turdus migratorius*); California quail (*Callipepla californica*); common raven (*Corvus corax*); dark-eyed junco (*Junco hyemalis*); northern flicker (*Colaptes auratus*); Nuttall's woodpecker (*Picoides nuttallii*); red breasted nuthatch (*Sitta canadensis*); red-tailed hawk (*Buteo jamaicensis*); sparrow (*Emberizidae*); spotted towhee (*Pipilo maculatus*); Stellar's jay (*Cyanocitta stelleri*); and other common songbirds.

Wildlife habitat types were classified using CDFW's Wildlife Habitat Relationship System. The study area contains the following wildlife habitat types: Montane Chaparral; Ponderosa Pine; and Riverine.

Special-Status Species and Protected Habitats with Potential to Occur on the Project Site

According to the USFWS, CNDDB, and other literature available regarding the study area, the following special-status species, presented in Table 2, may occur or have documented historical occurrences in the vicinity of the study area.

TABLE 1.
Special-Status Species with Potential to Occur Near the Project Site

Common Name *Scientific Name*	Status[1]	General Habitat	Microhabitat
Animals			
Sharp-shinned hawk *Accipiter stratus*	--/WL/--	Cismontane woodland; Lower montane coniferous forest; Riparian forest; Riparian woodland	North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.
Northern goshawk *Accipiter gentilis*	--/--/CSSC/--	Within, and in vicinity of, coniferous forest. Uses old nests, and maintains alternate sites.	Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.
Great gray owl *Strix nebulosa*	--/CE/--/--	Resident of mixed conifer or red fir forest habitat, in or on edge of meadows.	Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.
Long-legged myotis *Myotis volans*	--/--/CSSC/--	Most common in woodland & forest habitats above 4,000 ft. Trees are important day roosts; caves & mines are night roosts.	Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings.
Silver-haired bat *Lasionycteris noctivagans*	--/--/CSSC/--	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.
Hoary bat *Lasiurus cinereus*	--/--/CSSC/--	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.
Plants			
Nissenan manzanita *Arctostaphylos nissenana*	--/--/--/1B.2	Closed-cone coniferous forest, chaparral.	Usually on metamorphics, associated w/ other chaparral species. 450-1100 m.
Brandegee's clarkia *Clarkia biloba ssp. brandegee*	--/--/--/4.2	Chaparral; cismontane woodlane; ione formation.	Openings in chaparral or woodland, especially known from the Ione formation in Amador County. 75- 915 m

[1] Regulatory Status is FESA listing/CESA listing/Other state status/CNPS rare plant status. FT=Federally Threatened; CE=California State Listed as Endangered; CT=California State Listed as Threatened; CSSC=California Species of Special Concern; SSC=Species of Special Concern; 1B= CNPS designated rare or endangered plants in California and elsewhere

Common Name *Scientific Name*	Status[1]	General Habitat	Microhabitat
Stanislaus monkeyflower *Erythranthe marmorata*	--/--/--/1B.1	Cismontane woodland; lower montane coniferous forest.	300- 1435 m.
Felt-leaved violet *Viola tomentosa*	--/--/--/4.2	Lower montane coniferous fores; subalpine coniferous forest; upper montane coniferous forest.	In open, conifer forest in dry, gravelly soils. 1035- 2015 m.
Pleasant Valley mariposa-lily *Calochortus clavatus avius*	--/--/--/1B.2	Lower montane coniferous forest.	Josephine silt loam and volcanically derived soil; often in rocky areas. 305-1700 m.
Red Hills soaproot *Chlorogalum grandiflorum*	--/--/--/1B.2	Cismontane woodland, chaparral, lower montane coniferous forest.	Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" site

Regulatory Setting:

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq*.; 50 Code of Federal Regulations [CFR] Parts 17 *et seq.*) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the federal ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq*.) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA (16 USC 1539 *et seq*.) provides a process by which nonfederal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in "take" of endangered or threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds and their nests and eggs; protected species are on a federal list specific to this act (50 CFR Section 10.13). Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald or golden eagles, including their parts, nests, or eggs. The Act provides civil and criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for

"disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) Section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of the CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge would comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or threatened or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Sections 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1607 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for 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. 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”.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2020). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'Berg-Nejedly Forest Practice Act, which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and charged the Board of Forestry to oversee their implementation. CAL FIRE works under the direction of the Board of Forestry and Fire Protection and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan must be prepared by a Registered Professional Forester for timber harvest on non-federal timberlands, with limited exceptions.

Cannabis Cultivation Program

Title 3 CCR Section 8102 states:

> [Each application for a cultivation license shall include the following, if applicable]:
>
> (w) A copy of any final lake or streambed alteration agreement issued by the CDFW, pursuant to sections 1602 or 1617 of the Fish and Game Code, or written verification from the CDFW that a lake and streambed alteration agreement is not required
>
> (dd) If applicable, the applicant shall provide evidence that the proposed premises is not located in whole or in part in a watershed or other geographic area that the State Water Resources Control Board or the Department of Fish and Wildlife has determined to be significantly adversely impacted by cannabis cultivation pursuant to section 8216.

Section 8216 states:

> If the State Water Resources Control Board or the Department of Fish and Wildlife notifies the department in writing that cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area pursuant to section 26069, subdivision (c)(1), of the Business and Professions Code, the department shall not issue new licenses or increase the total number of plant identifiers within that watershed or area while the moratorium is in effect.

Section 8304 states:

> All licensees shall comply with all of the following environmental protection measures:
>
> (a) Compliance with section 13149 of the Water Code as implemented by the State Water Resources Control Board, Regional Water Quality Control Boards, or CDFW;
>
> (b) Compliance with any conditions requested by the CDFW or the State Water Resources Control Board under section 26060.1(b)(1) of the Business and Professions Code;
>
> (c) All outdoor lighting used for security purposes shall be shielded and downward facing.

Section 8304(g) states:

> Mixed-light license types of all tiers and sizes shall ensure that lights used for cultivation are shielded from sunset to sunrise to avoid nighttime glare.

Local Laws, Regulations, and Policies

The County General Plan also includes policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (Exhibits 5.12-14, 5.12-5 and 5.12-7, El Dorado County, 2003). Lands located within the overlay district are subject to the following provisions, provided that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/ CDFW);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
- Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

The project site is not located in an area subject to these additional provisions (El Dorado County 2003).

<u>El Dorado County</u>

El Dorado County Code and General Plan Policies pertaining to the protection of biological resources include protection of rare plants, setbacks to riparian areas, and mitigation of impacted oak woodlands. Policy 7.4.4.4 of the General Plan establishes the native oak tree canopy retention and replacement standards. Impacts to oak woodlands have been addressed in the El Dorado County General Plan EIR, available for review online at https://www.edcgov.us/Government/planning/pages/final_environmental_impact_report_%28eir%29.aspx or at El Dorado County Planning Services offices located at 2850 Fairlane Court, Placerville, CA, 95667. Mitigation in the form of General Plan policies has been developed to mitigate impacts to less than significant levels. The County's oak resources reporting and impact mitigation requirements are outlined in El Dorado County's Oak Resources Management Plan (ORMP) and codified in County Ordinance No. 5061.

<u>El Dorado County Oak Resources Conservation Ordinance (No. 5061)</u>

The El Dorado County Oak Resources Conservation Ordinance was adopted to establish standards for implementing the County's ORMP. The Ordinance protects native oak resources as oak canopy or as an individual tree and states that an impact is defined for individual native oak trees as the physical destruction, displacement or removal of a tree or portions of a tree caused by poisoning, cutting, burning, relocation for transplanting, bulldozing or other mechanical, chemical, or physical means. For oak woodlands, tree and land clearing apply when they are associated with land development, including, but not limited to, grading, clearing, or otherwise modifying land for roads, driveways, building pads, landscaping, utility easements, fire-safe clearance and other development activities. If a project is determined to have an impact to individual native oak trees or oak woodlands the project is required to mitigate for that impact through one of the following: pay-in-lieu fees, purchase and deed-restrict oak woodland off-site, or plant replacement oaks on- or off-site. Several exemptions exist, including cutting of oaks for the property owner's personal use, so long as the oaks are not a Heritage Tree (a native oak tree 36 inches diameter or more at breast heigh [dbh] or a multi-stemmed tree having a total aggregate dbh of 36 inches or more) nor a valley oak (*Quercus lobata*). A

landowner may remove up to eight trees from a single parcel per year under this exemption, provided that the total dbh of trees removed from a single parcel does not exceed 140 inches (County Code 130.39.050 (J.)).

Impact Analysis:

a. **Special-Status Species:** During the field survey, no special-status animal species were detected within the project area. State and federal databases did not report any special-status animal species in the study area. Project implementation would not directly impact any known special-status animal species. Special-status species were reported to be present in the general vicinity of the study area. There is a moderate potential for special-status amphibians and/or reptiles to occur in the intermittent channel 350 ft northwest of the project area. Special-status animal species from the intermittent channel could move into the project area between the time the field survey was completed and the start of construction, however the BRA indicates that there is no potential for the special-status amphibians to occur on-site as there is no suitable habitat. With the implementation of mitigation measure BIO-1 Wildlife Exclusion Fencing, the impacts would be reduced to a less than significant level.

Special-status bird and bat species were reported in databases (CNDDB and USFWS) in the vicinity of the project area. The project area contains a few oak trees, and the project area is adjacent to forest resources, so there is a moderate potential for birds of prey and bat species to utilize trees in the study area. The project area, and adjacent trees and utility poles, contain suitable nesting habitat for various bird species, so there is a moderate potential for birds of prey and bat species to occur in the project area. However, no nests or roosts were observed during the field survey. If construction activities are conducted during the nesting season, then nesting birds could be directly impacted by tree removal and indirectly impacted by noise, vibration, and other construction-related disturbance, project construction is considered a potentially significant adverse impact to nesting birds. With implementation of mitigation measure BIO-2 Pre-Construction Surveys for Special-Status Species, the impacts would be reduced to a less than significant level.

The project area contains chaparral and mixed oak/conifer forest habitats. The habitats have potential for harboring special-status plant species, and Special-status plants have a potential to occur in these habitats because rare plant species have been reported in similar habitats in the region by the CNDDB.
While no special-status plants were identified in the pedestrian survey, these surveys were not conducted during the blooming period and special-status plants still have the potential to occur in the habitat types present on the project site and are included in Table 2. With implementation of Mitigation Measure BIO-3, Pre-Construction Surveys for Special-Status Plants, the potential impacts to special-status plants would be reduced to a less than significant level.

With the implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3, potential impacts on amphibians, birds, or plants identified as a candidate, sensitive, or special-status species would be **less than significant with mitigation.**

Mitigation Measure BIO-1: Wildlife Exclusion Fencing

To prevent special-status amphibians and other wildlife from entering work areas during construction, barriers shall be erected by the applicant before ground disturbance occurs. Specifically, wildlife exclusion fencing shall be erected around work areas, especially those facing the intermittent channel; this typically consists of 3-foot-tall fencing made from erosion control fabric attached to wire mesh on posts, with the bottom keyed into the ground and the top bent away from work areas. Wildlife exclusion fencing shall also be incorporated into the perimeter fences of the cultivation compounds.

If any special-status species are detected, construction shall be delayed, and the appropriate wildlife agency (CDFW and/or USFWS) shall be consulted and project impacts and mitigation reassessed as necessary.

Mitigation Measure BIO-2: Pre-Construction Surveys for Special-Status Species

A pre-construction survey for special-status species shall be performed by a qualified biologist to ensure that special-status species are not present in the project area. The focal species of the pre-construction survey are any roosting bats, nesting special-status birds, sharp-shinned hawk, long-legged myotis, and the North American Porcupine.

If construction activities occur during the nesting season (February 15th through August 31st), a pre-construction survey for the presence of special-status bird species or any nesting bird species shall be conducted by a qualified biologist. Nesting bird surveys shall be tailored so that they capture the appropriate survey buffer for spotted owl and other special-status raptors to be present in the area. Pre-construction bat surveys could be performed at the same time. If active nests are identified in these areas, CDFW and/or USFWS shall 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.

Mitigation Measure BIO-3: Pre-Construction Surveys for Special-Status Plants

Plants with the potential to occur on the project site include Nissenan manzanita, Brandegee's clarkia, Stanislaus monkeyflower, Felt-leaved violet, Pleasant Valley mariposa-lily, and Red Hills soaproot. Special-status plant surveys conducted throughout the Study Area in November 2021 were negative but given enough time between the survey and the start of construction, plants may become established in areas where suitable habitat exists. Since the November 2021 surveys were also not conducted during the blooming period, another round of special-status plant surveys shall be conducted in areas proposed for impact prior to commencement of construction. Surveys shall be conducted in accordance with the Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 2000), the Botanical Survey Guidelines of the California Native Plant Society (CNPS 2001), and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018). This protocol includes conducting surveys at the appropriate time of year when plants are in bloom and focusing on habitat types that are more likely to harbor rare species, especially ones with the potential to occur on the project site. If no special-status plant species are found, no further mitigation would be required.

b, c. **Riparian Habitat and Wetlands:** As discussed in the BRA, the project area and study area are not within any designated listed species' critical habitat. The project area does not contain habitat for special-status species, but the study area contains an intermittent channel along the western property line that provides habitat for special-status species. However, because the cannabis cultivation premises is setback greater than 350 ft from this channel, vegetative buffers are present, and minimal ground disturbance is proposed, implementation of the proposed project would not impact any special-status habitats, and no mitigation is necessary.

Potential direct impacts to water resources would not occur by modification or destruction of stream banks or riparian vegetation or the filling of wetlands or channels that could cause increased erosion and sedimentation in water bodies due to soil disturbance. The cultivation areas have been designed with large setbacks from watercourses (greater than 350 ft), situated on flatter areas (ridgetops), and include vegetative buffers. As a result of these design avoidance measures, no direct impacts to water resources would occur.

Potential adverse impacts to water resources could occur during operation of cultivation activities through the discharge of sediment or other pollutants (fertilizers, pesticides, human waste, etc.) into receiving waterbodies. However, the project proponent is required to file a Notice of Applicability under the State Water Resources Control Board's (SWRCB) Cannabis General Order WQ 2019-0001-DWQ. Compliance with this Order would ensure that cultivation operation would not significantly impact water resources by using a combination of BMPs, buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

Riparian setbacks apply to 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 proposed project is compliant with the setback requirements of the SWRCB Cannabis General Order WQ 2019-0001-DWQ which requires a minimum setback of 100 ft from intermittent watercourses or wetlands. As noted above, the cannabis cultivation premises is setback at least 350 ft from the intermittent channel along the western property line.

Therefore, potential impacts to any riparian habitat or other sensitive natural community would be **less than significant.**

d. **Migration Corridors:** The project site is within important habitat identified for migratory deer herds. In the Integrated Natural Resources Management Plans (INRMP) Inventory Map, *Important Habitat for Migratory Deer Herds*, the project site is mapped within the California Department of Fish and Game (CDFG)-Designated Critical Winter Range for the Grizzly Flat Herd (Koenigs 2010). Although the project site would be located in an important habitat for migratory deer herds, the project would not have a significant impact on animal movement because the majority of the open space within the project property would still be available for animal movement as the proposed project would disturb no more than 1 acre of the total 114-acre parcel.

Implementation of the proposed project would include the installation of a six-foot-tall security fence around the cultivation compound that would preclude access by some species. The fenced cultivation area would be surrounded by open space, however, allowing wildlife to move around this small, fenced area. Thus, implementation of the project would have a less than significant impact on wildlife movement.

Implementation of the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites and impacts would be **less than significant.**

e. **Local Policies:** Construction of the proposed project would require the clearing of up to 1 acre of brush and small trees. This may require clearing of commercial tree species but would not remove any young or mature oak trees or involve any major trimming of branches or root disturbance. Therefore, the El Dorado County Oak Resources Conservation Ordinance would not be relevant to the proposed project. No other local policies or ordinances protecting biological resources are applicable to the proposed project. Thus, there would be **no impact.**

f. **Adopted Habitat Conservation Plans**: The study area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan, and there would be **no impact**.

FINDING: No special-status species or sensitive habitats were identified on the project site. Implementation of Mitigation Measure BIO-1 would prevent any special-status amphibians and other wildfire from entering the construction area. Mitigation Measure BIO-2, Pre-Construction Survey for Special-Status Species, would avoid any potential impacts to special-status bats, nesting raptors, nesting birds, or other migratory birds. For this Biological Resources evaluation, impacts would be **less than significant with mitigation.**

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			**X**	
b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?			**X**	
c. Disturb any human remains, including those interred outside of formal cemeteries?			**X**	

Environmental Setting:

A letter from the North Central Information Center (NCIC 2021) regarding the proposed project site is included as Appendix D to this Initial Study.

According to NCIC 2021 [internal citations omitted]:

> In this part of El Dorado County, archaeologists locate prehistoric-period habitation sites on elevated landforms near streams (Moratto 1984:173). This region is known as the ethnographic-period territory of the Plains Miwok. The Plains Miwok inhabited the lower reaches of the Mokelumne and Cosumnes River and both banks of the Sacramento River from Rio Vista to Freeport (Wilson and Towne 1978:398). The proposed project search area is situated in the Sierra Nevada about 545 ft northwest of the North Fork of the Cosumnes River. Given the extent of known cultural resources and the environmental setting, there is low potential for locating prehistoric-period cultural resources in the immediate vicinity of the proposed project area.
>
> Within the search area, the 1874 GLO plat of T9N, R13E shows no evidence of nineteenth-century historical activity. The 1953 Sly Park 7.5' USGS topographical map shows evidence of a twentieth century ditch and flume in the vicinity. Given the extent of known cultural resources and patterns of local history, there is low potential for locating historic-period cultural resources in the immediate vicinity of the proposed project area.

European American settlement of El Dorado County began in earnest in 1848 with the discovery of gold at Sutter's Mill on the American River (NIC 2020). Some mining camps in the area developed into permanent towns. Timber harvesting, farming, and ranching developed in the region along with the mines. Eventually, the importance of mining declined, travel became more efficient with the modernization of roads such as U.S. 50 in the 1920s and 30s, and the need for waystations was reduced. Timber production also declined in the early 20th century. The economy in much of El Dorado County became increasingly focused on residential, retail, and recreational uses. Wine production has also seen a rise in the County in the past few decades. Today, the largest industries in the County are health care and social assistance, retail trade, accommodation and food service, and various educational services. There are over 100,000 acres of active farming land, and some of the highest paying industries are utilities, mining, quarrying, oil and gas extraction, as well as manufacturing.

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);

B. Are associated with the lives of persons significant in our past (persons);

C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or

D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for State and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under CEQA. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.

B. Are associated with the lives of persons important to local, California, or national history.

C. Embody the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values.

D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the California Register of Historical Resources (CRHR), which identifies the State's architectural, historical, archeological, and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

PRC (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer and must work with the officer to ensure that the project incorporates "prudent and feasible measures that would eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human

remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California PRC stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and State CEQA Guidelines

Section 21083.2 of the State CEQA Guidelines requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided in the State CEQA Guidelines under Section 21083.2.

Section 15064.5 of the State CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of a historic resource before they approve such projects. Historic resources are those that are:

- Listed in, or determined to be eligible for listing in, the CRHR (PRC Section 5024.1[k]);
- Included in a local register of historic resources (PRC Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of PRC Section 5024.1(g); or
- Determined by a lead agency to be historically significant.

State CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and PRC Section 5097.95 for addressing the existence of, or probable likelihood of, Native American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

State CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

Cannabis Cultivation Program:

California Code of Regulations Title 3 Section 8304(d) states:

> [All licensees shall comply with all of the following environmental protection measures:] (d) Immediately halt cultivation activities and implement section 7050.5 of the Health and Safety Code if human remains are discovered.

Impact Analysis:

a. **Historic Resources:** A records search of the NCIC was conducted for the proposed project.

The NCIC records search, which was conducted on September 29, 2021, indicated that zero prior studies had been completed that cover a portion of the project site. Additionally, two cultural resources study reports on file at the NCIC office cover a portion of the broader search area (i.e., between 0 and 0.25 mile from the project site). The record search and previous studies indicated that the proposed project area contains zero (0) recorded prehistoric period resources and zero (0) recorded historic-period cultural resources. Based on the results of the NCIC records search and its indication that the site was not sensitive with respect to cultural resources, a pedestrian survey of the site was deemed unnecessary. Standard Conditions of Approval (below) imposed by the County on the project would address the accidental discovery of any previously unidentified resources during construction and result in project impacts that are **less than significant**.

b. **Archaeological Resources:** Based on the absence of known significant unique archaeological resources within the Area of Potential Effect, archaeological clearance for the project as proposed is recommended. Standard Conditions of Approval (below) imposed by the County on the proposed project would address the accidental discovery of any previously unidentified archaeological resources during construction and result in project impacts that are **less than significant**.

c. **Human Remains:** The records search completed for this project did not identify known human remains in the Area of Potential Effect (NCIC 2021). In the unlikely event that human remains are discovered during construction, the County's standard Conditions of Approval (below) requiring compliance with CEQA Guidelines Section 15064.5(e) would result in project impacts that are **less than significant**.

Conditions of Approval:

- Heritage Resources: In the event a heritage resource or other item of historical or archaeological interest is discovered during grading and construction activities, the project proponent shall ensure that all such activities cease within 50 ft of the discovery until an archaeologist can examine the find in place and determine its significance. If the find is determined to be significant and authenticated, then the archaeologist shall determine the proper method(s) for handling the resource or item. Grading and construction activities may resume after the appropriate measures are taken or the site is determined not to be of significance.

- Discovery of Human Remains: In the event of the discovery of human remains, all work shall cease and the County coroner shall be immediately notified pursuant to subdivision(c) of Section 7050.5 of the Health and Safety Code and Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or in his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. The Native American Heritage Commission will immediately notify the person it believes to be the most likely descendant of the deceased Native American.

Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Section 5097.98 of the Public Resources Code, with the most likely descendants regarding their recommendations. The descendants shall complete their inspection and make their recommendation within 48 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials or other proper method(s) for handling the remains in accordance with Section 5097.98(b-h). Any additional costs as a result of complying with this section shall be borne by the project applicant. Grading and construction activities may resume after appropriate measures are taken.

FINDING: With the implementation of standard Conditions of Approval imposed by the County, the proposed project would have a less than significant impact on Cultural Resources.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Result in potential significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			**X**	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			**X**	

Environmental Setting:

This section provides an evaluation of existing energy production and consumption conditions, as well as potential energy use and related impacts from the proposed project. The following discussion is consistent with and fulfills the intent of Appendix F Energy, from the State CEQA Guidelines.

The units of energy used in this section are the British thermal units (BTU) and kilowatt hours (kWh). A BTU is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (°F) at sea level. Because the other units of energy can all be converted into equivalent BTU, the BTU is used as the basis for comparing energy consumption associated with different resources. A kWh is a unit of electrical energy, and one kWh is equivalent to approximately 3,413-BTU, taking into account initial conversion losses (i.e., from one type of energy, such as chemical, to another type of energy, such as mechanical) and transmission losses. Natural gas consumption is described typically in terms of cubic feet (cf) or therms; one cubic foot of natural gas is equivalent to approximately 1,050-BTU, and 1-therm represents 100,000-BTU.

California Energy Overview:

Electricity

California's electricity needs are satisfied by a variety of entities, including investor-owned utilities, publicly owned utilities, electric service providers and community choice aggregators. In 2020, the California power mix totaled 272,576 gigawatt hours (GWh). In-state generation accounted for 190,913 GWh, or 70 percent, of the State's power mix. The remaining electricity came from out-of-state imports (CEC 2021a). Table 3 below provides a summary of California's electricity sources as of 2020.

TABLE 3.
California Electricity Sources 2020

Fuel Type	Percent of California Power (%)
Coal	2.74
Large Hydro	12.21
Natural Gas	37.06
Nuclear	9.33
Oil	0.01
Other (Petroleum Coke/Waste Heat)	0.19
Renewables (excluding Large Hydro)	33.09

Fuel Type	Percent of California Power (%)
Unspecified	5.36

Source: CEC 2021a

Natural Gas

Natural gas provides the largest portion of the total in-state capacity and electricity generation in California, with nearly 45 percent of the natural gas burned in California used for electricity generation in a typical year. Much of the remainder is consumed in the residential, industrial, and commercial sectors for uses such as cooking, space heating, and as an alternative transportation fuel. In 2012, total natural gas demand in California for industrial, residential, commercial, and electric power generation was 2,313 billion cf per year (bcf/year), up from 2,196 bcf/year in 2010 (CEC 2021b).

Transportation Fuels

Transportation accounts for a major portion of California's energy budget. Automobiles and trucks consume gasoline and diesel fuel, which are nonrenewable energy products derived from crude oil. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles (SUVs). In 2015, 15.1 billion gallons of gasoline were sold in California (CEC 2021c). Diesel fuel is the second most consumed fuel in California, used by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats, and farm and construction equipment. In 2015, 4.2 billion gallons of diesel were sold in California (CEC 2021d).

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Independence and Security act of 2007

House of Representatives Bill 6 (HR 6), the federal Energy Independence and Security Act of 2007, established new standards for a few equipment types not already subjected to a standard, and updated some existing standards. Perhaps the most substantial new standard that HR 6 established was for general service lighting that was to be deployed in two phases. First, phased in between 2012 through 2014, common light bulbs were required to use about 20 to 30 percent less energy than previous incandescent bulbs. Second, by 2020, light bulbs were to consume 60 percent less energy than bulbs at the time the bill was passed; this requirement effectively phased out the incandescent light bulb.

Energy Improvement and Extension Act of 2008

The formerly entitled "Renewable Energy and Job Creation Act of 2008," or Division B of HR 1424, was signed into law by President Bush in October 2008. The signed bill contained $18 billion in incentives for clean and renewable energy technologies, as well as for energy efficiency improvements.

State Laws, Regulations, and Policies

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years, and to provide an update in the year between reports. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research. The 2019 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

California Building Standards Code (California Code of Regulations, Title 24)

The 2019 Building Energy Efficiency Standards, comprising Title 24, Parts 1 and 6, of the California Code of Regulations, is mandatory statewide. Local government agencies may adopt and enforce energy efficiency standards for newly constructed buildings, additions, alterations, and repairs provided the California Energy Commission finds that the standards would require buildings to consume no more energy than permitted by Title 24, Part 6. Such local standards may include adopting the requirements of Title 24, Part 6 before their effective date, requiring additional energy conservation measures, or setting stricter energy budgets. Title 24, Part 11 contains additional energy measures that are applicable to the project under the California Green Building Standards Code (CALGreen).

Cannabis Cultivation Program

Title 3 of the California Code of Regulations Section 8102(s) states:

> Each application for a cultivation license shall include the following, if applicable: For indoor and mixed-light license types, identification of all power sources for cultivation activities, including but not limited to, illumination, heating, cooling, and ventilation;

Section 8305 provides requirements for certain mixed-light cannabis cultivator licensees to ensure that, by 2023, their electrical power meets the average electricity greenhouse gas emissions intensity required by their local utility provider. That section includes options for the purchase of carbon offset credits if such standards are not met.

Section 8306 provides requirements for stationary and portable generators greater than 50 horsepower. It requires these to comply with the appropriate Airborne Toxic Control Measure for stationary or portable generators and includes certificates or permits that are acceptable to prove compliance. Additional compliance options are provided for generators below 50 horsepower by 2023, including limiting hours of operation, meeting certain emergency use requirements, and filter and engine requirements.

Local Laws, Regulations, and Policies

El Dorado County General Plan

The El Dorado County General Plan Public Services and Utilities Element encourages energy efficiency development within the County by imposing two policies:

- *Policy 5.6.2.1*- Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

- *Policy 5.6.2.2*- All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Impact Analysis:

a. **Energy Consumption:** The proposed project would involve the construction of a cannabis cultivation facility. While construction activities would result in the temporary consumption of energy resources in the form of vehicle and equipment fuels (gasoline and diesel fuel) and electricity/natural gas (directly or indirectly), such consumption would be short-term and temporary and would thus not have the potential to result in wasteful, inefficient, or unnecessary consumption of energy resources. Regarding long-term operation of the project, the proposed project would be powered by a proposed solar photovoltaic panel array and energy storage system to be located on-site. The applicant would use both sun-grown and mixed-light methods for cannabis cultivation. The project is expected to source all electricity for operation from the proposed on-site solar facilities. Therefore, use of an on-site generator would be limited to power outage events. The project would be subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, contains additional energy measures that are applicable to the project under CALGreen. Prior to project approval, the project applicant would be required

to ensure that the project would meet Title 24 requirements applicable at that time, as required by State regulations through their plan review process. Therefore, impacts related to energy use would be **less than significant**.

b. **Energy Plans and Efficiency Standards:** Part 6 of Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. Title 24 also includes Part 11, CALGreen. CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and State-owned buildings, as well as schools and hospitals. The proposed project would meet Title 24 and CALGreen standards to reduce energy demand and increase energy efficiency. Overall, the project would not conflict with existing energy standards and regulations; therefore, impacts during construction and operation of the project would be **less than significant**.

FINDING: With conformance with statewide mandatory energy requirements as outlined in Title 24, Parts 6 and 11, of the California Code of Regulations, the project would have a less than significant impact on energy resources.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			**X**	
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?				**X**
iv) Landslides?			**X**	
b. Result in substantial soil erosion or the loss of topsoil?			**X**	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?			**X**	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			**X**	
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			**X**	

Environmental Setting

The project property is located in a mountainous region, with land that generally slopes downward from northwest to southeast. The project would include a nursery/immature cultivation area and a mature cultivation area. Vegetation in the area proposed for development is mixed trees (pine, cedar, and oak) and interspersed with areas of ruderal/disturbed areas with non-native grassland. Site elevations are generally highest in the northeast and lowest in the south, and elevations range from approximately 3,455 ft amsl in the northeastern area of the property to approximately 3,120 ft amsl along the southern edge of the property.

According to the custom Soil Resource Report for this project (Appendix E; NRCS 2023), the following soil map units occur on the project property:

- Aiken cobbly loam, 3 to 30 percent slopes (AgD): covers 17.3 percent of the parcel;
- Argonaut loam, seeped variant (AoB): covers 2.3 percent of the parcel;

- Cohasset loam, summits, 2 to 20 percent slopes, dry (CmB): covers 3.9 percent of the parcel;
- Cohasset cobbly loam, 15 to 50 percent slopes (CoE): covers 66.2 percent of the parcel;
- Josephine silt loam, 15 to 30 percent slopes (JtD): covers 7.3 percent of the parcel;
- Sites loam, 15 to 30 percent slopes, C low montane (SkD): covers 3 percent of the parcel;

Regulatory Setting:

Federal Laws, Regulations, and Policies

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: US Geological Survey (USGS), National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2016) are to:

1. Develop effective measures to reduce earthquake hazards;

2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines";

3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and

4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for State, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq*.) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the SHMA addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.

Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the SHMA, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Paleontological Resources

The CEQA lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological resource management is also addressed in PRC Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands.

Impact Analysis:

a. Seismic Hazards:

i) **Rupture of Fault:** Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can damage or collapse buildings, cause severe damage to roads and pavement structures, and cause failure of overhead as well as underground utilities.

There are no earthquake faults delineated on Alquist-Priolo Fault Zone maps within the project property (CDC 2023b). Since the project property is not traversed by a known active fault and is not within 200 ft of an active fault trace, surface fault rupture is not considered to be a significant hazard for the project site. The

project would not expose people or structures to substantial adverse effects from a fault rupture, and any potential impacts from implementation of the proposed project would be **less than significant.**

ii) **Ground Shaking:** The potential for seismic ground shaking in the project area would be considered low for the reason stated under question i) above. Any potential impacts due to seismic risks would be addressed through compliance with the Uniform Building Code (UBC). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. Project impacts would be **less than significant**.

iii) **Ground Failure:** Because the project site is considered an area with low potential for seismic activity, there is minimal to no potential for seismic-related ground failure, including liquefaction (CDC 2023b). There would be **no impact**.

iv) **Landslide:** The project property is in a mountainous region, with land that generally slopes down from northwest to southeast. The project would include one cannabis cultivation area located in the central portion of the project property. The cannabis cultivation area gently slopes from northwest to southeast, and vegetation in the area proposed for cultivation is undeveloped, sparsely wooded land. The project property has a small watercourse/riparian edge located approximately 350 feet northwest of the proposed cultivation area. Site elevations range from approximately 3,455 ft amsl in the northeast area of the property to approximately 3,120 ft amsl along the southern edge of the property. The southern half of the parcel drains west into Brownsville Creek, thence Cedar Creek. The northern half is drained by an ephemeral watercourse approximately 350 feet north of the project area which flows west into Cedar Creek and then into Scott Creek, eventually flowing into the Cosumnes River. These slopes do have landslide potential; however, the slopes in the project site are gentle and have low landslide potential with elevations ranging from approximately 3,455 to 3,120 ft amsl. The proposed project would comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance, and grading on the project site would be minimal and balanced on-site. The owner/applicant would till the cultivation areas as necessary; however, ground disturbance would only take place in the mature and immature cultivation areas and total ground disturbance would be 31,865 sf which is less than 1 acre. Any potential impacts from implementation of the proposed project would be **less than significant**.

b. **Soil Erosion:** Minimal grading is proposed at the edges of the project site, and all soil would be balanced on-site. The owner/applicant would use a small tractor to till the cultivation area and nursery area, and total ground disturbance would not exceed 1 acre. Waddles and other control measures would be installed around the cannabis cultivation and compost areas, as necessary, to prevent soil erosion. Project impacts would be **less than significant**.

c. **Geologic Hazards:** According to the NRCS custom Soil Resource Report for the proposed project, the site is composed of six soil map units, and the entirety of the project premises would be developed on soils classified under the Cohasset or Aiken soils series (NRCS 2023). The Cohasset soils series are noted to have low to moderate erosive qualities (USDA 2018), while the Aiken soils series are noted to have moderate erosive qualities. Minimal grading would occur at the edges of the project site and be balanced on-site. Project impacts would be **less than significant**.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations, distortion of structures, and warping of doors and windows. The following soils were mapped on the project site: Aiken cobble loam, 3 to 30 percent slopes (AgD); Argonaut loam, seeped variant (AoB); Cohasset loam, summits 2 to 20 percent slopes, dry (CmB); Cohasset cobbly loam, 15 to 50 percent slopes (CoE); Josephine silt loam, 15 to 30 percent slopes (JtD); and Sites loam, 15 to 30 percent slopes, C low montane (SkD). These soils are well-drained and do have clay materials, meaning the soils have shrink-swell capabilities and the potential to be expansive. However, the proposed project would not include any habitable structures, and any proposed buildings would require building permits from the El Dorado County Building Department. Any future proposed buildings would be designed and constructed by a qualified engineer, and with County issuance of building permits

following the building plan check review, any potential impacts from development on potentially expansive soils would be **less than significant**.

e. **Septic Capability:** The project applicant proposes to temporarily use a seasonal portable toilet and hand-washing station that serves the structures on the property, with plans to eventually replace this with a permanent toilet and on-site septic system. The property is located in a rural area of El Dorado County with no residence on-site. Should a septic tank or leach field be constructed in the future, it would be designed and constructed by a qualified engineer, and with County issuance of building permits. Impacts would be **less than significant**.

f. **Paleontological Resource:** No previous surveys conducted in the project area have identified the project site as sensitive for paleontological resources or other geologically sensitive resources, nor have testing or ground disturbing activities performed to date uncovered any paleontological resources or geologically sensitive resources. Additionally, the project site is not located within the Mehrten Formation. Therefore, impacts relating to paleontological resources would be **less than significant**.

FINDING: A review of the soil and geologic conditions on the project site determined that the project would not result in a substantial adverse effect. The proposed project would comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance. Future development would be required to comply with the Uniform Building Code which would address potential seismic related impacts. For this Geology and Soils resource section, impacts would be less than significant or have no impact.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			**X**	

Environmental Setting:

Cumulative greenhouse gas (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria air pollutants and TACs are pollutants of regional and local concern (see Section 7.III, Air Quality, above); GHGs are global pollutants. The primary land-use related GHGs are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The individual pollutant's ability to retain infrared radiation represents its global warming potential (GWP) and is expressed in terms of CO_2 equivalents (CO_2e); therefore, CO_2 is the benchmark having a GWP of 1. To comply with international reporting standards, GWPs established by the Intergovernmental Panel on Climate Change Fourth Assessment Report is used in this analysis: CH_4 – GWP of 25; N_2O – GWP of 298 (IPCC 2007). Emissions are expressed in annual metric tons (MT) of CO_2e. Other GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). While these compounds have significantly higher global warming potentials (ranging in the thousands), these typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

GHG Sources

The primary anthropogenic source of CO_2 is the burning of fossil fuels; the two largest sources being coal to produce electricity and petroleum in combustion engines. The primary sources of anthropogenic CH_4 are natural gas systems losses (during production, processing, storage, transmission, and distribution), enteric fermentation (digestion from livestock), and landfill off-gassing. The primary source of anthropogenic N_2O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70 percent of countywide GHG emissions). A distant second are residential sources (approximately 20 percent), and commercial/industrial sources are third (approximately 7 percent). The remaining sources are waste/landfill (approximately 3 percent) and agricultural (<1 percent) (EDCAQMD 2021).

Regulatory Setting:

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

State Laws, Regulations, and Policies

Executive Order (EO) S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

In 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006,* formally known as the Global Warming Solutions Act (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 provided initial direction on creating a comprehensive multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives. One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)) and to update the plan at least once every 5 years.

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. Senate Bill (SB) 32 was adopted in 2016, which codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030.

California Code of Regulations Title 3, *Food and Agriculture*, Division 8, *Cannabis Cultivation*, contains the following sections applicable to the project and relevant to the greenhouse gas emissions analysis:

> Section 8102(s) states: [Each cultivation license application shall include the following, if applicable:] For indoor and mixed-light license types, identification of all power sources for cultivation activities, including but not limited to, illumination, heating, cooling, and ventilation.
>
> Section 8305 provides requirements for certain mixed-light cannabis cultivator licensees to ensure that, by 2023, their electrical power meets the average electricity greenhouse gas emissions intensity required by their local utility provider. That section includes options for the purchase of carbon offset credits if such standards are not met.

Impact Analysis:

a. **GHG Emissions:** The project would result in GHG emissions associated with short-term construction and long-term operations.

Construction

Construction GHG emissions would be generated by exhaust from construction equipment, on-road hauling trucks, and worker commuting trips. Construction for the proposed project would be short-term and temporary, no more than approximately 3 months in total for each phase. All construction equipment and commercial trucks would be maintained to meet current emissions standards as required by the CARB. Neither the EDCAQMD nor El Dorado County have adopted criteria or guidance for determining the significance of a project's construction GHG emissions.

Operation

A project's operational GHG sources would include: mobile emissions from vehicles traveling to and from the project site; emissions from tractor use for road maintenance; engine exhaust from chainsaws, and

mowers; burn piles from seasonal dead/dying brush; emissions from organic pesticides and soil amendments; water sources from the energy required to source, treat and convey water used by the project; and solid waste sources from emissions associated with the collection, disposal, and decomposition of solid waste. Downed tree branches and brush would be burned in the offseason according to CAL FIRE and Pioneer Fire District rules and regulations. For most development projects, mobile emissions are the dominant source of GHGs.

Neither the EDCAQMD nor El Dorado County have adopted criteria or guidance for determining the significance of a project's operational GHG emissions. Because the project site is located within the south-central third of El Dorado County near the Sacramento Metropolitan Air Quality Manage District's (SMAQMD's) jurisdictional boundary, the guidance and screening criteria from the SMAQMD for a land use development project's GHG emissions were used in this analysis. The SMAQMD provides a table of operational screening levels with land uses and sizes below which a project's operational GHG emissions would not be expected to result in GHG emissions that would have a significant effect on the environment. A cannabis cultivation facility is not included in the Operational Screening Levels table. However, the relative size of land uses in the table can indicate whether the project's mobile GHG emissions would be significant. As described in Section 7.XVII, Transportation, the project is expected to generate a total of up to 36 commuter trips and up to 8 truck trips per day. The Policy TC-Xe threshold for El Dorado County is 100 daily trips, therefore, the project trip generation of 36 daily trips would be far less than the expected trip generation for any of the development types listed in the SMAQMD Operational Screening levels table. For comparison, in transportation planning, the trip generation for typical single-family residences is 9 to 10 daily trips (504 to 560 daily trips for 56 residences). Water sourced from public utilities results in GHG emissions from the energy required to source, treat, and transport the water over long distances. The proposed project is estimated to demand approximately 159,000 gallons of water annually from an on-site well, eliminating GHG emissions related to treating and pumping water off-site except for a small amount of emissions associated with the electricity to run the well pump. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be **less than significant**.

b. **GHG Reduction Plans:** There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 requires further reductions of 40 percent below 1990 levels by 2030. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the low carbon fuel standard (LCFS), and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed. As previously discussed, a comparison of the project with the SMAQMD Operational Screening levels table indicated that the project's GHG emissions would not result in significant impact. Therefore, implementation of the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and the impact would be **less than significant**.

FINDING: The proposed project would result in less than significant impacts to GHG emissions, and the project would not conflict with State or local GHG reduction plans or regulations.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				**X**
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				**X**
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
g. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			**X**	

Regulatory Setting:

Hazardous materials and hazardous wastes are subject to extensive federal, State, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, State, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and EDCAQMD.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past

hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Code of Federal Regulations (14 CFR) Part 77

14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed (if required). The code provides specific guidance regarding FAA notification requirements.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. OEHHA, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cf of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees. In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups).

California Division of Occupational Safety and Health

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans.

Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible radiofrequency (RF) energy exposure limits for workers (Title 8 CCR Section 5085[b]) and requires warning signs where RF energy might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and CAL FIRE administer State policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 ft from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 ft of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

California Highway Patrol (CHP), along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

Cannabis Cultivation Program

Title 3 of the California Code of Regulations Section 8102(q) states:

> [Each cultivation license application shall include the following, if applicable:] Evidence that the applicant has conducted a hazardous materials record search of the EnviroStor database for the proposed premises. If hazardous sites were encountered, the applicant shall provide documentation of protocols implemented to protect employee health and safety;

Section 8106(a)(3) states:

> (a) The cultivation plan for each Specialty Cottage, Specialty, Small, and Medium licenses shall include all of the following:
>
> (3) A pest management plan which shall include, but not be limited to, the following:
> (A) Product name and active ingredient(s) of all pesticides to be applied to cannabis during any stage of plant growth;
> (B) Integrated pest management protocols, including chemical, biological, and cultural methods the applicant anticipates using to control or prevent the introduction of pests on the cultivation site; and

> (C) A signed attestation that states the applicant shall contact the appropriate County Agricultural Commissioner regarding requirements for legal use of pesticides on cannabis prior to using any of the active ingredients or products included in the pest management plan and shall comply with all pesticide laws.

Section 8304(f) states:

> [All licensees shall comply with all of the following environmental protection measures:] Compliance with pesticide laws and regulations pursuant to section 8307 of this chapter.

Section 8307 contains requirements regarding compliance with pesticide laws and regulations. It also contains measures to protect pollinators, water bodies, and wildlife.

Local Laws, Regulations, and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the State Responsibility Areas (SRAs) in El Dorado County, as established by CAL FIRE. The classification system provides three classes of fire hazards: Moderate, High, and Very High. The County's Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by State law. The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

Impact Analysis:

a. **Hazardous Materials:** The proposed project would involve cultivation and propagation of cannabis. Hazardous materials associated with the proposed operation of a cannabis cultivation facility include organic pesticides, soil amendments, gasoline, diesel fuel, and engine oil. All hazardous materials used on-site would be stored in a 1,200-sf proposed storage shed designated for pesticide and agricultural chemical storage use. Flammable materials would be stored in a designated area in the 1,200-sf shed. Any uses of hazardous materials would be required to comply with all applicable federal, State, and local standards associated with the handling and storage of hazardous materials. The proposed project would also be subject to the requirements of the SWRCB Cannabis General Order. The SWRCB Cannabis General Order program has "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which include the following requirements:

- Cannabis cultivators shall not apply restricted materials, including restricted pesticides or herbicides, or allow restricted materials to be stored at the cannabis cultivation site. Cannabis cultivators shall implement integrated pest management strategies where possible to reduce the need and use of pesticides or herbicides and the potential for discharges to waters of the State.
- Cannabis cultivators shall keep and use absorbent materials designated for spill containment and spill cleanup equipment on-site for use in an accidental spill of fertilizers, petroleum products, hazardous materials, and other substances which may degrade waters of the State.
- Implementation of spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.

With appropriate storage, handling, and application BMPs that comply with the requirements of the federal, State, and local regulations, it is not anticipated that the use of these materials at the facility would pose a significant hazard. The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and therefore, impacts would be **less than significant**.

b. **Hazardous Conditions:** As discussed under question a), organic pesticides, soil amendments, gasoline, diesel fuel, and engine oil would be stored and used at the site. Use of such materials would be required to comply with all applicable local, State, and federal standards associated with the handling and storage

of hazardous materials, including the standard conditions contained in the SWRCB Cannabis General Order. Standard conditions include implementation of spill prevention, control, and countermeasures and the maintenance of appropriate cleanup materials on-site.

With implementation of appropriate storage, handling, and application BMPs, it is not anticipated that the use of these materials would pose a significant hazard. In the event of reasonably foreseeable upset and accident conditions, it is unlikely that these hazardous materials would be released in a manner that would create a significant hazard to the public or the environment. Project impacts would be **less than significant**.

c. **Hazardous Materials near Schools:** There are no schools within three miles of the project site. The project would be required to ensure that hazardous chemicals and solid wastes are handled per County, State, and federal regulations. As such, the proposed project would have **no impact**.

d. **Hazardous Sites:** The following databases were reviewed for the proposed project and surrounding area to identify potential hazardous contamination sites: the California DTSC EnviroStor database (DTSC 2023); California State Water Resources Control Board's Geotracker database (SWRCB 2023); and the U.S. EPA's Superfund National Priorities List (USEPA 2023). Based on review of these databases, the project site is not included on a list of or near any hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, there would be **no impact**.

e. **Aircraft Hazards, Private Airstrips:** According to the County's Zoning Map and the El Dorado County Airport Land Use Compatibility Plan, the project site is not within any airport safety zone or airport land use plan area (EDC ALUC 2012). The project site is not located in the vicinity of a public or private airstrip. The closest airstrip to the project site is the private Perryman Airport-7CL9, located approximately 11 miles due northwest of the project site. As such, the project would not be subject to any land use limitations contained within any adopted Comprehensive Land Use Plan, and there would be no immediate hazard for people working in the project area or safety hazard resulting from airport operations and aircraft over-flights in the vicinity of the project site**.** Therefore, there would be **no impact**.

f. **Emergency Plan:** The Pioneer Fire Protection District requirements would be incorporated as Conditions of Approval. No applicable emergency plan would be affected by the project as proposed. Additionally, access roads would be at least 12 feet wide with invisible turnouts and a turnaround bubble at the end of the property line for fire vehicle access and maneuvering. An existing well and 5,000-gallon water storage tank would provide water access for fire suppression vehicles. An evacuation plan would be prepared for the project site, and workers on-site would monitor conditions in the area during periods of high fire danger to ensure early evacuations if needed. Impacts would be **less than significant**.

g. **Wildfire Hazards:** The project is located in a Very High Fire Hazard Severity Zone (FHSZ) of a State Responsibility Area (SRA) (CAL FIRE 2023). The Pioneer Fire Protection District is primarily responsible for structural fire protection services to the project site, and CAL FIRE is primarily responsible for wildland fire suppression. CAL FIRE's nearest station is the CAL FIRE Mt. Danaher Fire Station 20 located approximately 12.2 miles northwest of the project site at 2840 Mt Danaher Rd, Camino, CA. The Pioneer Fire Protection District also provides all risk, partly staffed/partly volunteer emergency services to the project area, and their nearest station is Station 37, located approximately 1.3 miles northeast of the site at 6021 Omo Ranch Road, Somerset, CA (Pioneer Fire Protection District 2023). Given that Pioneer Fire Protection District's resources are closer, they would likely provide an initial response to most types of emergencies that may occur on the project site; CAL FIRE resources may also respond, especially in the case of larger or more complex incidents. The degree of hazard in wildland areas depends on variables like temperature, wind, and moisture, the amount of dryness and arrangement of vegetation, slope steepness, proximity to human activities, accessibility of firefighting equipment, and fuel clearance around structures. The County's General Plan Safety Element precludes development in areas of high wildland fire hazard unless such development can be adequately protected from wildland fire hazards as demonstrated in a Fire Plan prepared by a qualified professional as approved by the El Dorado County Fire Prevention Officers Association and approved by the local Fire

Protection District and/or CAL FIRE. Such a plan was prepared for this project and is included as Appendix G to this Initial Study (California Reforestation, Inc 2021).

The applicant would take several measures to reduce potential wildfire hazards, as recommended by the Fire Plan. Downed tree branches and brush, as well as dead wood, would be moved out of zone. A 5,000-gallon water tank for the Pioneer Fire Protection District is located on-site and would provide water for fire suppression if needed. Additionally, vegetation would be mowed, masticated, or cut to ground level each May for effective fuel reduction. Defensible space around the structures, including the cannabis cultivation premises, would extend 200 ft from the structure to resist ignition and be kept clear of the dead vegetation. For an early evacuation route if a fire would occur, fuels would be mowed or masticated annually 300 ft from both edges of the internal access roads used for the proposed project. A 300-foot-wide fuel break would be established following the road along the ridge to allow defensible space for fire suppression activities. An evacuation plan would be prepared for the project site, and workers on site would monitor conditions in the area during periods of high fire danger to ensure early evacuations if needed. These measures would be included as Conditions of Approval for the proposed project. Impacts would be **less than significant**.

FINDING: The proposed project would not expose the public or environment to hazards relating to the use, storage, transport, or disposal of hazardous materials. Additionally, conformance with the County's Conditions of Approval would reduce potential emergency plan and wildfire hazard impacts to less than significant. Therefore, impacts would be less than significant, or no impact would occur for hazards and hazardous materials.

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			**X**	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			**X**	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or -off-site?			**X**	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			**X**	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			**X**	
f. Otherwise substantially degrade water quality?			**X**	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			**X**	
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			**X**	
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			**X**	
j. Inundation by seiche, tsunami, or mudflow?			**X**	

Environmental Setting

The project site receives an average of 45.69 inches of precipitation per year (CNPS 2021). Most precipitation is concentrated in the winter and early spring months, with summers being almost completely dry. The project site is located in a mountainous region, with land that generally slopes downward from northeast to southwest. The project would include one cannabis cultivation area located in the central portion of the project property. The cannabis cultivation area gently slopes from northwest to southeast, and vegetation in the area proposed for cultivation is

undeveloped, sparsely wooded land. The project property has a small watercourse/riparian edge located approximately 350 feet northwest of the proposed cultivation area. Site elevations range from approximately 3,455 ft amsl in the northeast area of the property to approximately 3,120 ft amsl along the southern edge of the property. The southern half of the parcel drains west into Brownsville Creek, thence Cedar Creek. The northern half is drained by an ephemeral watercourse approximately 350 feet north of the project area which flows west into Cedar Creek and then into Scott Creek, eventually flowing into the Cosumnes River. No permanent watercourses exist in the immediate vicinity of the cultivation area, and the proposed project is setback at least 350 from the nearest ephemeral watercourse.

The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in the region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through precipitation infiltrating into the fractures and water from the seasonal creek when inundated. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Existing demand for groundwater in the vicinity of the site is low given the rural and undeveloped nature of much of the surrounding land. The project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C1050E, revised September 25, 2008 (FEMA 2008).

Regulatory Setting:

Federal Laws, Regulations, and Policies

Clean Water Act

The CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the proposed project are CWA Section 303 and Section 402.

Section 303(d) — Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

Section 402—NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination Program (NPDES), which is officially administered by USEPA. In California, USEPA has delegated its authority to the SWRCB, which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acres are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The General Permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a SWPPP. SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of BMPs that would be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the CVRWQCB (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region Six). The proposed project site falls under the jurisdiction of the CVRWQCB. The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013, for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The Phase II NPDES permit became effective on July 1, 2013. By July 1, 2015, this State-mandated permit required the County to address storm water runoff from new development and redevelopment projects, both during construction and after construction occurs.

On May 19, 2015, the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purposes of the ordinance are to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of BMPs to reduce the adverse effects of polluted runoff discharges on Waters of the State.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the State into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the State's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Cannabis Cultivation Program:

Applicants for a cannabis cultivation license are required to provide to DCC a final copy of proof of a lake or streambed alteration agreement issued by CDFW or written verification that an agreement is not necessary (3 CCR Section 8102(v)).

Title 3 of the California Code of Regulations Section 8102 states, in part:

> Each application [for a cultivation license] shall include the following, if applicable:
>
> (p) For all cultivator license types except Processor, evidence of enrollment in an order or waiver of waste discharge requirements with the State Water Resources Control Board or the appropriate Regional Water Quality Control Board. Acceptable documentation for evidence of enrollment can be a Notice of Applicability letter. Acceptable documentation for a Processor that enrollment is not necessary can be a Notice of Non-Applicability;

(v) Identification of all of the following applicable water sources used for cultivation activities and the applicable supplemental information for each source pursuant to section 8107 of this chapter:

(1) A retail water supplier;

(2) A groundwater well;

(3) A rainwater catchment system;

(4) A diversion from a surface waterbody or an underground stream flowing in a known and definite channel.

(w) A copy of any final lake or streambed alteration agreement issued by the CDFW, pursuant to sections 1602 or 1617 of the Fish and Game Code, or written verification from the CDFW that a lake and streambed alteration agreement is not required;

(dd) If applicable, the applicant shall provide evidence that the proposed premises is not located in whole or in part in a watershed or other geographic area that the State Water Resources Control Board or the Department of Fish and Wildlife has determined to be significantly adversely impacted by cannabis cultivation pursuant to section 8216.

Section 8107(b) states:

If the water source is a groundwater well:

(1) The groundwater well's geographic location coordinates in either latitude and longitude or the California Coordinate System; and

(2) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code. If no well completion report is available, the applicant shall provide evidence from the Department of Water Resources indicating that the Department of Water Resources does not have a record of the well completion report. If no well completion report is available, the State Water Resources Control Board may request additional information about the well.

Section 8216 states:

If the State Water Resources Control Board or the Department of Fish and Wildlife notifies the department in writing that cannabis cultivation is causing significant adverse impacts on the environment in a watershed or other geographic area pursuant to section 26069, subdivision (c)(1), of the Business and Professions Code, the department shall not issue new licenses or increase the total number of plant identifiers within that watershed or area while the moratorium is in effect.

Section 8304 (a and b) states:

All licensees shall comply with all of the following environmental protection measures:

(a) Compliance with section 13149 of the Water Code as implemented by the State Water Resources Control Board, Regional Water Quality Control Boards, or CDFW;

(b) Compliance with any conditions requested by the CDFW or the State Water Resources Control Board under section 26060.1(b)(1) of the Business and Professions Code;

Section 8307 contains requirements regarding compliance with pesticide laws and regulations. It also contains measures to protect pollinators, water bodies, and wildlife.

Impact Analysis:

a. **Water Quality Standards:** There is potential for the proposed project to result in degradation of water quality during both the construction and operational phases. The cannabis plants would be grown in raised beds in rows and would use drip irrigation using water from the existing on-site well. The cannabis cultivation premises is setback approximately 350 ft from the nearest watercourse so it would not likely cause degradation of water quality due to runoff from the development or operation of the cultivation operation. During construction, localized indirect impacts to water resources could occur from oil and grease from construction equipment, and increased erosion and sedimentation due to soil disturbance. During operation, localized impacts could occur due to a discharge of sediment or other pollutants, fertilizers, pesticides, and human waste. The project proponent would be required to enrolled under the SWRCB Cannabis General Order WQ 2019-0001-DWQ. One of the requirements is to prepare a Site Management Plan (SMP), which includes identifying potential sources of water quality violations or waste discharge requirements, corrective actions including implementing and monitoring BMPs, and documenting water usage and timing to ensure the water use is not impacting water quality objectives and beneficial uses. The project applicant would be required to prepare and implement a SMP.

With implementation of measures required by the SMP and adherence to the County Code, impacts would be **less than significant**.

b. **Groundwater Supplies:** A well was constructed on-site in July 2022. The well is 480 ft deep and can provide an initial flow rate of 10 gallons per minute. This well would provide the main water supply for the approximately 10,000 sf of flowering cannabis canopy and miscellaneous support and sanitary needs. It has been estimated that the project would use approximately 159,000 gallons of water annually. The project premises are not over a critically over drafted groundwater basin (DWR 2024), and therefore it is not anticipated that the project would deplete groundwater supplies. There is adequate water supply to irrigate the proposed project, and the proposed project would not introduce substantial impervious surfaces that would interfere with groundwater recharge in the area of the proposed project. Therefore, impacts to groundwater supplies and recharge would be **less than significant**.

c-f. **Drainage Patterns:** The southern half of the parcel drains west into Brownsville Creek, then Cedar Creek. The northern half is drained by an ephemeral watercourse approximately 350 feet north of the project area which flows west into Cedar Creek and then into Scott Creek, eventually flowing into the Cosumnes River. The cannabis cultivation areas would be developed on undeveloped wooded land. The proposed project would not introduce impervious surfaces, so drainage within the site would percolate into the surrounding pervious surfaces to reduce any potential runoff. Additionally, the project applicant would install waddles and other preventative measures to minimize sediment laden runoff and erosion.

The project would not disturb one (1) or more acre of soil, and therefore, would not be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009 DWQ. However, the project would be required to comply with the SWRCB Cannabis General Order WQ 2019-0001-DWQ requirements. With the implementation of the General Permit Order 2009-0001 DWQ, impacts would be **less than significant** for questions c), d), e), and f).

g-j. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C1050E, revised September 26, 2008 (FEMA 2008), and would not result in the construction of any structures that would impede or redirect flood flows. No dams are located in the project area that could result in potential hazards related to dam failures. The project site would not be at risk for tsunami impact as the site is approximately 120 miles inland from the coast. According to USGS, mudflows or debris flows start on steep slopes and travel to canyon bottoms, stream channels, and areas near the outlets of canyons during intense rainfall. Debris flows commonly begin in swales on steep slopes, making areas downslope from the swale particularly hazardous (USGS 2000). Due to the site's elevation, relatively flat project area and absence of nearby wetlands, the proposed project would not be at significant risk of exposure to mudflows. The project is not located near a lake or large body of standing water, so there is no risk of seiche. Therefore, impacts would be **less than significant** for questions g), h), i), and j).

FINDING: With adherence to federal, State, and local regulations, the proposed project would have a less than significant impact on hydrology and water quality.

XI. LAND USE PLANNING

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Physically divide an established community?				**X**
b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			**X**	

Environmental Setting:

The project property is zoned Rural Land, 160-acre Minimum (RL-160) and designated for Natural Resource (NR) in the El Dorado County General Plan. The intent of the RL-160 zone is to identify those lands that are suitable for limited residential development based on topography, access, groundwater or septic capability, and other infrastructural requirements. This zone may be applied where resource-based industries in the vicinity may impact residential uses. Commercial support activities that are compatible with the available infrastructure may be allowed within this zone to serve the surrounding rural and agricultural communities. Although agricultural uses are allowed, these lands generally do not support exclusive agricultural use. This zone is applied to those lands to allow uses which supplement the agricultural use.

The purpose of the NR General Plan land use designation is to identify areas that contain economically viable natural resources and to protect the economic viability of those resources and those engaged in harvesting/processing of those resources including water resources development from interests that are in opposition to the managed conservation and economic, beneficial use of those resources. The important natural resources of the County include forested areas, mineral resources, important watershed, lakes and ponds, river corridors, grazing lands, and areas where the encroachment of development would compromise these natural resource values. Land under both public and private ownership that contain these resources, including wilderness areas and other lands managed for resource values and multiple use, are included in this category. This designation shall be applied to those lands which are 40 acres or larger in size and contain one or more important natural resource. Compatible uses on private land may include agriculture, rangeland, forestry, wildlife management, recreation, water resources development, and support single-family dwellings. The maximum allowable density for this designation is one dwelling unit per 160 acres or larger outside the National Forest Service lands and within "timber production" areas and one dwelling unit per 40 acres within river canyons outside of the "timber production" areas. This designation is considered appropriate only in the Rural Regions. Isolated parcels outside the National Forest Service lands and below 3,000 feet elevation may be exempt from the one dwelling unit per 160-acre parcel size. If it is determined that such lands are unsuitable for "timber production," one dwelling unit per 40 acres maximum density can be considered. Any modifications of this land use designation shall require one of the following findings: (1) No important natural resource exists on the property; or (2) If a project is proposed, it will significantly enhance the long-term production and preservation of the on-site resources through the application of development strategies such as fuels management plans, timber management plans, self-imposed setbacks buffers, and open space.

Regulatory Setting:

California State law requires that each city and county adopt a general plan "for the physical development of the city and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the city or county for the next 15-20 years. The general plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses.

The El Dorado County General Plan was adopted in 2004. The County's 2013-2021 Housing Element was adopted in 2013.

Impact Analysis:

a. **Divide Established Community:** The proposed project would involve the development of a cannabis cultivation facility with appurtenant uses located on a privately-owned property within a rural area in south-central El Dorado County. The project property is not within or in the vicinity of an established community. Further, the proposed project would not develop any new roadways or involve any development that could divide an established community. Therefore, the project would have **no impact**.

b. **Land Use Consistency:** The proposed project would conform to both the RL-160 zoning and NR land use designation with the issuance of a conditional use permit (CUP) as cannabis is an agricultural use and agriculture is allowed on lands zoned RL with the issuance of a CUP. Additionally, Commercial Cannabis businesses in unincorporated El Dorado County are required to apply for and obtain a Commercial Cannabis Use Permit (CCUP). Therefore, with County approval of the CCUP, the proposed project would be in conformance with the County Code, and impacts would be **less than significant**.

FINDING: The proposed project would not divide an established community, and with County approval of a CCUP, would be in conformance with the County Code. Therefore, less than significant or no impact to land use and planning goals would occur.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**

Environmental Setting:

The western portion of El Dorado County is divided into five, 15-minute quadrangles (Folsom, Placerville, Georgetown, Auburn, and Camino & Mokelumne Hill) mapped by the State of California Division of Mines and Geology showing the location of MRZs (CDC 2001). Those areas which are designated MRZ-2a contain discovered mineral deposits that have been measured or indicate reserves calculated. Land in this category is considered to contain mineral resources of known economic importance to the County and/or State. Review of the mapped areas of the County indicates that project site does not contain any mineral resources of known local or statewide economic value.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the proposed project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by California Department of Conservation (CDC) and California Geological Survey following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning mineral resource zones. Lands classified Mineral Resource Zone (MRZ)-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

Local Laws, Regulations, and Policies

El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. Exhibit 5.9-6 of the General Plan shows the MRZ-2 areas within the County based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the County's important mineral resource deposits are concentrated in the western third of the County. The proposed project site is not located within this region.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that would threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

Impact Analysis:

a, b. **Mineral Resources.** The project site is not mapped as being within an MRZ by the CDC or in the County General Plan (CDC 2001). **No impact** would occur for questions a) and b).

FINDING: No impacts to mineral resources are expected either directly or indirectly from implementation of the proposed project.

XIII. NOISE

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			**X**	
b. Generation of excessive groundborne vibration or groundborne noise levels?			**X**	
c. For a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				**X**

Existing Noise Setting:

The project property is located in a rural area approximately 12 miles directly south of US Route 50 and 6.7 miles southeast of the community of Somerset. The ambient noise environment in the immediate project vicinity is defined primarily by sparse traffic on the local roadway network.

Background:

Noise Terminology and Metrics

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol LEQ, with a specified duration.

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this wide range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of dBA. The threshold of hearing for the human ear is about 0 dBA, which corresponds to 20 mPa.

Because decibels are logarithmic units, SPL cannot be added or subtracted through standard arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than from one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dBA—rather, they would combine to produce 73 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dBA louder than one source.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern 1 dBA changes in sound levels, when exposed to steady, single-frequency (“pure-tone”) signals in the mid-frequency

(1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dBA are generally not perceptible. It is widely accepted, however, that people begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dBA increase is generally perceived as a distinctly noticeable increase, and a 10 dBA increase is generally perceived as a doubling of loudness.

Groundborne Vibration Terminology and Metrics

Groundborne vibration consists of rapidly fluctuating motions or waves transmitted through the ground with an average motion of zero. Sources of groundborne vibrations include natural phenomena and anthropogenic causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints. Generally, a PPV of less than 0.08 in/sec does not produce perceptible vibration. At 0.10 PPV in/sec, continuous vibrations may begin to annoy people, and it is the level at which there is a risk of architectural damage (e.g., cracking of plaster) to historical buildings and other vibration-sensitive structures. A level of 0.30 PPV in/sec is commonly used as a threshold for risk of architectural damage to standard dwellings (Caltrans 2013).

Regulatory Setting:

El Dorado County General Plan

The El Dorado County General Plan Public Health, Safety, and Noise Element contains Goal 6.5: "Ensure that County residents are not subjected to noise beyond acceptable levels." The following objective and policies from the General Plan would be applicable to the project (El Dorado County 2004):

Objective 6.5.1: Protection of Noise-Sensitive Development. Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.

Policy 6.5.1.2 Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 at existing or planned noise sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

Policy 6.5.1.7 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 for noise sensitive uses.

Policy 6.5.1.11 The standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, and 8:00 a.m. and 5:00 p.m. on weekends, and on federally recognized holidays. Further, the standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to public projects to alleviate traffic congestion and safety hazards.

Table 6-2, Noise Level Performance Protection Standards for Noise Sensitive Land Uses Affected by Non- Transportation Sources, of the General Plan establishes noise level standards for sensitive land uses. For rural areas, the noise standard limits are: 50 dBA L_{EQ} and an L_{MAX} of 60 dBA from 7:00 a.m. to 7:00 p.m.; 45 dBA L_{EQ} and an L_{MAX} of 55 dBA from 7:00 p.m. to 10:00 p.m.; and 40 dBA L_{EQ} and an L_{MAX} of 50 dBA from 7:00 a.m. to 7:00 p.m.

Table 6-4, Maximum Allowable Noise Exposure for Non-Transportation Noise Sources in Rural Centers – Construction Noise, of the General Plan establishes construction noise level standards (that occurs outside the hours

specified in Policy 6.5.1.11) of: 55 dBA L_{EQ} and an L_{MAX} of 75 dBA from 7:00 a.m. to 7:00 p.m.; 50 dBA L_{EQ} and an L_{MAX} of 65 dBA from 7:00 p.m. to 10:00 p.m.; and 45 dBA L_{EQ} and an L_{MAX} of 60 dBA from 7:00 a.m. to 7:00 p.m.

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100 ft away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all affected property owners and approved by the County.

For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

El Dorado County Municipal Code

The El Dorado County Municipal Code, Chapter 9.16, Noise, defines and prohibits loud or raucous noise:

Section 9.16.040 – Loud and raucous noises—Definitions.

Loud and raucous noise means:

1. Any noise made by the motor of any automobile, truck, tractor, motorcycle, or aircraft of any kind not reasonably required in the operation thereof under the circumstances and shall include, but not be limited to, backfiring, motor racing, and the buzzing by airplanes;

2. The sound of the discharge of any explosive except by or with the permission of any appropriate State or local licensing agency;

3. The human voice or any record or recording thereof when amplified by any device whether electrical or mechanical or otherwise to such an extent as to cause it to unreasonably carry on to public or private property or to be heard by others using the public highways, public thoroughfares, or public buildings;

4. Any sound not included in the foregoing, which is of such volume, intensity, or carrying power as to interfere with the peace and quiet of persons upon public or private property or other users of the public highways, thoroughfares, and buildings.

Section 9.16.040 – Loud and raucous noises—Prohibited.

> Except as otherwise provided in this chapter, it is unlawful for any person to willfully make, emit, or transmit or cause to be made, emitted, or transmitted any loud and raucous noise upon or from any public highway or public thoroughfare or from any aircraft of any kind whatsoever, or from any public or private property to such an extent that it unreasonably interferes with the peace and quiet of another's private property.

The El Dorado County Municipal Code, Chapter 130, Zoning, is the El Dorado County Zoning Ordinance and establishes the following regarding noise:

Chapter 130.37 of the County Zoning Ordinance complies with General Plan Goal 6.5 (Acceptable Noise Levels), and supplements County Code Chapter 9.16 (Noise) by establishing standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses. Per Chapter 130.37, "The following noise sources shall be exempt from the standards of this Chapter: I. Construction (e.g., construction, alteration or repair activities) during daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order." Table 130.37.060.1 contains noise standards for projects which require an acoustic analysis.

Impact Analysis:

a. Generation of Noise:

Construction

Construction of the project would generate noise from the use of a bulldozer and chainsaws. Construction would happen in two phases, the first to establish outdoor cultivation and the second to build greenhouses. Each phase of construction is expected to have a maximum duration of three months. The nearest noise sensitive receptor to the cultivation area is a single-family residence located 0.46-mile northeast of the proposed cannabis cultivation area. Chapter 130.37 of the County Zoning Ordinance complies with General Plan Goal 6.5 (Acceptable Noise Levels), and supplements County Code Chapter 9.16 (Noise) by establishing standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses. Per Chapter 130.37, "The following noise sources shall be exempt from the standards of this Chapter: I. Construction (e.g., construction, alteration or repair activities) during daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order." (El Dorado County 2018). A County Condition of Approval would restrict construction activities to the daylight hours specified in the zoning ordinance. The applicant would maintain compliance with the relevant requirements of Chapter 130.37, and construction of the project would not result in the generation of a substantial temporary increase in ambient noise levels in excess of the standards established in the General Plan Noise Element.

Operation

Sources of noise resulting from long-term operation of the project would include worker commute vehicles traveling to and from the project site, trucks used for occasional supply deliveries or product shipments, chainsaws and mowers for cultivation upkeep, a tractor with box scraper to maintain areas where vehicles drive and park, and occasional noise from testing/maintaining backup generators. During phase 2 of the project, greenhouses would be installed. Each greenhouse would include two 36-inch Wall Master Box Fans. Based on the SoundPLAN noise modeling conducted by Saxelby Acoustics for the project and included as Appendix F, the proposed greenhouse fans would generate noise levels up to 30 dBA at a location 100 feet away from the nearest rural residential use. These noise levels would comply with the El Dorado County nighttime noise standard of no more than 40 dBA.

In typical outdoor environments, changes in sound levels of 1 to 2 dBA are generally not perceptible. A sound level change of 3 dBA is considered a barely perceptible increase and a sound level change of 5 dBA is considered a readily perceptible increase. Due to the logarithmic nature of the decibel scale, a doubling of sound levels is an increase in 3 dBA. Therefore, in order for traffic noise to increase by 3 dBA (a barely perceptible increase), the traffic volume would have to double. The project is expected to generate a total of up to 36 commuter trips and up to 8 truck trips per day. The Policy TC-Xe threshold for El Dorado County is 100 daily trips, therefore, the project trip generation of 36 daily trips would be far less than the expected trip generation for any of the development types listed in the SMAQMD Operational Screening levels table. For comparison, in transportation planning, the trip generation for typical single-family residences is 9 to 10 daily trips.

Impact Summary

With adherence to the County Condition of Approval to restrict the hours of construction, the project would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in

excess of standards established in the local general plan or noise ordinance, and the impact would be **less than significant**.

b. **Excessive Groundborne Vibration and Noise Levels:** Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted to implement the proposed project. The activities that would cause noise would be made from a chainsaw, bulldozer, and truck. Therefore, the project would not result in generation of excessive ground borne vibration levels, and the impact would be **less than significant**.

c. **Aircraft Noise:** The project is not located within an airport land use plan or in the immediate vicinity of a private airstrip. The closest airstrip to the project site is the private Perryman Airport-7CL9, located approximately 11 miles due northwest of the project site. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from airports, and there would be **no impact**.

FINDING: With adherence to the County Condition of Approval to restrict construction hours, the project would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards. The project would not result in generation of excessive groundborne vibrations levels. The project would not expose people residing or working in the project area to excessive noise levels from airports.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)?			**X**	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

Regulatory Setting:

No federal or State laws, regulations, or policies apply to population and housing for the proposed project.

Local Laws, Regulations, and Policies

The El Dorado County General Plan (adopted 2004) limits residential density on lands designated for NR. one dwelling unit per 160 acres or larger outside the National Forest Service lands and within "timber production" areas and one dwelling unit per 40 acres within river canyons outside of the "timber production" areas. In October of 2013, the El Dorado County Board of Supervisors adopted the 2013-2021 Housing Element to the Adopted General Plan.

Impact Analysis:

a. **Population Growth:** The proposed project does not include the construction of any new homes; however, it does include the construction of a cannabis cultivation facility that could create a limited number of new jobs in the region. While the addition of new employment opportunities could increase the County's population, it is anticipated that the new employees would likely be existing residents of the County or surrounding area that would commute to the project site. As such, the proposed project would not induce substantial population growth or result in a demand for new housing. The impact is **less than significant**.

b. **People or Housing Displacement:** There is currently no residence located on the project property. Therefore, no existing housing or residents would be displaced by the proposed project. **No impact** would occur.

FINDING: The proposed project would not induce substantial growth either directly or indirectly and would not displace housing or residents. Less than significant or no impact would occur to population and housing.

XV. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Fire protection?			**X**	
b. Police protection?			**X**	
c. Schools?			**X**	
d. Parks?			**X**	
e. Other government services?			**X**	

Regulatory Setting:

No relevant federal laws, regulations, or policies are applicable to this section.

State Laws, Regulations, and Policies

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

California Public Resources Code Division 4: Forests, Forestry and Range and Forage Lands

The project is located in a Very High Fire Hazard Severity Zone of a State Responsibility Area (CAL FIRE 2023). SRAs are defined by California PRC Section 4102 as areas of the State in which the Board of Forestry and Fire Protection has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where CAL FIRE has legal and financial responsibility for wildfire protection. SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value.

California PRC Sections 4291 *et seq*. requires that brush, flammable vegetation, or combustible growth within 100 ft of buildings be removed. Vegetation that is more than 30 ft from the building, less than 18 inches high, and important for soil stability, may be maintained as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of rapid transmission of fire from nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the CFC.

California PRC Section 4290 requires CAL FIRE to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within the SRA and lands within very high FHSZs of Local Responsibility Areas (LRA). Additional regulations regarding defensible space can be found in Title 14, Sections 1270.00 *et seq*. of the California Code of Regulations.

Impact Analysis:

a. **Fire Protection:** The proposed project is located within a Very High Fire Hazard Severity Zone of a SRA. The Pioneer Fire Protection District is primarily responsible for structural fire protection services to the project site, and CAL FIRE is primarily responsible for wildland fire suppression. CAL FIRE's nearest station is the CAL FIRE Mt. Danaher Fire Station 20 located approximately 12.2 miles northwest of the project site at 2840 Mt Danaher Rd, Camino, CA. The Pioneer Fire Protection District also provides all risk, partly staffed and partly volunteer emergency services to the project area, and their nearest station is Station 37, located 1.3 miles northeast of the site at 6021 Omo Ranch Road, Somerset, CA (Pioneer Fire Protection District 2023). Given that Pioneer Fire Protection District's resources are closer, they would likely provide an initial response to most types of emergencies that may occur on the project site; CAL FIRE resources may also respond, especially in the case of larger or more complex incidents. The project would be subject to review by the Pioneer Fire Protection District to ensure all required fire protection measures are incorporated into the building plans. A 5,000-gallon water tank for the Pioneer Fire Protection District would be installed slightly northeast of the cannabis cultivation area. A wildland fire safe plan was prepared for this project and is included as Appendix G. While a new cannabis cultivation facility project could potentially require fire services, it would not result in the need for new fire personnel or facilities, as existing levels of fire service can be provided adequately with existing personnel out of existing facilities. Additionally, Fire Department fees would be collected as part of the building permit process. Therefore, the impact would be **less than significant**.

b. **Police Protection:** Law enforcement services for the project area are provided by the El Dorado County Sheriff's Office. Their nearest facility is a station located 1.05 miles southeast of the site at 200 Industrial Drive, Placerville, CA (El Dorado County Sheriff's Office, 2021). Development of the project site could potentially result in a need for police protection services to respond to any potential incidents that may occur at the site. With the current law enforcement services in the area and the implementation of site security measures, including security fencing, onsite presence, motion sensor lights, and camera surveillance, the proposed project would not result in a substantial impact to police protection in the area and the impact would be **less than significant**.

c-e. **Schools, Parks, and Government Services:** Operation of the proposed project would not induce population growth that would substantially contribute to increased demand on schools, parks, or other governmental services that could, in turn, result in the need for new or expanded facilities. Therefore, the project's impact to these services would be **less than significant** for questions c), d), and e).

FINDING: The project would not result in a significant increase of public services to the project. Any increased demand to services would be addressed through the payment of established impact fees and impacts to public services would be less than significant.

XVI. RECREATION

	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			**X**	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

National Trails System

The National Trails System Act of 1968 authorized The National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes four classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Crest Trail falls under this category. The Pacific Crest Trail passes through the Desolation Wilderness area in eastern El Dorado County.

2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County, the California National Historic Trail, and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri to California before the advent of the telegraph.

3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, State, or private lands. In El Dorado County, there are 5 NRTs.

4. Connecting or side trails, which provide additional points of public access to national recreation, national scenic or national historic trails or which provide connections between such trails.

State Laws, Regulations, and Policies

California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks,

recreation areas, and recreational facilities they now have are not lost to other uses.

California Recreational Trail Act

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through Section16.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

Local Laws, Regulations, and Policies

The 2004 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents.

Impact Analysis:

a, b. **Parks and Recreational Services:** The proposed project would not induce a significant increase in permanent population that would contribute to increased demand on recreation facilities or contribute to increased use of existing facilities such that physical deterioration of the facility would occur. The proposed project would be located in rural, south-central El Dorado County, and the closest park or recreational facility is Pioneer Park, located approximately 6.7 air miles northwest of the site at 6740 Fairplay Road, Somerset CA. The proposed project would have no impact on this facility or others in the vicinity of the site. Impacts to recreation would be **less than significant**.

FINDING: No significant impacts to park or recreational facilities would result from implementation of the proposed project.

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			**X**	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d. Result in inadequate emergency access?			**X**	

Environmental Setting:

The site can be accessed from the north via an existing gravel driveway that leads south from Omo Ranch Road. The project site is located in a rural area that receives low vehicular traffic. The project site is located approximately 39 minutes' drive (approximately 22.4 miles) southeast of Placerville and approximately 18 minutes' drive (approximately 11.6 miles) east of Somerset.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the proposed project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. This State agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

According to the transportation element of the County General Plan, Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are excepted from these standards and are allowed to operate at LOS F, although none of these are located in the Lake Tahoe Basin. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

Impact Analysis:

a. **Conflict with Transportation Plan:** The applicant would reside close by and manage day-to-day operations. The project is conservatively expected to generate up to 36 daily round trips and up to 8 truck delivery trips under busiest assumptions but would generate far fewer trips on most days. Vehicles accessing the site would approach from Omo Ranch Road; those commuting from outside the local community may reach Omo Ranch Road via Mt. Aukum Road. On Omo Ranch Road, a sufficient level of sight distance exists on both directions of the driveway to facilitate safe turns to and from the site. Given the already low traffic volume in the area, the small number of increased trips resulting from the project would not result in a significant impact.

Given the rural nature of the site, the low population density of the area, the low traffic volumes existing, and the low increases anticipated, bicycle or pedestrian use of public roadways would not be impeded. Therefore, the proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be **less than significant**.

b. **Vehicle Miles Travelled (VMT):** Current direction regarding methods to identify VMT and comply with State requirements is provided by the 2021 CEQA Guidelines Section 15064.3. 15064.3(b)(3) provides this direction for small projects:

> Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

Conservatively, after full project buildout is complete and during the most intensive harvesting period of the year, it is estimated that there would be a maximum number of 36 daily round trips and up to 8 truck delivery trips per day during peak conditions. The project would generate far fewer trips on most days.

Given the low level of existing traffic volume in the area, and the adequacy of existing infrastructure to accommodate additional volume, the project's impact would be **less than significant**.

c. **Design Hazards:** No design features associated with the proposed project would increase hazards. No changes would be made to existing public roads, and sufficient line of sight and low traffic volumes exist in the area to safely accommodate vehicles travelling to and from the project site. The driveway leading to the site from Omo Ranch Road would be surfaced with gravel and would be 12 ft wide. Additionally, the applicant would use a tractor with box scraper to maintain areas where vehicles drive and park. Grading would be minimal, balanced on-site, and limited to the edges of the project site. Eight parking spaces would be constructed northeast of the cultivation area. A gravel cul-de-sac turnaround is located at the end of the driveway to facilitate emergency vehicle turnarounds, as needed. Further, although the project is a farming operation, no farm vehicles or equipment (e.g., tractors) would be transported on public roads, as the site would be a small, self-contained operation, so the project impact would be **less than significant.**

d. **Emergency Access:** The proposed project site would have adequate access for emergency vehicles. A gravel, cul-de-sac turnaround is located at the end of the driveway for emergency purposes. The driveway would be kept clear of ladder fuels and dead, downed, and dying vegetation for at least 300 ft on either side. Therefore, impacts would be **less than significant**.

FINDING: The proposed project would not exceed traffic or VMT thresholds, introduce hazardous transportation design features, or obstruct emergency vehicle access, and impacts to transportation would result in less than significant or no impacts.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			**X**	
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

Environmental Setting:

Records of AB 52 consultation by the County are included as Appendix H to this Initial Study. Formal invitations to participate in AB 52 consultation on the proposed project were sent by the County to seven tribal representatives on December 7, 2021. The representatives included:

- Pamela Cubbler, Colfax-Todds Valley Consolidated Tribe
- Sara Setshwaelo, Ione Band of Miwok Indians
- Cosme Valdez, Nashville-El Dorado Miwok-Maidu-Nishinam Tribe
- Regina Cuellar, Shingle Springs Band of Miwok Indians
- Don Ryberg, Tsi-Akim Maidu
- Gene Whitehouse, United Auburn Indian Community of the Auburn Rancheria
- Darrel Cruz, Washoe Tribe of Nevada and California

The tribal representatives did not respond or provide any information about TCRs in the project area to the County, thereby concluding AB 52 consultation. However, the United Auburn Indian Community of the Auburn Rancheria provided language to be included as a condition of approval in this Tribal Cultural Resources (TCR) section to ensure that no TCRs are impacted during construction.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to TCRs and the proposed project.

State Laws, Regulations, and Policies

Assembly Bill (AB) 52

AB 52, which was approved in September 2014 and effective on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:

    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

- A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Impact Analysis:

a.i),ii) **Tribal Cultural Resources.** As noted above, formal invitations to participate in AB 52 consultation on the proposed project were sent by the County to seven tribal representatives on December 7, 2021. No responses were received providing information about any TCRs in the project area, thereby concluding AB 52 consultation. During previous coordination with the County, the United Auburn Indian Community of the Auburn Rancheria provided the following language to be included as a Condition of Approval:

> **"**If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. A Tribal Representative from culturally affiliated tribes shall be immediately notified and shall determine if the find is a TCR (PRC Section 21074). The Tribal Representative will make recommendations regarding the treatment of the discovery. Preservation in place is the preferred alternative under CEQA and UAIC protocols, and every effort must be made to preserve the resources in place, including through project redesign.
>
> Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, has been satisfied.
>
> The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary."

With adherence to the Condition of Approval above, the potential impact from inadvertent discovery of TCRs would be **less than significant.**

FINDING: With adherence to the Condition of Approval above, the potential impact from inadvertent discovery of TCRs would be less than significant.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunication facilities, the construction or relation of which could cause significant environmental effects?			**X**	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry or multiple dry years?			**X**	
c. Result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?			**X**	
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e. Comply with federal, state and local management and reduction statutes and regulations related to solid waste?			**X**	

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA 2014).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) required all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the CEC to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years, and to provide an update in the year between reports. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research. The 2019 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

Title 24–Building Energy Efficiency Standards

The California Green Building Standards Code (CALGreen) (CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including industrial buildings) throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR (CBSC 2019). The current 2019 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2020.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* require that all public water systems providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-ft per year (AFY), prepare an urban water management plan (UWMP).

Cannabis Cultivation Program

California Code of Regulations Title 3 Section 8102(s) states:

> [Each application for a cultivation license shall include the following, if applicable:] For indoor and mixed-light license types, identification of all power sources for cultivation activities, including but not limited to, illumination, heating, cooling, and ventilation

Section 8108 includes options for acceptable management of cannabis waste, including onsite composting, collection by a local or contracted waste agency, or self-hauling to certain approved destinations.

Section 8308 includes additional requirements for cannabis waste management, including reporting requirements.

Impact Analysis:

a. **Construction of New/Expansion of Existing Utilities**: An existing on-site well would provide the main water supply for the proposed cultivation operation and miscellaneous support and sanitary needs. The

proposed project would utilize a seasonal portable toilet and hand-washing station northeast of the cannabis cultivation area. The project's power needs would be provided by the proposed on-site solar facilities. The proposed project would not require relocation or expansion of existing utilities. Therefore, the proposed project would have a **less than significant impact**.

b. **Sufficient Water Supply:** As noted above, the water supply for the proposed project would come from an existing well slightly north of the proposed cultivation area. This well would provide the main water supply for the proposed cultivation operation and miscellaneous support and sanitary needs. The proposed project is anticipated to demand approximately 159,000 gallons of water annually. In comparison, the average single-family home in the area uses approximately 140,115 gallons of water annually (El Dorado Irrigation District 2022). The well is 480 ft deep and can provide an initial flow rate of 10 gallons per minute. There is adequate water supply to irrigate the proposed project, and impacts would be **less than significant**.

c. **Wastewater Treatment:** There are no public wastewater treatment systems serving the project site. As discussed above, the project would utilize a seasonal portable toilet and hand-washing station to dispose of wastewater. This impact would be **less than significant**.

d,e. **Solid Waste Disposal and Requirements:** El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting, and loading of solid waste and recyclables. On-site solid waste collection would be self-hauled to a manned fully permitted solid-waste landfill or transformation facility for non-organic waste. Any organic materials would be chipped, shredded, or otherwise broken down on-site so that it could not be used for any purpose except compost. The applicant would store cannabis waste in a composting area secured with a 6-ft-tall fence and covered with plastic. The project would not produce substantial volumes of waste, and compliance with existing regulations for diversion would minimize the materials sent to local landfills. Impacts would be **less significant** for questions d) and e).

FINDING: No significant utility and service system impacts would be expected with the project, either directly or indirectly, and impacts would be less than significant.

XX. WILDFIRE

Would the project:				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			**X**	
b. Due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			**X**	
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities: that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			**X**	
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			**X**	

Environmental Setting:

The project property is bordered to the east by undeveloped timber production land; to the south by wooded to densely wooded land; to the west by open space; and to the north by Omo Ranch Road and timber production land. The project would be located in a Very High Fire Hazard Severity Zone of an SRA (CAL FIRE 2023). The Pioneer Fire Protection District would be primarily responsible for structural fire protection services to the project site, and CAL FIRE is primarily responsible for wildland fire suppression. CAL FIRE's nearest station is the CAL FIRE Mt. Danaher Fire Station 37 located approximately 12.2 miles northwest of the project site at 2840 Mt Danaher Rd, Camino, CA. The Pioneer Fire Protection District also provides partly staffed and partly volunteer emergency services to the project area, and their nearest station is Station 37, located approximately 1.3 miles northeast of the site at 6021 Omo Ranch Road, Somerset, CA (Pioneer Fire Protection District 2023). Given that Pioneer Fire Protection District's resources are closer, they would likely provide an initial response to most types of emergencies that may occur on the project site; CAL FIRE resources may also respond, especially in the case of larger or more complex incidents. A 5,000-gallon water tank for the Pioneer Fire District would be installed slightly northwest of the cannabis cultivation area.

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to this section, as the project site not on or adjacent to federal land and does not receive direct protection from a federal agency.

State Laws, Regulations, and Policies

The project is located in a Very High Fire Hazard Severity Zone of a State Responsibility Area (CAL FIRE 2023). SRAs are defined by California PRC Section 4102 as areas of the State in which the Board of Forestry and Fire Protection has determined that the financial responsibility for preventing and suppressing fires lies with the State of California. SRAs are lands in California where CAL FIRE has legal and financial responsibility for wildfire protection.

SRA lands typically are unincorporated areas of a county, are not federally owned, have wildland vegetation cover, have housing densities lower than three units per acre, and have watershed or range/forage value.

California PRC Sections 4291 *et seq*. require that brush, flammable vegetation, or combustible growth within 100 ft of buildings be removed. Vegetation that is more than 30 ft from the building, less than 18 inches high, and important for soil stability, may be maintained as may single specimens of trees or other vegetation that is maintained so as to manage fuels and not form a means of the transmission of fire from other nearby vegetation to a structure. Requirements regarding hazardous vegetation and fuel management are also contained in Sections 4906 and 4907 of the California Fire Code.

California PRC Section 4290 requires CAL FIRE to adopt regulations implementing minimum fire safety standards for defensible space that would be applicable to lands within the SRA and lands within very high FHSZs of Local Responsibility Areas (LRA). Additional regulations regarding defensible space can be found in Title 14, Sections 1270.00 *et seq*. of the California Code of Regulations.

Local Laws, Regulations, and Policies

El Dorado County Municipal Code

El Dorado County Municipal Code Chapter 8.09. - Vegetation Management and Defensible Space contains requirements for wildfire prevention and enforcement of such measures within the unincorporated areas of the county. That chapter reaffirms relevant state statutes and regulations and adds additional requirements and mechanisms of enforcement.

El Dorado County General Plan

The El Dorado County General Plan (El Dorado County 2004) includes the following relevant policies:

Policy 5.7.2.1 Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Policy 6.2.1.1 Implement Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map and/or building permit stage.

Policy 6.2.2.1 Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

Policy 6.2.2.2 The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as wildland-urban interface (WUI) communities within the vicinity of Federal lands that are a high risk for wildfire, as listed in the Federal Register Executive Order 13728 of May 18, 2016, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a WUI Fire Safe Plan prepared by a qualified professional as approved by the El Dorado County Fire Prevention Officers Association. The WUI Fire Safe Plan shall be approved by the local Fire Protection District having jurisdiction and/or California Department of Forestry and Fire Protection. (Resolution 124-2019, August 6, 2019)

Policy 6.2.3.1 As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and fire fighting personnel and equipment would be available in accordance with applicable State and local fire district standards.

Policy 6.2.3.2 As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.2.4.1 Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.

Impact Analysis:

a. As discussed under question g) in Section IX, Hazards and Hazardous Materials, the project applicant would prepare and implement an evacuation plan and wildfire prevention measures as Conditions of Approval in the case of an emergency. A gravel cul-de-sac turnaround is located at the end of the driveway for emergency vehicle access. The driveway would be kept clear of ladder fuels, and dead, downed, and dying vegetation for at least 300 ft on either side. It is anticipated that no more than one personnel would be on-site under most circumstances and no more than 12 personnel under peak conditions, and that these individuals could quickly evacuate in case of an emergency. Given low traffic volume and population in the area, evacuation of the site is not expected to cause issues of traffic or impair the evacuation of the surrounding area. With adherence to the Conditions of Approval, impacts would be **less than significant**.

b, d. Because the project site is within an SRA very high fire hazard severity zone, a project-specific Wildland Fire Safe Plan was prepared for the proposed project (California Reforestation Inc 2021) and is included as Appendix G to this Initial Study. Implementation of the proposed project would not alter any roadways, access points, or otherwise degrade traffic operations and access to the area in such a way as to interfere with an emergency response or evacuation plan. The proposed project would be required to adhere to all fire prevention and protection requirements and regulations of El Dorado County including the El Dorado County Fire Hazard Ordinance and the Uniform Fire Code, as applicable. Downed tree branches and brush would be burned in the offseason according to CAL FIRE and Pioneer Fire District rules and regulations. As a Condition of Approval, the project applicant would be required to ensure that vegetation would be mowed, masticated, or cut to ground level each May for effective fuel reduction. Defensible space around the structures, including the cannabis cultivation premises, would extend 100ft from the structure to resist ignition and be kept clear of the dead vegetation. For an early evacuation route if a fire would occur, fuels would be mowed or masticated annually 300 ft from both edge roads of the internal access roads used for the proposed project. An evacuation plan would be prepared for the project site, and workers on-site would monitor conditions in the area during periods of high fire danger to ensure early evacuations if needed.

A cul-de-sac turnaround is located at the end of the driveway to facilitate turnarounds, as needed, including for emergency vehicles. An emergency water storage tank would be installed and approved by the Pioneer Fire Protection Department. The proposed project is located adjacent to sloping terrain, but all proposed developments would be located on relatively flat areas. Therefore, the project would not pose a significant landslide risk in post-fire conditions. Additionally, the project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C1050E, revised September 25, 2008 (FEMA 2008), and due to the site's high elevation and upslope location relative to the surrounding topography, the site would not be at risk of post-fire flooding. Therefore, project impacts would be **less than significant** for questions b) and d).

c. **Installation or Maintenance of Infrastructure.** As discussed under question g) in Section 7.IX, Hazards and Hazardous Materials, the Fire Plan recommended that vegetation be mowed, masticated, or cut to ground level each May for effective fuel reduction. Defensible space around the structures, including the cannabis cultivation premises, would extend 100 ft to resist ignition and be kept clear of the dead vegetation. Vegetation would be mowed or masticated annually for 300 ft from both edges of all internal access roads used for the proposed project. An evacuation plan would be prepared for the project site, and workers on-site would monitor conditions in the area during periods of high fire danger to ensure early evacuations if needed. These measures would be implemented as Conditions of Approval for the proposed project. However, the proposed project would not include or require the installation or maintenance of additional infrastructure that would exacerbate fire risk. Therefore, impacts would be **less than significant**.

FINDING: As conditioned and with adherence to the County Code, Conditions of Approval, CAL FIRE requirements, wildfire impacts would be less than significant.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		**X**		
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		**X**		
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			**X**	

Impact Analysis:

a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment. As conditioned or mitigated, and with adherence to County permit requirements, this project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of California history, pre-history, or tribal cultural resources. Any impacts from the project would be **less than significant with mitigation** due to the design of the project and required standards that would be implemented prior to project construction or with the building permit processes and/or any required project specific improvements on the property.

b. Cumulative impacts are defined in Section 15355 of the State CEQA Guidelines as *two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.*

The cumulative analysis is based on consideration of past, present, and probable future projects in the vicinity of the proposed project. The projects considered in the cumulative analysis include those that would be constructed concurrently with the proposed project and those that would be in operation at the same time as the proposed project. The cumulative projects considered in this analysis are limited to projects that would result in similar impacts as the proposed project due to their potential to collectively contribute to significant cumulative impacts, and the cumulative project identified for this analysis is the Organic Farming Innovations Cannabis Farm. The Organic Farming Innovations Cannabis Farm is a proposed cannabis cultivation and operations project that is located approximately 5.77 miles northwest of the project site. The Organic Farming Innovations Cannabis Farm proposes the cultivation of 68,000 sf of outdoor cannabis canopy and includes 8,082 sf of support area. The CEQA document for the Organic Farming Innovations Cannabis Farm was

circulated for public review in December 2023 and was approved in April 2024. The Robert Arabian cannabis cultivation project would be located 5.08 miles northeast of the project site and would cultivate approximately 9,639 square feet (sf) of outdoor cannabis canopy and associated support structures. The CEQA document for this project was circulated for public review in March 2023. The Somerset Ridge Cannabis Cultivation Project would be located 5.14 miles north of the project site. This project proposes the cultivation of 6,450 sf of outdoor cannabis cultivation with 955 sf of support area. Preparation of the CEQA document for the Somerset Ridge Cannabis Cultivation Project is underway.

Due to the small size of the proposed project, types of activities proposed, and site-specific environmental conditions which have been disclosed in the Project Description and analyzed in Sections 7.I through 7.XX for the proposed project, there would be no significant cumulative impacts anticipated related to aesthetics, agriculture and forestry resources, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards/hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire that would be cumulatively considerable. Mitigation measures for the proposed project would reduce potential impacts related biological resources such that no contributions to cumulative impacts would be expected. Therefore, the proposed project would not contribute to potentially significant cumulative impacts, and impacts would be **less than significant with mitigation**.

c. As conditioned and with compliance with the County Code, the proposed project would be anticipated to have a less than significant project-related environmental effect on human beings, either directly or indirectly. Therefore, impacts would be **less than significant**.

FINDINGS: The proposed project would not result in significant environmental impacts, exceed applicable environmental standards, or significantly contribute to cumulative environmental impacts.

8.0 INITIAL STUDY PREPARERS

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9.0 REFERENCES

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, and T.J. Rosatti, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition, thoroughly revised and expanded. University of California Press, Berkeley, California. 1,600 pp.

California Air Resources Board (CARB). 2021. "Area Designation Maps/State and National." Last reviewed September 7, 2021. http://www.arb.ca.gov/desig/adm/adm.htm.

California Building Standards Code (CBSC). 2019. 2019 California Green Building Standards Code – CalGreen, California Code of Regulations, Title 24, Part 11. Accessed on September 7, 2021 and available at: https://codes.iccsafe.org/content/CAGBSC2019.

California Department of Conservation (CDC). 2023a. California Important Farmland Finder. Accessed on October 24, 2023 from: https://maps.conservation.ca.gov/DLRP/CIFF/.

2023b. Fault Activity Map of California. Accessed October 24, 2023 from: https://maps.conservation.ca.gov/cgs/fam/.

2023c. Farmland Mapping and Monitoring Program. Accessed October 24, 2023 from https://www.conservation.ca.gov/dlrp/fmmp.

2023d. Important Farmland Categories webpage. Accessed on October 24, 2023 from: https://www.conservation.ca.gov/dlrp/fmmp/Pages/prime_farmland_fmmp.aspx.

2023e. Williamson Act Program. Accessed on October 24, 2023 from: https://www.conservation.ca.gov/dlrp/wa.

2001. Mineral Land Classification of El Dorado County, California. Accessed on October 24, 2023 at https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc.

California Department of Forestry and Fire Protection (CAL FIRE). 2023. California Fire Hazard Severity Zone Viewer. Accessed on October 24, 2023 from: https://egis.fire.ca.gov/FHSZ/.

California Department of Toxic Substances Control (DTSC). 2023. Envirostor. Accessed November 8, 2023 from https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Sacramento&tour=True.

California Department of Transportation (Caltrans). 2023. Scenic Highways – List of Eligible and Officially Designated State Scenic Highways. Accessed November 8, 2023 from https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

2013. Transportation and Construction Vibration Guidance Manual, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office. September. Available online at http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf.

California Department of Water Resources (2024). Critically Overdrafted Basins and SGMA Data Viewer. Accessed April 25, 2024 at: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#waterbudget.

California Energy Commission (CEC). 2021a. 2020 Total System Electric Generation. Accessed November 8, 2023 at https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation.

2021b. Supply and Demand of Natural Gas in California. Accessed on November 8, 2023 from: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california

2021c. California Gasoline Data, Facts, and Statistics. Accessed on November 8, 2023 from https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics

2021d. Diesel Fuel Data, Facts, and Statistics. Accessed on November 8, 2023 from https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics

California Native Plant Society (CNPS). 2021. Calscape. Accessed on November 8, 2023 from https://calscape.org/.

2020. Inventory of Rare and Endangered Plants. Rare Plant Scientific Advisory Committee, David P. Tibor, convening editor. California Native Plant Society. Sacramento, California. Accessed on November 8, 2023 and internet database available at http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi/Search?search=Sacramento.

California Reforestation, Inc. Manich, Leon J. October 22, 2021. Wildland Fire Safe Plan.

California State Water Resources Control Board (SWRCB). 2023. Geotracker. Accessed on November 8, 2023 from: https://geotracker.waterboards.ca.gov/.

El Dorado County Air Quality Management District (EDCAQMD). 2023. Climate Change. Accessed November 8, 2023 at https://www.edcgov.us/Government/AirQualityManagement/Pages/climate_change.aspx.

2005. Rule 223-1 – Fugitive Dust - Construction, Bulk Material Handling, Blasting, Other Earth Moving Activities, Carryout and Trackout Prevention. Amended October 2005. Accessed November 8, 2023 and available online at: https://www.edcgov.us/Government/AirQualityManagement/documents/Rule%20223-1_Fugitive%20Dust-Construction.pdf.

2002. Guide to Air Quality Assessment. February 2002. Accessed November 8, 2023 from: https://www.edcgov.us/Government/AirQualityManagement/documents/Chapter4_RF6A.pdf.

El Dorado County Air Quality Management District, Sacramento Metropolitan Air Quality Management District, Feather River Air Quality Management District, Placer County Air Pollution Control District, and Yolo-Solano Air Quality Management District (EDCAQMD et al.). 2017. Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan. July 2017. Accessed November 8, 2023 from: http://www.ysaqmd.org/wp-content/uploads/Planning/Sac-Regional-2008-NAAQS-Attainment-and-RFP-Plan.pdf.

2013. $PM_{2.5}$ Implementation/Maintenance Plan and Redesignation Request for Sacramento $PM_{2.5}$ Nonattainment Area. October 2013. Accessed on November 8, 2023 and available at: http://www.ysaqmd.org/wp-content/uploads/Planning/Sac-Region-PM2.5-Maintenance-Plan.pdf.

El Dorado County. 2018. Zoning Ordinance – Adopted August 14, 2018 and amended on December 2, 2020. Accessed on November 8, 2023 from https://www.edcgov.us/Government/planning/Pages/zoning_ordinance.aspx.

2015a. Asbestos Review Areas, Western Slope, El Dorado County, California. Accessed on November 8, 2023 and available at: https://www.edcgov.us/Government/AirQualityManagement/documents/asbestos%20review%20map%201-22-15.pdf

2015b. General Plan Agriculture and Forestry Element, as amended in December, 2015. Accessed on November 8, 2023 from: https://www.edcgov.us/Government/planning/pages/adopted_general_plan.aspx

2004. El Dorado County General Plan: Adopted 2004, last amended December 10, 2019. Accessed on November 8, 2023 at: https://www.edcgov.us/Government/planning/pages/adopted_general_plan.aspx.

2003. El Dorado County General Plan Draft Environmental Impact Report. State Clearinghouse No. 2001082030. Placerville, CA: El Dorado County Planning Services.

El Dorado County Airport Land Use Commission. (EDC ALUC). 2012. Airport Land Use Compatibility Plan. Adopted June 28, 2012. Accessed on November 8, 2023 from: https://www.edctc.org/airport-land-use-commission

El Dorado County Sheriff's Office. 2021. Mailing Addresses and Locations. Accessed on November 8, 2023 from: https://www.edcgov.us/Government/sheriff.

El Dorado Irrigation District. 2022. 2022 Water Supply and Demand Report. Accessed on March 18, 2024 and available at: https://www.eid.org/home/showdocument?id=13035.

Environmental Permitting Specialists (EPS). 2021. Analysis of Odor at the Proposed Outdoor Cannabis Cultivation Located in Somerset (El Dorado County), California.

Federal Emergency Management Agency (FEMA). 2008. FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated areas, no. 06017C1050E. Accessed on November 8, 2023 from: https://www.fema.gov/flood-maps.

Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Summary for Policymakers. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. February. https://www.ipcc.ch/report/ar4/wg1/.

Koenigs, Ethan. 2010. Figure 4: INRMP Inventory Map Update: Important Habitat for Migratory Deer Herds. Accessed November 8, 2023 from: INRMP_H-Migratory_Deer_Herdks.pdf (edcgov.us)

National Earthquake Hazards Reduction Program (NEHRP). 2016. Background and History. Accessed on November 8, 2023 and available online at: https://sgp.fas.org/crs/misc/R43141.pdf

Natural Investigations Company (NIC), Inc. 2021. Biological Resources Assessment for the Cannabis Cultivation Operation at 5600 Omo Ranch Road.

Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey of Archon Cannabis Cultivation Site. Accessed October 27, 2023 at http://websoilsurvey.nrcs.usda.gov.

North Central Information Center (NCIC). 2021. Records Search Results for 117 Omo Ranch Road (APN 095-030-036-000).

OEHHA (Office of Environmental Health Hazard Assessment). 2020. Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments. https://oehha.ca.gov/air/air-toxics-hot-spots.

Pioneer Fire Protection District. 2021. Accessed on November 8, 2023 from: http://pioneerfire.org/.

Sunset Western Garden Collection. 2020. Sunset Climate Zones. Sunset Publishing Corporation. Accessed on November 8, 2023 and available on the Internet at: https://www.sunsetwesterngardencollection.com/climate-zones.

United States Department of Agriculture (USDA). 2018. Official Series Description. Accessed on November 8, 2023 from: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053587.

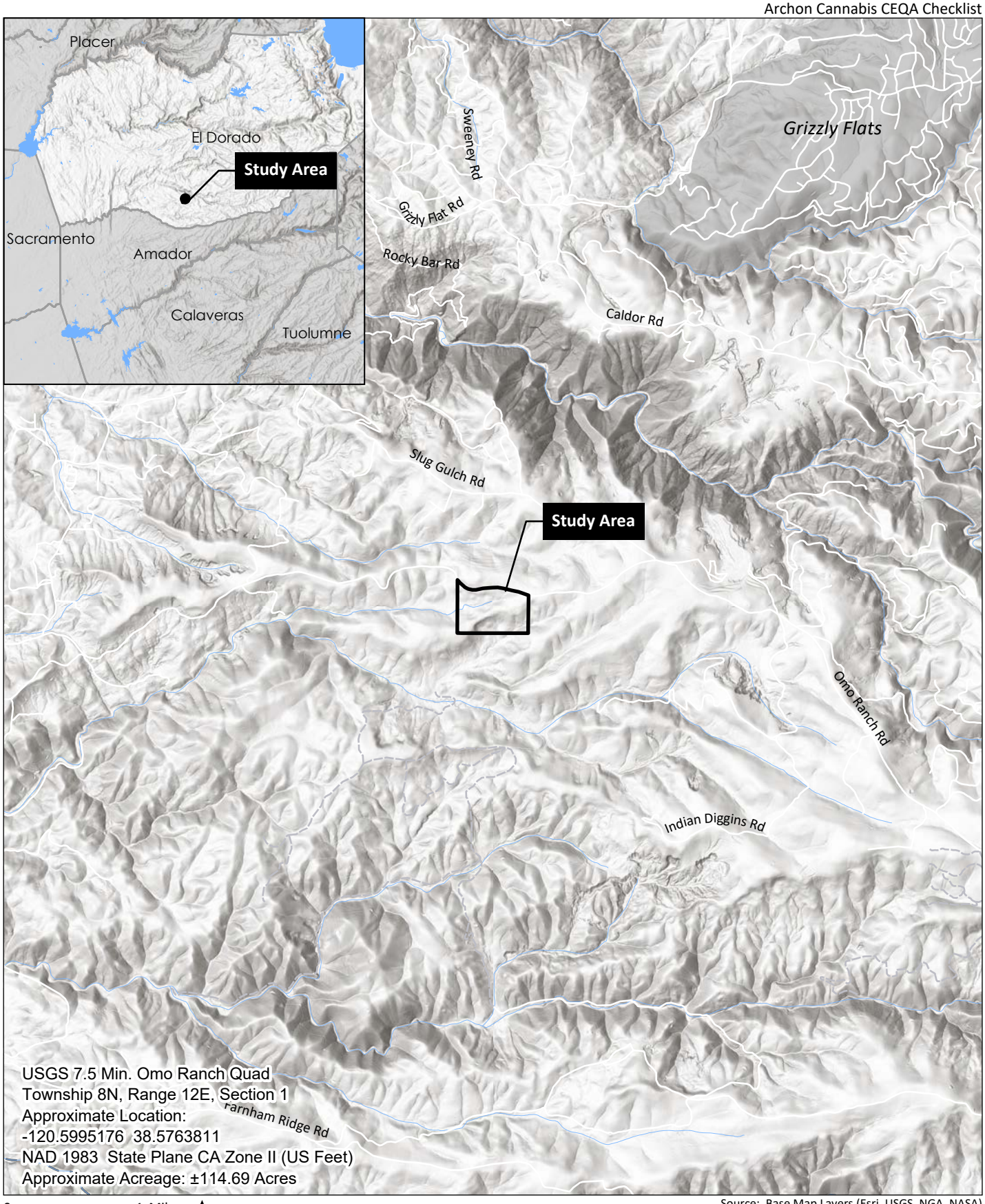
United States Environmental Protection Agency (USEPA). 2023. Superfund: National Priorities List. Accessed on November 8, 2023 from: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.

2014. Summary of the Energy Policy Act. Accessed on November 8, 2023 and available online at: https://www.epa.gov/laws-regulations/summary-energy-policy-act

United States Geological Survey (USGS). 2000. Landslide Hazards USGS Fact Sheet FS-071-00. Accessed on November 8, 2023 from: https://pubs.usgs.gov/fs/fs-0071-00/fs-0071-00.pdf.

Appendix A

Figures

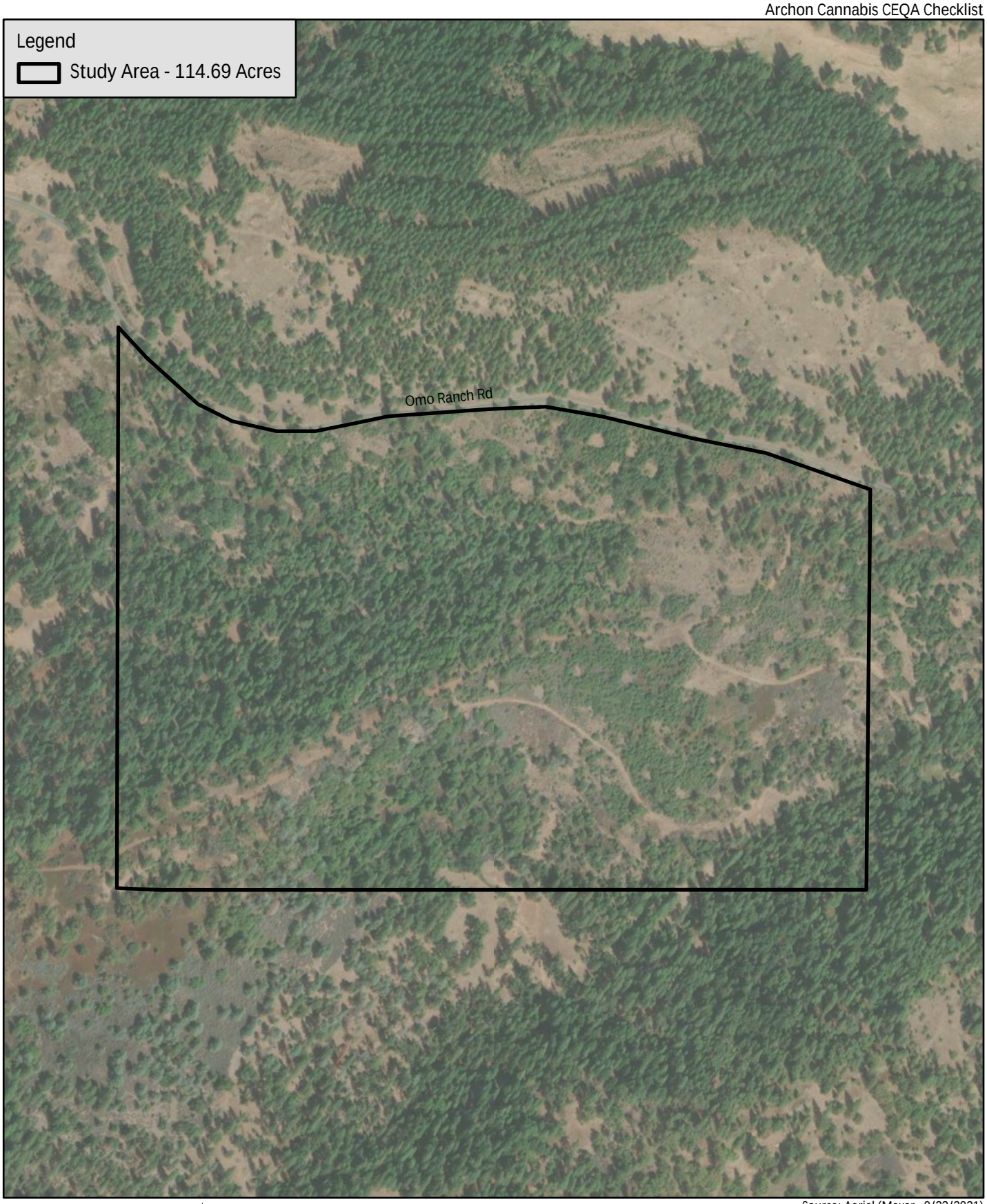


Source: Base Map Layers (Esri, USGS, NGA, NASA)

HELIX Environmental Planning

Site and Vicinity Map

Figure 1

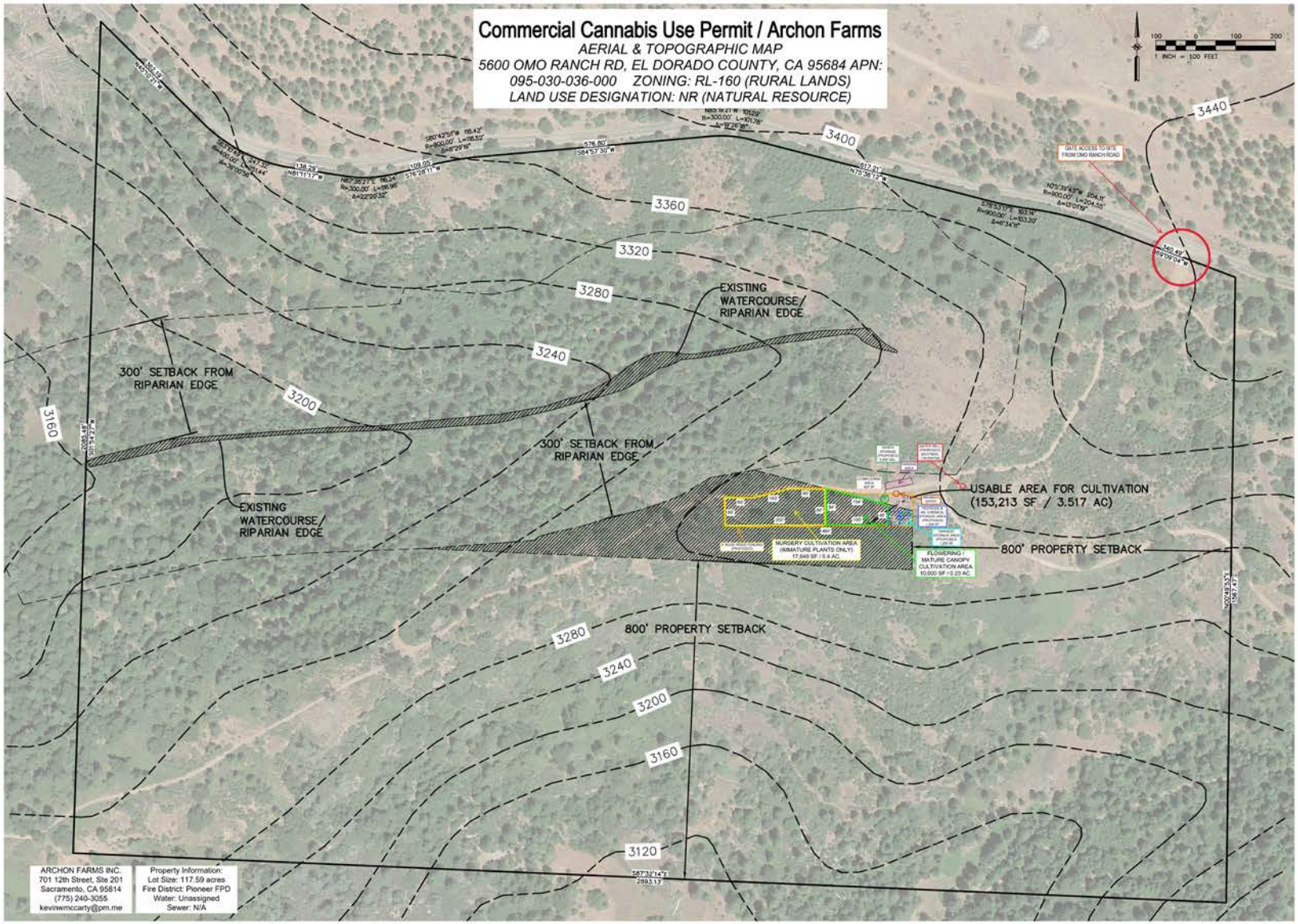


Source: Aerial (Maxar, 9/23/2021)

HELIX Environmental Planning

Aerial Map

Figure 2

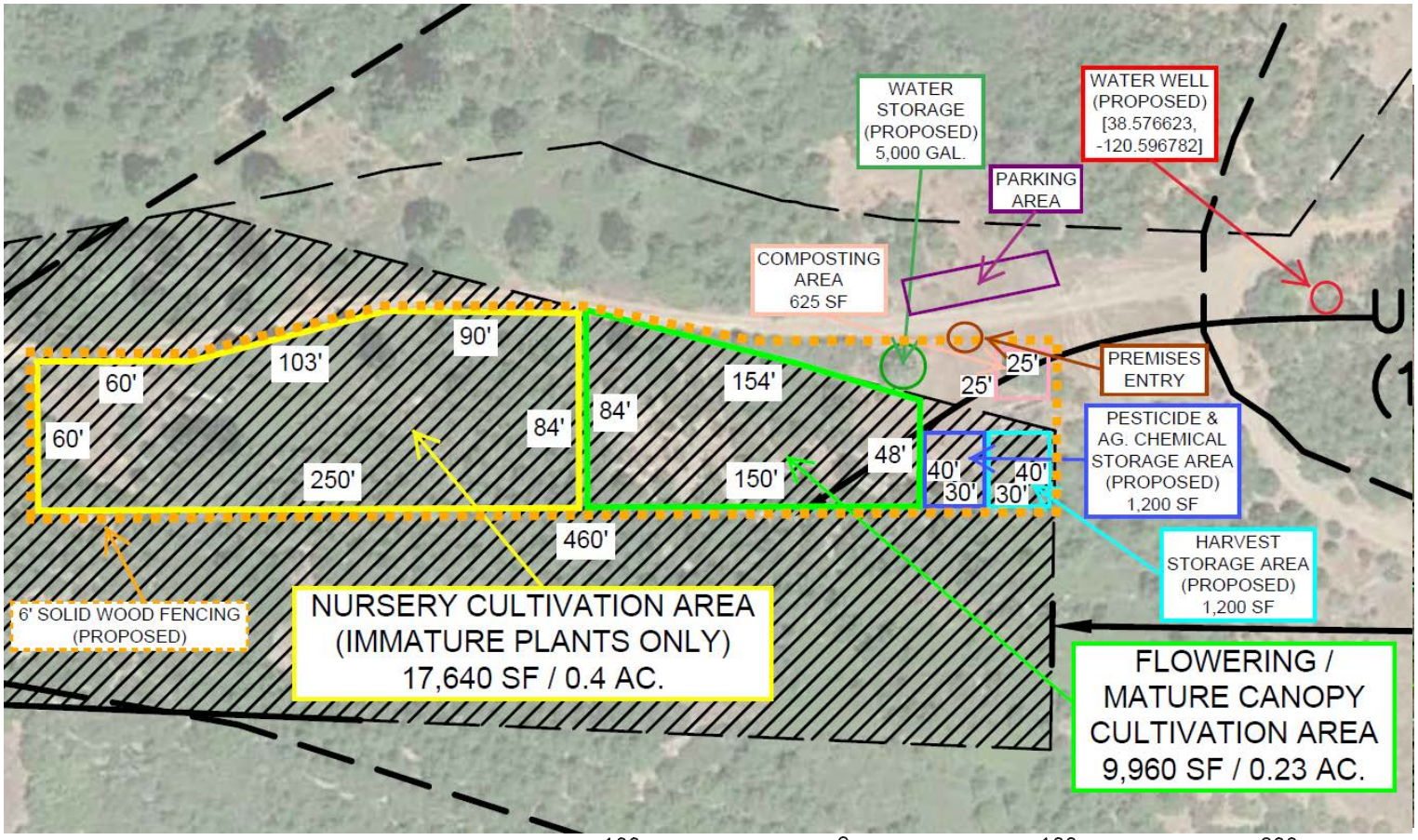


Source: RFE Engineering, Inc. 2021

HELIX Environmental Planning

Site Plan

Figure 3



Source: El Dorado County 2021

Appendix B

Odor Report

ENVIRONMENTAL PERMITTING SPECIALISTS
Air Quality • Permitting • OHSA • RMP/PSM

November 10, 2021

Kevin McCarty
Managing Partner
Archon Farms, Inc.
701 12th Street
Sacramento, CA 95814

Subject: Evaluation of On-Site and Off-Site Cannabis Odors at Proposed Mixed-Light Outdoor Cannabis Cultivation in Somerset (El Dorado County)

Dear Mr. McCarty

Environmental Permitting Specialists (EPS) has reviewed the project description and site plans for the proposed mixed-light/outdoor cannabis cultivation to evaluate the potential for odors. The proposed project site is located at 5600 Omo Ranch Road, Somerset in El Dorado County. The 117.59 acre site is located in rural South central El Dorado County. There are no homes in the immediate vicinity of the project site. Figure 1 illustrates the proposed site location.

The proposed project consists of approximately 10,000 square feet of flowering canopy that would use hoop houses equipped with an odor control system. There would be an additional 17,640 square feet of immature (non-flowering) nursery cultivation area. There would be a minimum 800 foot setback from the property lines to the cultivation areas.

The potential for odors is substantially reduced since the flowing canopy would be enclosed inside six hoop houses. Unlike greenhouses that fully enclose the canopy, the ends of hoop houses are typically open allowing air, moisture and odors to escape into the atmosphere. The hoop houses for the current project, however, will have end caps that will be load bearing that will allow the installation of ventilation fans and carbon odor control system.

To determine if odor intensity associated with the proposed project will comply with Dorado County's 7 dilution to threshold (D/t) odor standard [Ordinance 5110 (5) D)], EPS

relied on odor intensity measurements at other greenhouses in Northern California and on odor modeling at several locations in El Dorado County, including Somerset. These are described below.

Results of Odor Monitoring

EPS has collaborated in conducting odor measurements near indoor cultivation sites. Specifically, EPS collaborated with Fulcrum Enterprises, LLC, NCM Odor Control, Inc., and Bosarge Environmental, LLC to conduct multi-day (October 1 to 3, 2019) odor intensity measurements adjacent to greenhouses.

Melanie Bosarge conducted the odor measurements using a Nasal Ranger Field Olfactometer and the results are reported in terms of DT. She is a Certified Instructor and has extensive training and experience in the use of the Nasal Ranger. She also completed training at the Odor School at St. Croix Sensory, the manufacturer of Nasal Ranger.

The odor measurements were conducted October 1 to 3, 2019 at a Northern California location (10175 Alberton Ave, Chico) that has seven (7) greenhouses each measuring 200 feet x 42 feet. Each greenhouse had 3 rows of four hundred (400) plants totaling 1,200 plants. The greenhouses were equipped with an odor control misting system. Photographs of the misting system appear in the attached report. At the time odor measurements were taken, the plants were two weeks away from harvesting. See Figures 1 to 5 in the attached report (Attachment A).

Odor intensity was measured at the greenhouse exhaust vents, at the property lines and at nearby off-site locations. A total of 17 on-site readings were taken. The results of the on-site testing were as follows:

Number of Readings	Measured D/t
4	0 (non-detect)
10	Between 2 and less than 2
2	4
1	7

In addition to on-site readings, 144 off-site readings were taken over two days under a variety of weather conditions. A complete copy of the odor monitoring report is attached (Attachment A).

These results indicate that odor intensity from the greenhouses equipped with effective odor control system would not lead to excess odors. Specifically, the odor intensity would remain at or below 7 DT. During majority of the tests (16 out of 17), odor intensity remained at or below 2 DT.

Since the current project will use hoop houses instead of greenhouses, higher level of odors may occur at the current site. EPS conservatively estimated the maximum odor intensity adjacent to hoop houses to be in the range of 4 to 8 DT.

Results of Odor Modeling

In addition, EPS has conducted extensive odor modeling in El Dorado County, including Somerset, to evaluate the dilution and transport of odors from indoor and outdoor cannabis cultivation areas. The modeling results quantify how odors would dilute when migrating from the canopy. The results are reported as a dilution factor. For example, a dilution factor of 2 means that odor intensity would be reduced by a factor of 2 or would be 50% lower.

Odor modeling results show that odor intensity declines by 88% over 100 meters or 26.7% every 100 feet. See Figure 2. Since the current project has a 800 foot setback, the maximum odor intensity is estimate to equal 0.67 DT.

Summary of Findings

EPS has reviewed the proposed cannabis cultivation project at 5600 Omo Ranch Road, Sommerset. On the basis of the project scope and description it is concluded that odor intensity along the property lines would be below 1 DT. Odor intensity off-site would be below 1 DT. Therefore, the project would meet the County's 7 DT odor limit. No further mitigation beyond what has been proposed is required.

To ensure on-going compliance, EPS staff will be available to measure odor intensity after the cannabis cultivation has commenced and the plants reach the flowering stage. If you have any questions or require additional information, please contact us at your convenience.

Sincerely,

Ray Kapahi

Ray Kapahi
Principal
Environmental Permitting Specialists
Web Site: https://www.epsconsulting.org/

ATTACHMENTS

- Figures 1 to 4
- Copy of Chico Odor Testing Report

Figure 1
Project Location Map
5600 Omo Ranch Road, Somerset, CA

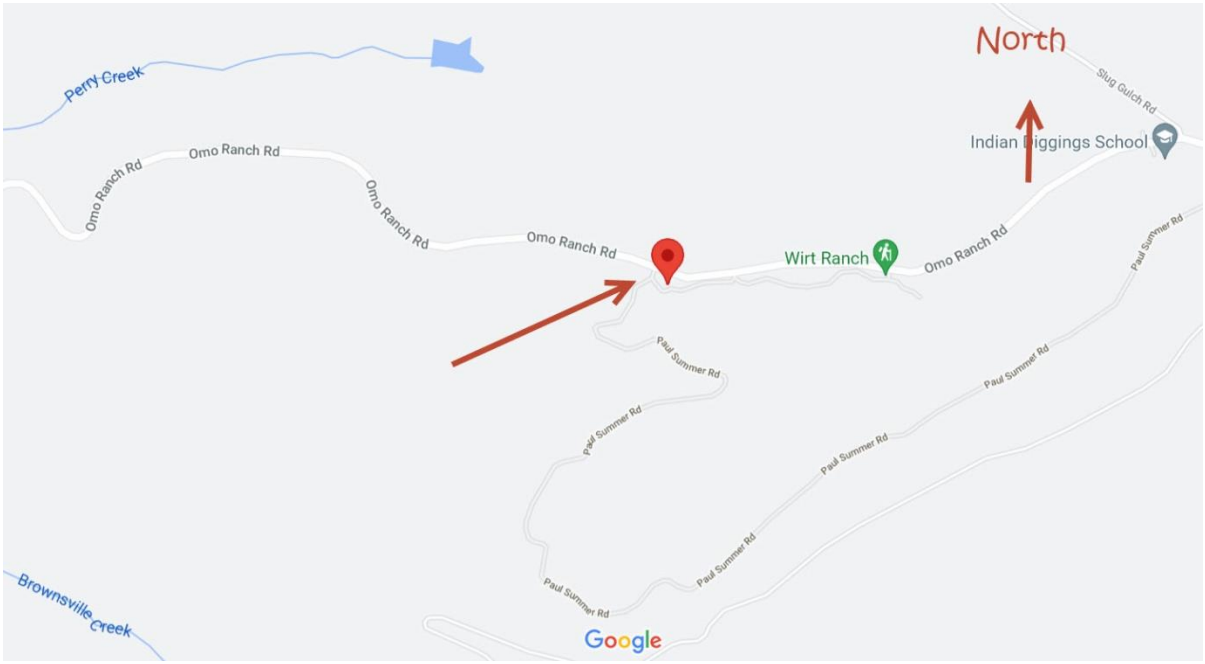


Figure 2
Site Map Showing Property Lines

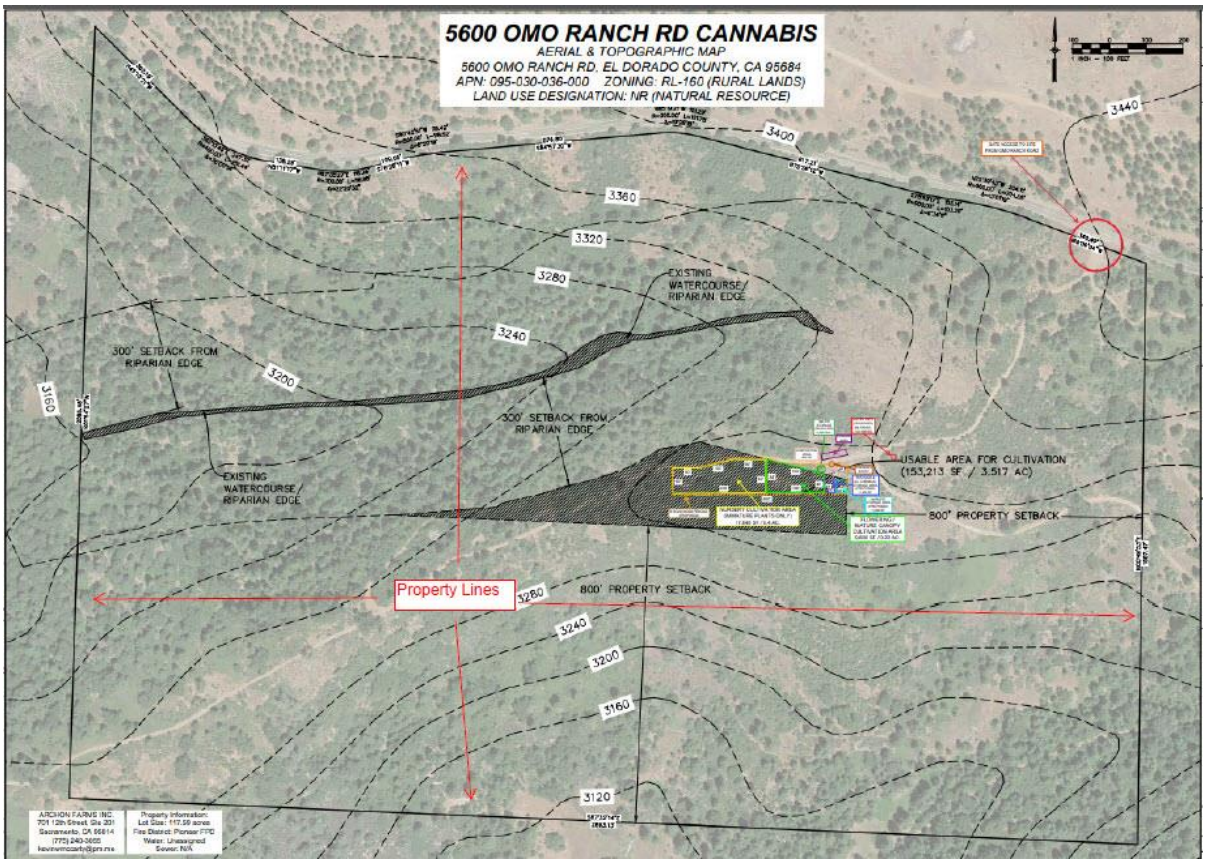


Figure 3
Site Map Showing Cultivation Areas

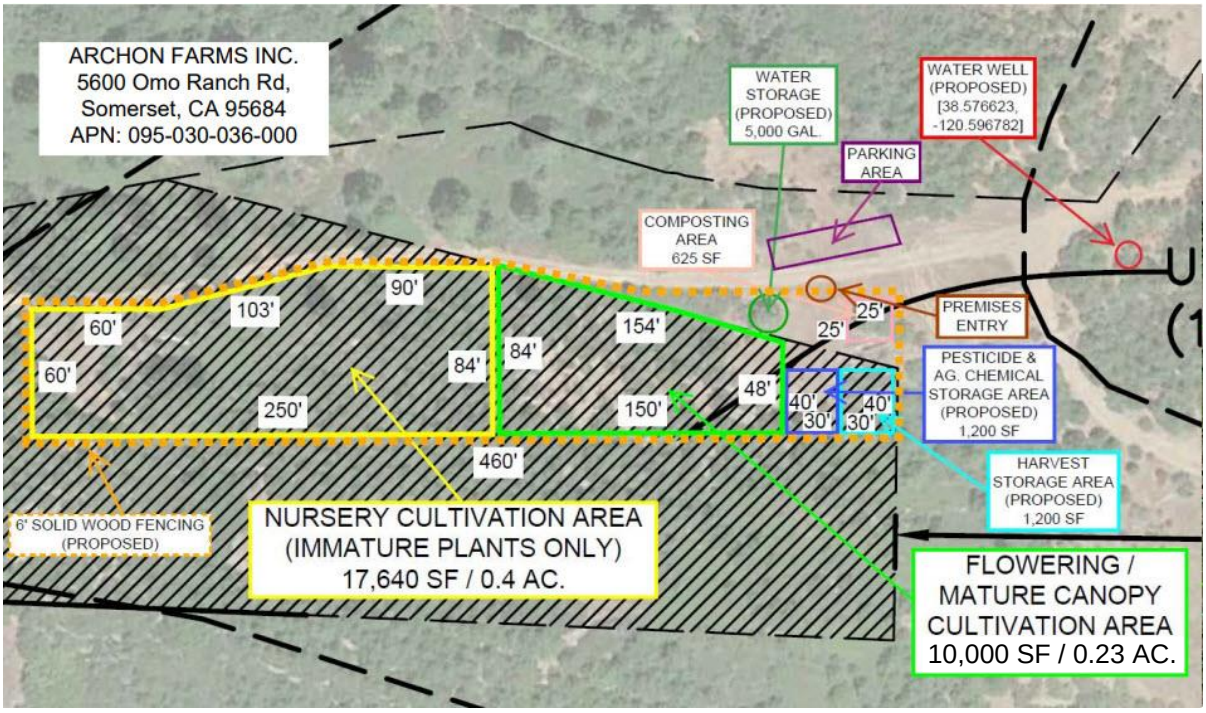
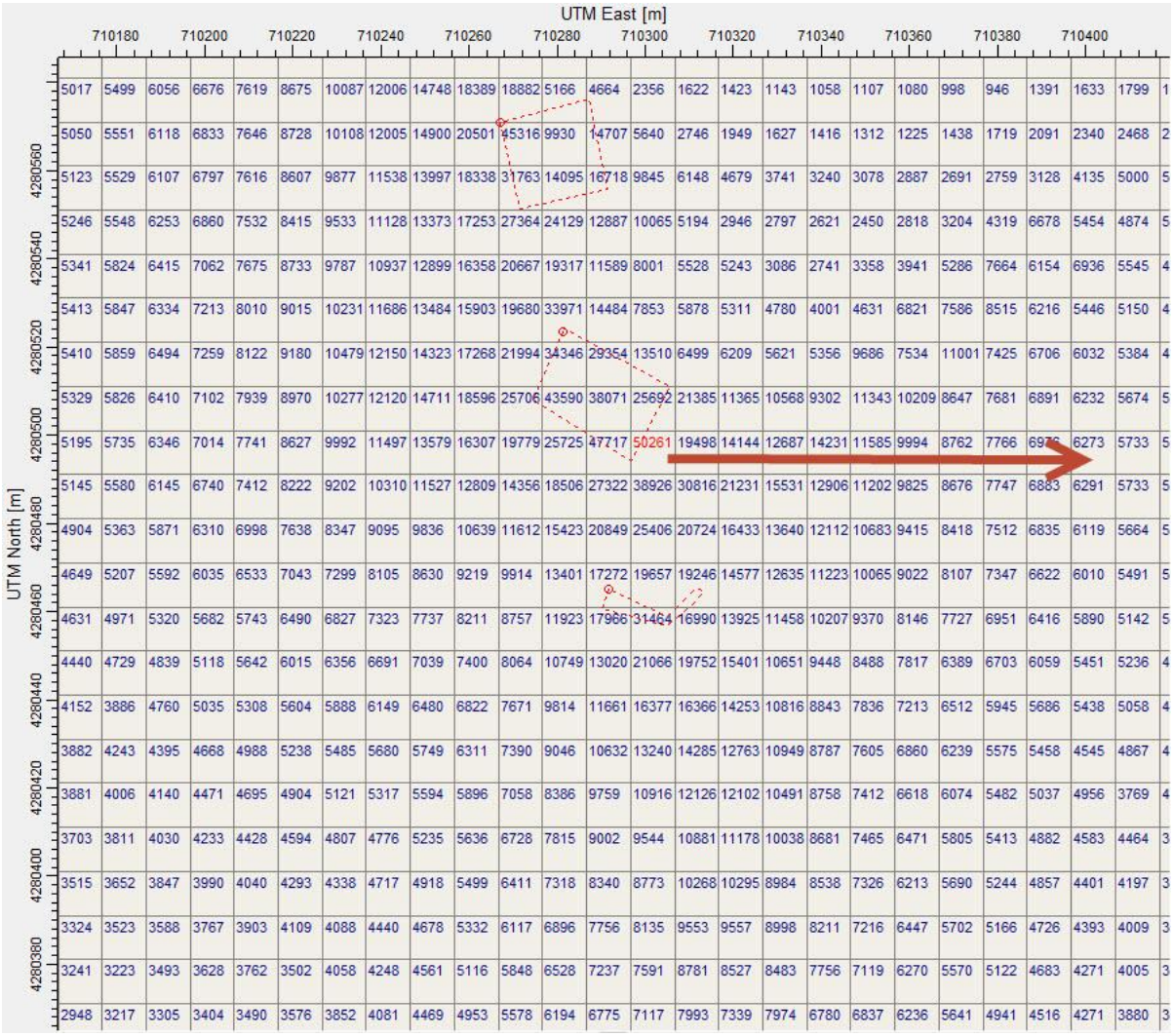


Figure 4
Odor Modeling Results Showing the Decline in Odor Intensity with Distance

(Relative Odor Concentration in micrograms/cubic meter)



Each Cell is 10 meters (32.8 feet)

Report on Odor Measurements at Greenhouses
Chico, CA

October 1 to 3, 2019

Bosarge Environmental, LLC
707 Bienville Blvd.
Ocean Springs, MS 39564
(228) 217-3180

November 1, 2019

Fulcrum Enterprises, LLC
390 Main Street
Great Barrington, MA 01239

RE: Odor Assessment Study

Introduction

Fulcrum Enterprises, LLC, (Fulcrum) retained Bosarge Environmental, LLC, as a third-party Odor Expert, to analyze the cannabis odor impact of a facility in California that is similar to a project Fulcrum is proposing for approval in Great Barrington, MA. The California facility is much older, but very similar in building size and plant production, of the proposed new facility. The Fulcrum design incorporates the same measures for odor control as the California facility. Fulcrum plans to present this odor study of an existing operational facility as a model for permitting the new facility.

Ms. Melanie Bosarge conducted ambient odor surveys the three days of October 1- 3, 2019. This time frame was selected because the operation was in full flowering stage. During this period, the greenhouses would have a crop of fully formed flowering cannabis plants at the stage when terpene odor is the greatest, creating a "worst-case-scenario" of odor for the facility.

Ms. Bosarge is a Chemical Engineer and Owner/Manager of Bosarge Environmental, LLC. She has represented St. Croix Sensory (St. Croix) as a certified instructor and provided client training and odor assessment services, as an independent contractor, since 2002. For more than thirty-five (35) years, St. Croix has been assisting facility owners, consulting engineering firms, and regulatory agencies to quantify odors from a variety of industrial, agricultural, and municipal operations, including wastewater treatment, landfills, composting, and manufacturing in both field and laboratory settings. St. Croix manufactures and markets state-of-the-art odor sampling and measurement equipment, including the Nasal Ranger Olfactometer. St. Croix's "ODOR SCHOOL"® is an internationally recognized program to prepare inspectors to conduct field evaluations of ambient odors.

Ambient Odor Assessment Methodology

Odor surveys were conducted using a newly calibrated Nasal Ranger field olfactometer to quantify odor strength when odor was noticed at each monitoring location. The Calibration Certificate appears in the Appendix as ***Exhibit 1***. Prior to odor observations, an inspector breathes through carbon cartridges for approximately one minute to "zero" nose to 100%. Upon arrival at each separate location, ambient odor is assessed with the "naked nose". If no odor is detected, the current time and "non-detected" (ND) is recorded. If an odor is detected, a reading is then taken with Nasal Ranger Olfactometer.

Using the Nasal Ranger, odor strength is measured as dilution ratios, reported as Dilution-to-Threshold (D/T) values. The Nasal Ranger Dilution-to-Threshold odor measurement is an "instantaneous" measurement, which is a recognition threshold. For example, a 4-D/T is the dilution ratio of 4-volumes of carbon filtered odor free air mixed with one-volume of ambient (odorous) air that makes the ambient odorous air "just-barely-recognizable" as an odor.

The D/T dilution ratio steps of the Nasal Ranger olfactometer used for the odor surveys were 2, 4, 7, 15, 30, and 60. If an odor is detected with the "naked nose" at a location, a measurement is taken with the Nasal Ranger. An odor in the air that is not measured at the 2-D/T dilution ratio is reported as less than 2-D/T (<2). The absence of ambient odor is reported as "non-detected" (ND).

Figure 1 – Nasal Ranger Olfactometer is a photograph taken during an odor survey at a cannabis growing operation in Colorado.

Figure No. 1 – Nasal Ranger Olfactometer

Building and Odor Control Specifications

NCM Environmental Solutions (NCM) constructed the odor neutralizing mist system for the California facility and currently provides the odor neutralizing agent and ongoing maintenance of the system. The California facility is much older, but very similar in building size and plant production, of the proposed new Fulcrum facility. Fulcrum plans to incorporate the same measures for odor control as the California facility. Consequently, one of the objectives of this odor study was to evaluate the efficiency of the exhaust and odor neutralizing system.

The cannabis growing area is made up of seven (7) greenhouses, two hundred (200) feet in length and forty-two (42) feet in width. Each greenhouse has three (3) rows of four hundred (400) plants, totaling twelve hundred (1,200) plants per greenhouse. The greenhouses have multiple holes on the siding and roof, as shown in pictures in ***Exhibit 2.***

NCM system specifications include an electric 1 HP system with a 1.75 GPM high pressure atomizing pump, operating at 800 PSI. During the odor study, the chemical injection pump was not automated. It was adjusted by hand using two knobs, as shown in photographs in ***Exhibit 2.***

The exhaust vents are fifty-five inches, square shaped, and powered by a 1-HP motor. Each exhaust vent has three (3) NCM 1.9 GPH nozzles. The nozzles are located on the exhaust vents, centered and positioned in a straight line. The California facility maintains the odor neutralizer injection pump at their preferred setting of 1000:1 dilution ratio. This set dilution ratio achieves the level of odor control needed and works within operations budget. Growers have determined that the facility has low levels of cannabis odors without the system on; therefore, the 1000:1 dilution ratio is sufficient for that site.

Odor Survey – Introduction and Mapping

Upon arrival at the facility on the afternoon of October 1, 2019, Ms. Bosarge was taken on an extensive tour of the site. Each step of the odor control system was identified and explained. A plan of action was developed and coordinated. The first odor survey was performed to test the efficiency of the odor control system. After concluding the onsite test, Ms. Bosarge investigated the area within the security fence, and along accessible residential, commercial and agricultural areas throughout neighborhood. Meteorological conditions were recorded and several locations were mapped and designated as survey locations. No odors were detected past the perimeter of the property during this initial investigation.

After the initial tour and first round of controlled test measurements of the odor neutralizer, Ms. Bosarge continued independently to develop a monitoring plan and complete several additional surveys during the three-day odor assessment study. Sixteen (16) onsite locations within the fenced area of the property and twelve (12) locations in the surrounding community were designated and mapped by recording latitude and longitude coordinates at each location. Unique identification codes were assigned to each location. The onsite locations were designated as Locations A through P. The offsite locations were designated as Locations 1 through 12. The center point of the cannabis greenhouses was designated as Location X. Latitude and longitude coordinates for each location were entered into Odor Tracker software to produce Google Earth Maps of the areas within the property and the surrounding community.

Table No. 1 Cannabis Facility Odor Monitoring Locations lists the center of the cannabis facility as Location X, along with twenty-eight (28) ambient odor survey locations. The table specifies an identification number, the latitude and longitude coordinates for each location and whether each location is onsite or offsite.

Table 1 - Cannabis Facility Odor Monitoring Locations

Loc #		Name	Latitude	Longitude
1	Offsite			
2	Offsite			
3	Offsite			
4	Offsite			
5	Offsite			
6	Offsite			
7	Offsite			
8	Offsite			
9	Offsite			
10	Offsite			
11	Offsite			
12	Offsite			
A	Onsite	Test Area 6 Ft from Exhaust		
B	Onsite	Test Area 12 FT From Exhaust		
C	Onsite	Test Area 24 Ft From Exhaust		
D	Onsite	West Corner of Greenhouses		
E	Onsite	South Corner of Greenhouses		
F	Onsite	South Midpoint of Greenhouses		
G	Onsite	East Corner of Greenhouses		
H	Onsite	East Corner of Whse		
I	Onsite	East Midpoint of Whse		
J	Onsite	North Corner of Whse		
K	Onsite	North Corner of Greenhouses		
L	Onsite	North Center of Greenhouses		
M	Onsite	Front Gate To Property		
N	Onsite	Post by Dumpster		
O	Onsite	Post Behind House		
P	Onsite	On Hill Behind House		
X	Onsite	Reference Center of Facility		

Figure No. 2 - Odor Inspection Locations Full View identifies the center of the cannabis facility as Location X and each of the twenty-eight (28) monitoring locations on a Google Earth map. The offsite Locations 1 through 12 are featured in this figure.

Figure No. 2 - Odor Inspection Locations Full View (Google Earth Map)

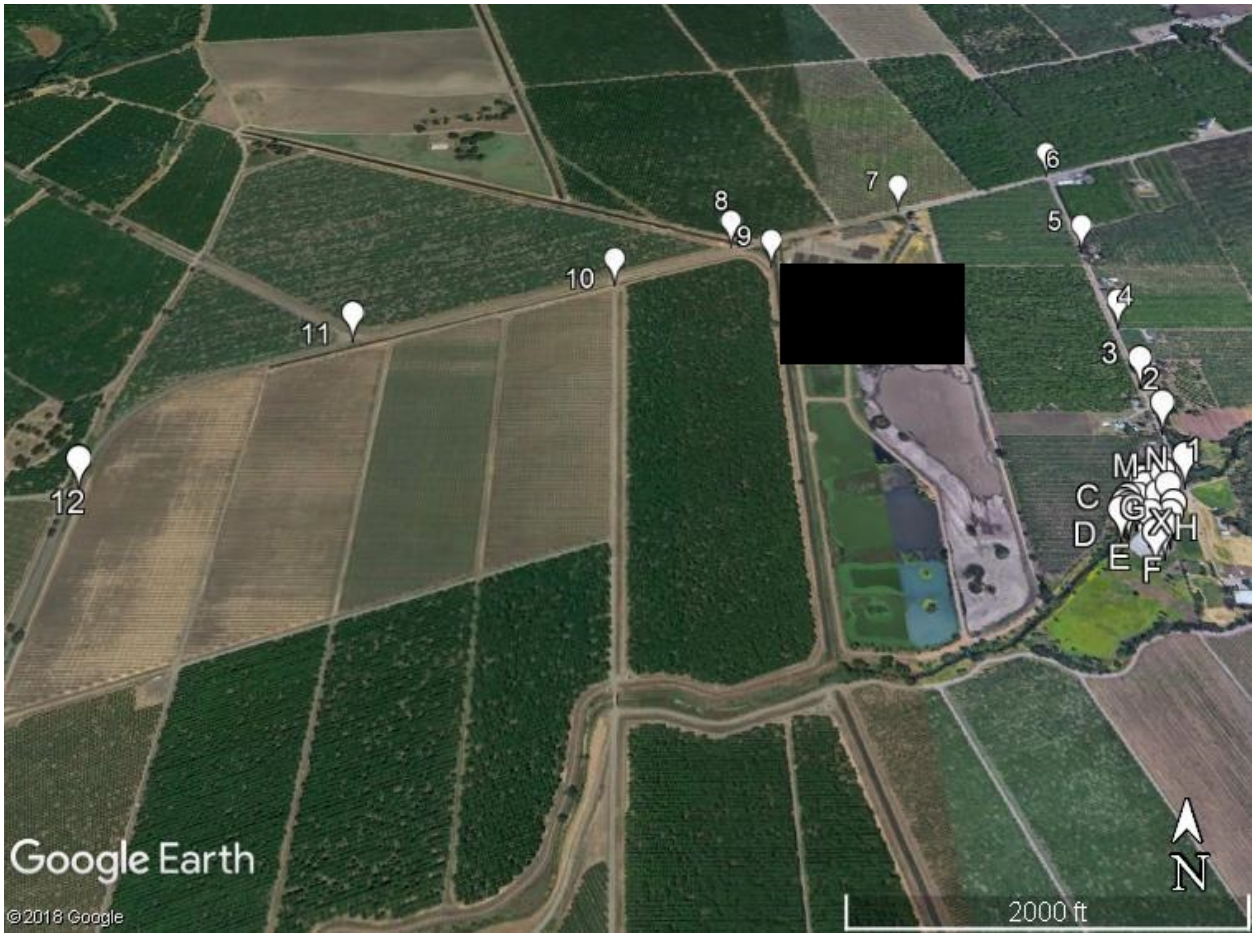


Figure No. 3 - Onsite Odor Inspection Locations identifies the center of the cannabis facility as Location X, and each of the sixteen (16) onsite monitoring Locations A through P on a Google Earth map.

Figure No. 3 - Onsite Odor Inspection Locations (Google Earth Map)

Odor Survey – Discussion

Fourteen (14) ambient odor surveys were conducted during the three-day study. Seven (7) of the rounds were performed offsite, in the surrounding community, and seven (7) rounds were conducted onsite. Two (2) of the onsite rounds, referred to as Test Rounds, included locations on the side of the greenhouses where the odor control system is installed. The objective of these Test Rounds was to evaluate the efficiency of the exhaust and odor neutralizing system.

For the Test Rounds, Locations A, B and C were designated at points six feet, twelve feet and twenty-four feet away from the exhaust fan of the greenhouses with the most mature plants. The exhaust fan, when operational, was blowing from the greenhouses at approximately sixteen MPH. The Test Rounds were performed under different scenarios to test the efficiency of the exhaust and odor neutralizing system.

Five (5) additional odor surveys were conducted onsite, within the facility property over the three-day odor study. During each survey, the date, time, odor reading and meteorological conditions, including temperature, humidity, precipitation, sky conditions, wind speed and wind direction were recorded at each location. Each survey was recorded separately and odor survey data reports appear in the Appendix as ***Exhibit 3***.

Approximately one hundred and sixty-eight (168) odor observations were recorded during the three-day study. During those days, seven offsite odor surveys were completed and seventy-nine (79) offsite observations were recorded. No cannabis odor was detected offsite at the property perimeter or in the community during those three days. The meteorological conditions, time of day and level of odor treatment varied between each offsite survey. Based on the results of the Odor Study, cannabis odor from the cultivation process does not leave the property.

During the same three-day timeframe, seven (7) onsite odor surveys were conducted and eighty-nine (89) onsite observations were recorded. No cannabis odor was detected during fifty-two (52) of those observations. Cannabis odor was detected at <2 D/T during twenty-three (23) observations and 2 D/T during nine (9) observations. Cannabis odor was detected at a level of 4 D/T during three (3) observations and 7 D/T during two (2) observations. During each observation of 4 D/T and 7D/T, the exhaust system had just been activated without odor neutralizer treatment, after cannabis odors had built up over night in the greenhouses. Those values returned to 2 D/T or less, within minutes after the greenhouses were properly vented and/or treated. These levels are extremely low for onsite operations.

Meteorological data and odor observation readings, from each Round, were loaded into the Odor Tracker software. ***Exhibit 3*** displays the results of each of the fourteen (14) Rounds. ***Exhibit 4*** contains several Maps that were created by the Odor Tracker Software, utilizing the entered data.

Odor Rounds Summary

Test Round 1 - Onsite

On the first afternoon, Test Round 1 was conducted from approximately 2:45 PM until 3:30 PM. In ***Exhibit 3,*** the Round 1 Onsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 30%, and the temperature was 74 degrees F. The wind was moderate and blowing from the west northwest. Prior to the odor observations, the exhaust and odor neutralizer systems were turned off. Cannabis odors were allowed to accumulate within the greenhouses. At 2:45 PM, the ventilation and exhaust system was turned on, without engaging the mist system. Measurements were taken at the three locations A, B and C, as the exhaust fans were turned on, but with no water mist or odor neutralizer. A reading of 7 D/T was taken at Location A with the Nasal Ranger. Within two minutes, a reading of 4 D/T was taken at Location B. Within two more minutes, a reading of 2 D/T was taken at Location C. These readings are higher than normal, because of the accumulation of cannabis odors, with an outdoor temperature of 74 degrees F and without any consistent ventilation in the greenhouses.

The next test was performed with the exhaust fans on and water mist only. After the system was on for approximately five minutes, a reading of 4 D/T was taken at Location A. Within two minutes, a reading of 2 D/T was taken at Location B. Within two more minutes, a reading of <2 D/T was taken at Location C. The lower readings were due to a combination of additional venting time and the water mist.

The odor control system was fully operational for the third and fourth set of readings. Each survey was within five to eight minutes of each other and results were identical at Locations A, B and C. A reading of <2 D/T was taken at Locations A and B. At Location C, no odor was detected. From these test results, it appears that a fully operational odor control system lowers the odor intensity readings from 7 D/T to <2 D/T, at six to twelve feet from the greenhouse ventilation fan. At twenty-four feet, the odor intensity goes from 2 D/T to non-detected.

Round 2 - Onsite

Several more onsite locations were designated and observed that afternoon, during Round 2, from 3:36 PM until 4:11 PM. The sky was sunny with no precipitation. The humidity was 20%, and the temperature was 74 degrees F. The wind was moderate and blowing from the northwest. The odor control system was fully operational. Odor was observed at <2 D/T at Locations D, E and G. No odors were detected at Locations M or K.

Round 3 - Offsite

After the initial onsite investigation, several offsite locations were designated and observed during Round 3, from approximately 4:13 PM until 5:06 PM. In ***Exhibit 3,*** the Round 3 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 19%, and the temperature was 74 degrees F. The wind was moderate and blowing from the west northwest. The odor control system was fully operational. No odors were detected.

Round 4 - Offsite

On the second day of the odor study, a few more offsite locations were designated and observed during Round 4, from approximately 9:56 PM until 10:30 PM. In ***Exhibit 3,*** the Round 4 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 51%, and the temperature was 55 degrees F. The wind was calm and blowing from the north. The odor control system was not operational yet. No odors were detected.

Test Round 5 - Onsite

Several more onsite locations were designated and observed during Round 5, from approximately 11:00 AM until 11:45 AM. In ***Exhibit 3,*** the Round 5 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 30 - 36%, and the temperature was 63 - 64 degrees F. The wind was light and variable. The odor control system had been during the night and had not been turned on yet. Odor was detected at a level of 2 D/T at Location O. At that moment, this location was downwind of greenhouses. Odor was detected at a level of <2 D/T at Locations A, B and F. No odors were detected at the other onsite locations.

Test Round 6 - Onsite

On the second day, Test Round 6 was conducted from approximately 11:40 AM until 12:24 PM. Additional onsite Locations L & K were incorporated into Test Round 6. In ***Exhibit 3,*** the Round 6 Onsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 30%, and the temperature was 64 degrees F. The wind was light and blowing from the north. Prior to the odor observations, the exhaust and odor neutralizer systems were still turned off. Cannabis odors were accumulating within the greenhouses, but appeared to be staying within the greenhouses. Readings were taken at Locations A and B at a level of <2 D/T. No odor was detected at Locations C or L. At approximately 11:45 PM, the ventilation and exhaust system was turned on, without engaging the mist system and allowed to vent for ten minutes. A reading of 2 D/T was taken at Locations A, B and C, within two minutes of each other. Within five to six more minutes, a reading of <2 D/T was taken at Locations L and K. These readings are higher than the first set of readings, because of the discharge of accumulated cannabis odors in the greenhouses.

The odor control system was fully operational during the next set of readings. The system was allowed to operate for fifteen minutes before odor was measured. A reading of <2 D/T was taken at Locations A, B and C. At Locations L and K, no odor was detected. From these test results, it appears that a fully operational odor control system, operated for fifteen to twenty minutes, lowers the odor intensity readings to non-detectable up to <2 D/T, at six to twenty-four feet from the greenhouse perimeter.

Round 7 – Onsite

After Test Round 6, one more set of observations were taken onsite, from approximately 12:26 PM until 12:51 PM. In ***Exhibit 3,*** the Round *7* Onsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 25%, and the temperature was 70 degrees F. The wind was light and blowing from the north. The odor control system was fully operational for approximately twenty to forty-five minutes. No odors were detected. This onsite round indicates that under the circumstances stated above, the odor control system, when operated consistently for less than one hour, reduces all onsite cannabis odor to zero.

Round 8 – Offsite

Offsite locations were observed during Round 4, from approximately 12:58 PM until 1:28 PM. In ***Exhibit 3,*** the Round 8 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 24%, and the temperature was 72 degrees F. The wind was light and blowing from the north. The odor control system was fully operational. No odors were detected.

Round 9 – Offsite

Offsite locations were observed during Round 9, from approximately 6:09 PM until 6:34 PM. In ***Exhibit 3,*** the Round 9 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 21%, and the temperature was 72 degrees F. The wind was moderate and blowing from the south southwest. The odor control system was not fully operational. The ventilation and exhaust system were operating; however, due to an issue with a pump, the odor neutralizer was not being used. No odors were detected.

Round 10 – Offsite

On the third day of the odor study, offsite locations were observed during Round 10, from approximately 9:42 AM until 10:09 AM. In ***Exhibit 3,*** the Round 10 Offsite Data Sheet displays the test data. The sky was mostly cloudy and foggy. The humidity was 51%, and the temperature was 59 degrees F. The wind was moderate and blowing from the south. The ventilation exhaust and odor control system were not in operation. No odors were detected.

Round 11 – Onsite

The next round was conducted from approximately 10:11 AM until 10:35 AM. In ***Exhibit 3,*** the Round 11 Onsite Data Sheet displays the test data. The sky was partly cloudy with no precipitation. The humidity was 37%, and the temperature was 60 degrees F. The wind was light and blowing from the north. Prior to the odor observations, the exhaust and odor neutralizer systems were still turned off. Cannabis odors had been accumulating within the greenhouses overnight.

At approximately 10:29 AM, the ventilation and exhaust system turned on automatically, because it was set to activate based on temperature in the greenhouses. The readings prior to the system coming on were relatively low. Readings at Locations J, O and K were <2 D/T. No odor was detected at any other locations before the system engaged. Once the ventilation and exhaust system turned on, a reading of 7 D/T was taken at Location A. A reading of 4 D/T was taken at Location B. A reading of 2 D/T was taken at Locations C and L. These readings are high and consistent with values obtained in Test Round 1, on the first day of the odor study, when the exhaust system was turned on, without the odor neutralizer. The elevated values are because of the discharge of accumulated cannabis odors in the greenhouses.

Round 12 – Onsite

After Round 11, one more set of observations were taken onsite, from approximately 11:20 AM until 11:50 AM. In ***Exhibit 3,*** the Round 12 Onsite Data Sheet displays the test data. The sky was partly cloudy with no precipitation. The humidity was 28%, and the temperature was 67 degrees F. The wind was light and blowing from the north. The ventilation and exhaust system had been operational for approximately fifty minutes to one hour and twenty minutes. The odor neutralizing system was still down because of the pump malfunction. Odors were detected at a level of 2 D/T at Location A. Odor was detected at a level of <2 D/T at Locations B, C, L and K. No odors were detected at any other locations. This onsite round indicates that under the circumstances stated above, the ventilation and exhaust system operating alone reduces the odor level onsite to a level of 2 D/T or less, when operated consistently.

Round 13 – Offsite

Offsite locations were observed during Round 13, from approximately 12:00 PM until 12:20 PM. In ***Exhibit 3,*** the Round 13 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 26%, and the temperature was 68 degrees F. The wind was light and blowing from the north. The odor control system was not fully operational. The ventilation and exhaust system were operating; however, due to an issue with a pump, the odor neutralizer was not being used. No odors were detected.

Round 14 - Offsite

Offsite locations were observed during Round 14, from approximately 3:40 PM until 4:10 PM. In ***Exhibit 3,*** the Round 14 Offsite Data Sheet displays the test data. The sky was mostly sunny with no precipitation. The humidity was 16%, and the temperature was 77 degrees F. The wind was moderate and blowing from the south southeast. The odor control system was not fully operational. The ventilation and exhaust system were operating; however, due to an issue with a pump, the odor neutralizer was not being used. No odors were detected.

Odor Survey Conclusions

No odors were detected at any of the designated locations throughout the California Community, during the three-day Odor Study. Seven (7) offsite surveys were conducted under three different operational conditions including 1) ventilation fan exhaust and odor neutralizer treatment 2) ventilation fan exhaust and no odor neutralizer treatment and 3) no ventilation fan exhaust and no odor neutralizer treatment. Based on these findings, this facility or one similar in size, construction, cultivation and basic odor control measures, should not adversely affect the surrounding community, even in times when odor control equipment is out-of-service for maintenance or not working properly.

In each case of onsite odor detection, where proper ventilation, exhaust and odor neutralizer treatment was in place, the odor was faint and intermittent at each location where <2 D/T was recorded. These locations were along the exhaust side of the greenhouses and either next to the greenhouses or directly downwind of the exhaust fans. This value indicates a barely discernible odor with the "naked nose", but under the threshold to be considered a recognizable odor with the Nasal Ranger Olfactometer on the lowest setting of 2-D/T.

Based on the findings in this Odor Study, Bosarge Environmental, LLC, concludes that "no discernible cannabis odor" was detected outside of this facility and is barely recognizable within 25 to 100 feet of the greenhouses. Consequently, this cannabis operation or one similar in size, construction, cultivation and odor control measures, should not adversely affect the surrounding community.

Submitted by,

Melanie Bosarge

Melanie Bosarge
Bosarge Environmental, LLC

APPENDIX

EXHIBIT 1

Nasal Ranger Olfactometer Calibration Certificate

CERTIFICATE OF CALIBRATION

for the
Nasal Ranger® Field Olfactometer

Serial Number : 90201429 **Calibration Date : 7/15/2019**

Dial D/T	Actual D/T	% Variance
60	60.02	0.0%
30	30.03	0.1%
15	15.07	0.5%
7	7.00	0.0%
4	4.00	0.0%
2	2.00	0.0%

This document certifies this Nasal Ranger® Field Olfactometer, specified by unique Serial Number, was calibrated using a NIST traceable primary gas flow standard by St. Croix Sensory, Inc.

St. Croix Sensory, Inc.
1150 Stillwater Blvd. N.
Stillwater, MN 55082 USA
+1-651-439-0177
info@nasalranger.com

NASAL RANGER®

Benjamin Lane
Calibration Technician

Exhibit 2

Photographs from the California Property

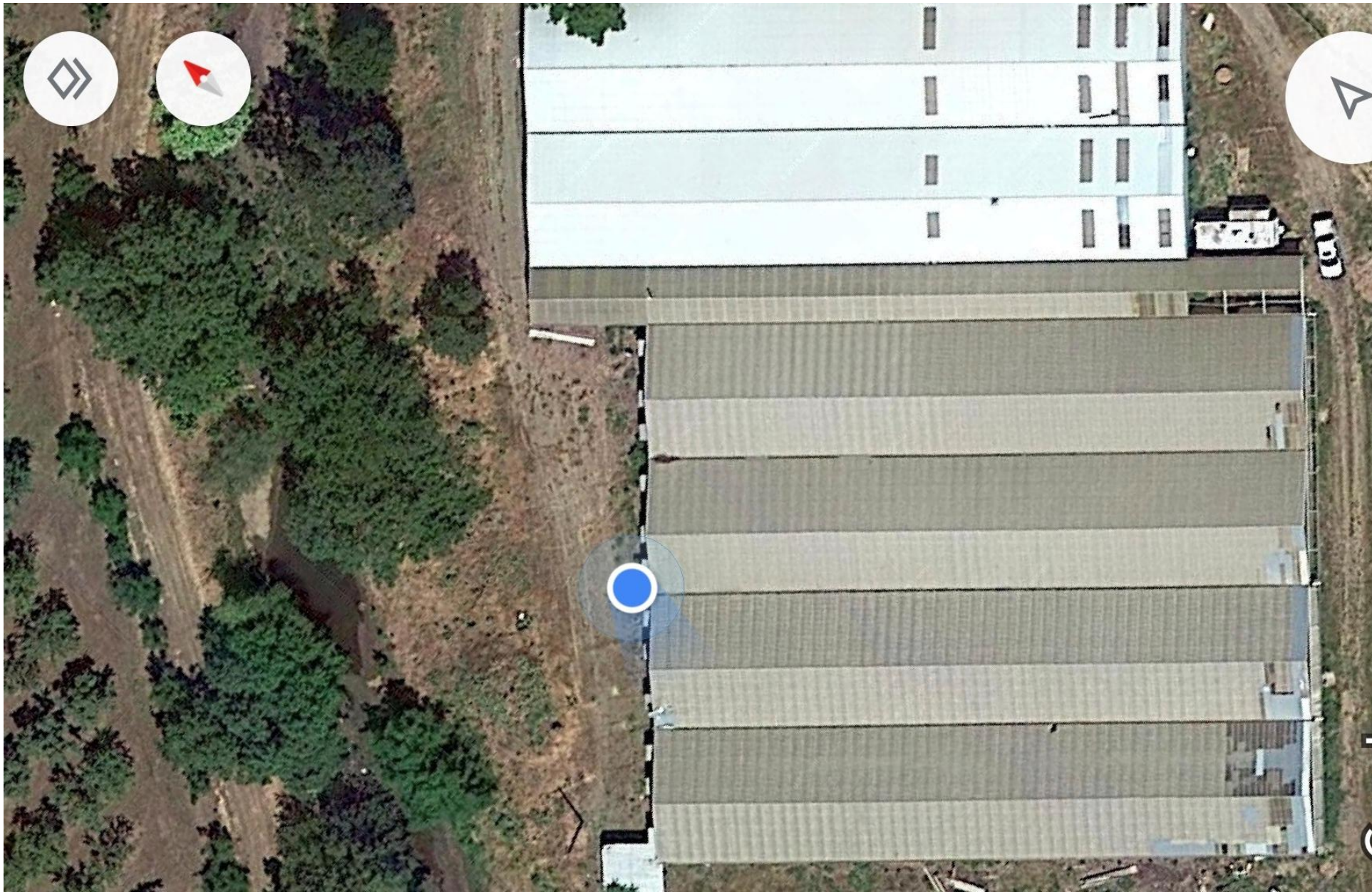



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Exhibit 3

Onsite and Offsite Odor Survey Data Sheets

ROUND 1 - ONSITE
10/1/19 2:50 PM - 3:26 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/1/2019 15:26	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:24	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:22	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:20	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:17	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:14	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:06	C	Test Area 24 Ft From Exhaust	<2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:04	B	Test Area 12 FT From Exhaust	2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 15:02	A	Test Area 6 Ft from Exhaust	4	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 14:54	C	Test Area 24 Ft From Exhaust	2	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 14:52	B	Test Area 12 FT From Exhaust	4	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92
10/1/2019 14:50	A	Test Area 6 Ft from Exhaust	7	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	30	29.92

ROUND 2 - ONSITE
10/1/19 3:36 PM - 4:11 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/1/2019 16:11	M	Front Gate To Property	ND	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:53	E	South Corner of Greenhouses	<2	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:49	G	East Corner of Greenhouses	<2	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:44	K	North Corner of Greenhouses	ND	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95
10/1/2019 15:36	D	West Corner of Greenhouses	<2	Mostly Sunny	None	NW	Moderate Wind (5-15 mph)	74	20	29.95

ROUND 3 - OFFSITE
10/1/19 4:13 PM - 5:06 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/1/2019 17:06	6		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 17:02	10		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:59	11		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:56	12		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:24	9		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:20	8		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94
10/1/2019 16:13	1		ND	Mostly Sunny	None	WNW	Moderate Wind (5-15 mph)	74	19	29.94

ROUND 4 - OFFSITE
10/2/19 9:56 AM - 10:30 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 10:30	1	[redacted]	ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:28	2		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:24	3		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:21	6		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:19	4		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:17	5		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:15	7		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:12	8		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:08	9		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:04	10		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 10:00	11		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07
10/2/2019 9:56	12		ND	Mostly Sunny	None	N	Calm (<1 mph)	55	51	30.07

ROUND 5 - ONSITE
10/2/19 11:00 AM - 11:45 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 11:45	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:43	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:42	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:40	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:38	D	West Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:36	O	Post Behind House	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:33	P	On Hill Behind House	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:31	N	Post by Dumpster	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:27	E	South Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:26	F	South Midpoint of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:24	G	East Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:22	H	East Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:20	I	East Midpoint of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:18	J	North Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:15	K	North Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:00	M	Front Gate To Property	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05

ROUND 6 - ONSITE
10/2/19 11:40 AM - 12:24 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 12:24	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:23	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:22	C	Test Area 24 Ft From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:21	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:19	K	North Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:05	K	North Corner of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:05	K	North Corner of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 12:04	L	North Center of Greenhouses	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:59	C	Test Area 24 Ft From Exhaust	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:57	B	Test Area 12 FT From Exhaust	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:55	A	Test Area 6 Ft from Exhaust	2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:45	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	63	36	30.05
10/2/2019 11:43	C	Test Area 24 Ft From Exhaust	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:42	B	Test Area 12 FT From Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05
10/2/2019 11:40	A	Test Area 6 Ft from Exhaust	<2	Mostly Sunny	None	N	Light Breeze (1-5 mph)	64	30	30.05

ROUND 7 - ONSITE
10/2/19 12:26 PM - 12:51 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 12:51	E	South Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:50	F	South Midpoint of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:48	G	East Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:47	H	East Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:46	I	East Midpoint of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:44	N	Post by Dumpster	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:43	M	Front Gate To Property	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:42	P	On Hill Behind House	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:41	O	Post Behind House	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:40	J	North Corner of Whse	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:33	K	North Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:30	L	North Center of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03
10/2/2019 12:26	D	West Corner of Greenhouses	ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	70	25	30.03

ROUND 8 - OFFSITE
10/2/19 12:58 PM - 1:28 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 13:28	11		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:25	12		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:21	10		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:19	8		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:18	9		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:16	7		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:14	6		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:12	5		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:10	4		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:06	3		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 13:04	2		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02
10/2/2019 12:58	1		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	72	24	30.02

ROUND 9 - OFFSITE
10/2/19 6:09 PM - 6:34 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/2/2019 18:34	12		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:31	11		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:29	10		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:27	9		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:25	8		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:22	7		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:20	6		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:18	5		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:16	4		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:14	3		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:12	2		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95
10/2/2019 18:09	1		ND	Mostly Sunny	None	SSW	Moderate Wind (5-15 mph)	72	21	29.95

ROUND 10 - OFFSITE
10/3/19 9:42 AM - 10:09 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 10:09	1	[redacted]	ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:08	2		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.30
10/3/2019 10:07	3		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:06	4		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:05	5		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 10:04	6		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:56	12		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:54	11		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:50	10		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:46	9		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:44	8		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00
10/3/2019 9:42	7		ND	Mostly Cloudy	Fog	S	Moderate Wind (5-15 mph)	59	51	30.00

ROUND 11 - ONSITE
10/3/19 10:11 AM - 10:35 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 10:35	C	Test Area 24 Ft From Exhaust	2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:34	B	Test Area 12 FT From Exhaust	4	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:33	A	Test Area 6 Ft from Exhaust	7	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:31	D	West Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:29	L	North Center of Greenhouses	2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:27	K	North Corner of Greenhouses	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:25	O	Post Behind House	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:23	P	On Hill Behind House	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:21	J	North Corner of Whse	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:19	I	East Midpoint of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:17	E	South Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:16	F	South Midpoint of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:15	G	East Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:14	H	East Corner of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:13	N	Post by Dumpster	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00
10/3/2019 10:11	M	Front Gate To Property	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	60	37	30.00

ROUND 12 - ONSITE
10/3/19 11:20 AM - 11:50 AM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 11:50	M	Front Gate To Property	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:45	A	Test Area 6 Ft from Exhaust	2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:44	B	Test Area 12 FT From Exhaust	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:43	C	Test Area 24 Ft From Exhaust	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:41	D	West Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:39	L	North Center of Greenhouses	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:38	K	North Corner of Greenhouses	<2	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:35	P	On Hill Behind House	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:34	O	Post Behind House	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:32	J	North Corner of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:29	N	Post by Dumpster	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:27	I	East Midpoint of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:25	H	East Corner of Whse	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:23	G	East Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:21	F	South Midpoint of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99
10/3/2019 11:20	E	South Corner of Greenhouses	ND	Partly Cloudy	None	N	Light Breeze (1-5 mph)	67	28	29.99

ROUND 13 - OFFSITE
10/3/19 12:00 PM - 12:20 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 12:20	12		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:18	11		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:15	10		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:12	9		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:10	8		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:08	7		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:06	6		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:05	5		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:04	4		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:03	3		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:02	2		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98
10/3/2019 12:00	1		ND	Mostly Sunny	None	N	Light Breeze (1-5 mph)	68	26	29.98

ROUND 14 - OFFSITE
10/3/19 3:40 PM - 4:10 PM

Date	Loc #	Location	D/T	Weather Condition	Precip	Wind Direction	Wind Speed	Temp	Humidity	Pressure
							mph	F	%	InHg
10/3/2019 16:10	1		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:08	2		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:06	3		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:04	4		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:02	5		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 16:00	6		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:52	12		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:50	11		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:48	10		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:44	9		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:42	8		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90
10/3/2019 15:40	7		ND	Mostly Sunny	None	SSE	Moderate Wind (5-15 mph)	77	16	29.90

Exhibit 4

Onsite and Offsite Odor Data Maps


M
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F
Google
Report a map error


M
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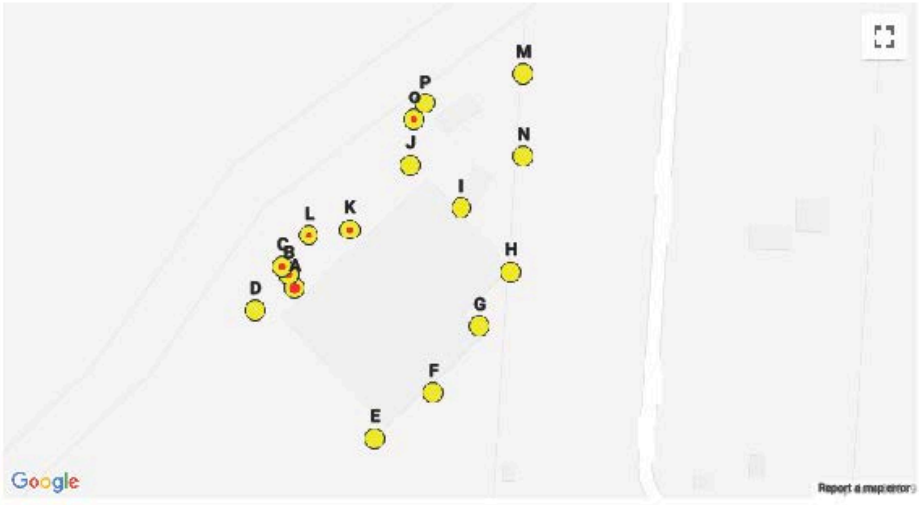
A
D
X
H
G
F
E
Google
Map data ©2019 Imagery ©2019 , Maxar Technologies, U.S. Report a map error

Odor DT Criteria (Eclipse Key)			
Avg. Log	Avg.	Eclipse Symbol	Description
0.000	= ND		Full Sun
0.001-0.301	< 2		1/4 Eclipse
0.301-0.845	>= 2		1/2 Eclipse
0.846-	>= 7		Full Eclipse

Date Range: 10/1/2019 thru 10/3/2019
Any Time of Day
Assessment Type: Inspection (DT)
Include Non-Detect



Odor DT Criteria (Eclipse Key)			
Avg. Log	Avg.	Eclipse Symbol	Description
0.000	= ND		Full Sun
0.001-0.301	< 2		1/4 Eclipse
0.301-0.845	>= 2		1/2 Eclipse
0.846-	>= 7		Full Eclipse

Date Range: 10/1/2019 thru 10/3/2019
Any Time of Day
Assessment Type: Inspection (DT)
Include Non-Detect

Odor DT Criteria (Eclipse Key)			
Avg. Log	Avg.	Eclipse Symbol	Description
0.000	= ND		Full Sun
0.001-0.301	< 2		1/4 Eclipse
0.301-0.845	>= 2		1/2 Eclipse
0.846-	>= 7		Full Eclipse

Date Range: 10/1/2019 thru 10/3/2019
Any Time of Day
Assessment Type: Inspection (DT)
Include Non-Detect

Appendix C

Biological Resources Assessment

BIOLOGICAL RESOURCES ASSESSMENT FOR THE CANNABIS CULTIVATION OPERATION AT 5600 OMO RANCH ROAD, SOMERSET, CALIFORNIA

November 12, 2021

Prepared by:

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TABLE OF CONTENTS

1. INTRODUCTION

1.1. PROJECT LOCATION AND DESCRIPTION

Natural Investigations Company conducted a biological resources assessment for proposed developments on a 117.59-acre parcel (APN 095-030-036-000) at 5600 Omo Ranch Road, Somerset, in El Dorado County, California.

The proposed cannabis cultivation operation consists of one cultivation compound capable of producing 9,600 square feet of mature plant canopy and 17,640 square feet of nursery/immature plant canopy. All plants will be grown fabric pots or raised beds within greenhouses utilizing mixed light. The cannabis project footprint will be just under 1 acre in size. The project will require some vegetation clearing, grading, and terracing for the establishment of the cultivation area (see exhibits). Ancillary facilities consist of two 1,200 square foot sheds for harvest storage, pesticide and agricultural chemical storage, a 625 square foot compost area and a 1,200 square foot parking area. Existing unpaved private roads will be used access the cultivation operational areas.

Various non-cannabis projects will also be established on this parcel, including 2 residences, an orchard, a food garden, and a vineyard. Development of these projects and the cannabis operation will require clearing of approximately 8 acres of timberland (see exhibits).

For this assessment, the Project Area was defined as the cannabis cultivation area plus the ancillary facilities and the non-cannabis areas to be cleared of timber, and this 8-acre area was the subject of the impact analysis. The entire 118-acre property was defined as the Study Area. The Study Area is defined to identify biological resources adjacent to the Project Area, and is the area subject to potential indirect effects from Project implementation.

1.2. SCOPE OF ASSESSMENT

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.

The County of El Dorado (County) has adopted the Oak Resources Conservation Ordinance Number 5061. The Oak Conservation Ordinance requires the inventory of oak resources and the mitigation for the removal of oak resources. Oak Resources consist of oak woodlands, individual native oak trees, and heritage trees. If Oak Resources are to be removed, an Oak Tree or Oak Woodland Removal Permit is required. This requires preparation of an Oak Resources Technical Report and a code compliance certificate verifying that no protected oak trees have been impacted within two years prior to the permit application.

2. ENVIRONMENTAL SETTING

The Study Area is located within the northern Sierra Nevada Foothills geographic subregion, which is contained within the Sierra Nevada Mountains geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately-cold winters. The Study Area and vicinity is in Climate Zone 7 - California's Gray Pine Belt, defined by hot summers and mild but pronounced winters without severe winter cold or high humidity (Sunset, 2021). The topography of the Study Area is mountainous with ridgelines and moderate hillslopes. The elevation ranges from approximately 3,120 feet to 3,455 feet above mean sea level. The southern half of the parcel drains west into Brownsville Creek, thence Cedar Creek. The northern half is drained by Cedar Creek which flows west into Scott Creek, eventually flowing into the Cosumnes River. Prior to the establishment of this cultivation operation, land uses were open space and timber production. The surrounding land uses are private estates, open space, and timber production.

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
- Aerial photography of the Study Area (current and historical)
- United States Geologic Service 7.5 degree-minute topographic quadrangles of the Study Area and vicinity
- USFWS National Wetland Inventory
- USDA Natural Resources Conservation Service soil survey maps
- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription
- USFWS species list (IPaC Trust Resources Report).

3.2. FIELD SURVEY

Consulting biologist Tim Nosal, MS. conducted a wildlife survey and botanical field survey on October 27, 2021. Weather conditions were cool and sunny. 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 CNDDB 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 (2021); CDFW (2021b,c); NatureServe 2021; and University of California at Berkeley (2021a,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). 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, 2021c). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2021), Calflora (2021); CDFW (2021a,b,c); and University of California at Berkeley (2021a,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:

northwestern fence lizard (*Sceloporus occidentalis occidentalis*); American black bear (*Ursus americana*); Botta's pocket gopher (*Thomomys bottae*); California ground squirrel (*Otospermophilus beecheyi*); Columbian black-tailed deer (*Odocoileus hemionus columbianus*); gray fox (*Urocyon cinereoargenteus*); western gray squirrel (*Sciurus griseus*); acorn woodpecker (*Melanerpes formicivorus*); American robin (*Turdus migratorius*); California quail (*Callipepla californica*); common raven (*Corvus corax*); dark-eyed junco (*Junco hyemalis*); northern flicker (*Colaptes auratus*); Nuttall's woodpecker (*Picoides nuttallii*); red breasted nuthatch (*Sitta canadensis*); red-tailed hawk (*Buteo jamaicensis*); sparrow (Emberizidae); spotted towhee (*Pipilo maculatus*); Stellar's jay (*Cyanocitta stelleri*); and other 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: chaparral and mixed oak/conifer forest. These vegetation communities are discussed here and are delineated in the Exhibits.

Chaparral: Although chaparral species are common throughout the Study Area, chaparral habitat is found only in the eastern half of the parcel. The dominant species within the chaparral varies based upon soils, aspect and site history. Typical species include wedgeleaf ceanothus (*Ceanothus cuneatus*), deer brush (*Ceanothus integerrimus* var. *macrothyrsus*), and whiteleaf manzanita (*Arctostaphylos viscida* ssp. *viscida*). Other woody species found in the chaparral include ponderosa pine (*Pinus ponderosa*), California black oak (*Quercus kelloggii*) and poison oak (*Toxicodendron diversilobum*). Various grasses and herbs were observed in the understory of the shrub canopy. This vegetation type can be classified as the Holland Type "Buck Brush Chaparral" or as "37.211.00 Wedge Leaf Ceanothus Chaparral" (CDFW 2021e).

Mixed Oak/Conifer Forest and Woodland: Historically, the parcel has been utilized for timber production. Stands of forested habitat within the Study Area vary in age, composition and canopy cover. Ridges and south-facing slopes are characterized by an open canopy of plantation-planted ponderosa pine and California black oak. However, the creeks and north-facing slopes support a maturing, dense canopy of a variety of conifers and hardwoods. In addition to ponderosa pine and black oak, other commonly observed species in the pine forest and woodland include incense cedar (*Calocedrus decurrens*), Douglas fir (*Pseudotsuga menziesii*), sugar pine (*Pinus lambertiana*), white fir (*Abies concolor*), gray pine (*Pinus sabiniana*) and canyon live oak (*Quercus chrysolepis*). The understory is highly variable and includes typical chaparral species as well as Sierran mountain misery (*Chamaebatia foliolosa*). This vegetation can be classified as the Holland Type "Sierran Mixed Conifer Forest" or as "87.015.02 *Pinus ponderosa* – *Calocedrus decurrens* – *Quercus kelloggii* Ponderosa pine – Incense Cedar – California Black Oak Forest and Woodland (CDFW 2021e).

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: Montane Chaparral; Ponderosa Pine and Riverine.

4.2.3. Critical Habitat and Special-status Habitat

No critical habitat for any federally-listed species occurs within the Project Area or the surrounding Study Area. The CNDDB reported no special-status habitats within the Project Area or surrounding Study Area. The CNDDB reported the following special-status habitats in a 10-mile radius outside of the Study Area: Sacramento-San Joaquin Foothill/Valley Ephemeral Stream; Central Valley Drainage Spring Stream; Central Valley Drainage Resident Rainbow Trout Stream; Central Valley Drainage Hardhead/Squawfish Stream. No special-status habitats were detected within the Project Area during the field survey. However, the surrounding Study Area contains the following special-status habitats: watercourses and riverine wetlands.

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.

No fishery resources exist in or near the Study Area; the nearest is the upper Cosumnes River several miles downstream. The Study Area is mapped as a wildlife corridor: Natural Landscape Blocks and Essential Connectivity Areas – as identified in the California Essential Habitat Connectivity Project (CDFW 2021d). The Study Area is not located within any 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 CNDDB
- A query of the California Native Plant Society's database *Inventory of Rare and Endangered Plants of California* (online edition).

The CNDDB 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 CNDDB has mapped an occurrence of great gray owl *(Strix nebulosa)* within the Study Area. However, this occurrence is an artifact of the mapping process at CNDDB. The actual location of this occurrence has been obscured by the CNDDB in order to protect the nest for this species. The exact location of these occurrences is not known, however suitable habitat for these species may be found within the Study Area.

Within a 10-mile buffer of the Study Area boundary, the CNDDB reported several special-status species occurrences, summarized in the following table along with any additional CNPS species.

A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System (see Appendix 1). The following species list is generated using a regional and/or watershed approach and does not necessarily indicate that the Study Area provides suitable habitat:

- California Red-legged Frog (*Rana draytonii*) Threatened
- Delta Smelt (*Hypomesus transpacificus*) Threatened
- Monarch Butterfly (*Danaus plexippus*) Candidate

Migratory birds should also be considered in the impact assessment.

Special-status Species Reported by CNDDB and CNPS in the Vicinity of the Study Area

Common Name Scientific Name	Status*	General Habitat**	Microhabitat**	Potential to Occur in Project Area***
Southern long-toed salamander Ambystoma macrodactylum sigillatum	CSSC		Aquatic larvae occur in ponds and lakes. Outside of breeding season adults are terrestrial and associated with underground burrows of mammals and moist areas under logs and rocks.	Absent: No habitat onsite.
California red-legged frog Rana draytonii	FT/CSSC	Aquatic; Artificial flowing waters; Artificial standing waters; Freshwater marsh; Marsh & swamp; Riparian forest; Riparian scrub; Riparian woodland; South coast flowing waters; South coast standing waters; Sacramento/San Joaquin flowing waters; Sacrament	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Absent: No habitat onsite.
Sierra Nevada yellow-legged frog Rana sierrae	FE/CT/WL	Aquatic	Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	Absent: No habitat onsite.
Sharp-shinned hawk Accipiter striatus	WL	Cismontane woodland; Lower montane coniferous forest; Riparian forest; Riparian woodland	North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	Potential to occur: Suitable habitat present.
Northern goshawk Accipiter gentilis	CSSC	North coast coniferous forest; Subalpine coniferous forest; Upper montane coniferous forest	Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Low potential to occur: Marginal habitat is present.
Great gray owl Strix nebulosa	CE	Lower montane coniferous forest; Old-growth; Subalpine coniferous forest; Upper montane coniferous forest	Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	The CNDDB has mapped an occurrence of this species within the Study Area. The actual location of this occurrence has been obscured by the CNDDB in order to protect the nest for this species. Low potential to occur: Marginal habitat is present.
Bank swallow Riparia riparia	CT	Riparian scrub; Riparian woodland	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Absent: No habitat onsite.
Fringed myotis Myotis thysanodes	CSSC		Uses caves, mines, buildings or crevices for maternity colonies and roosts.	Absent: No habitat onsite.
Long-legged myotis Myotis volans	CSSC	Upper montane coniferous forest	Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings.	Potential to occur: Suitable habitat present.
Silver-haired bat Lasionycteris noctivagans	CSSC	Lower montane coniferous forest; Old-growth; Riparian forest	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	Potential to occur: Suitable habitat present.

Hoary bat Lasiurus cinereus	CSSC	Broadleaved upland forest; Cismontane woodland; Lower montane coniferous forest; North coast coniferous forest	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Potential to occur: Suitable habitat present.
Townsend's big-eared bat Corynorhinus townsendii	CSSC	Broadleaved upland forest; Chaparral; Chenopod scrub; Great Basin grassland; Great Basin scrub; Joshua tree woodland; Lower montane coniferous forest; Mojavean desert scrub; Meadow & seep; Riparian forest; Riparian woodland; Sonoran desert scrub; Sonoran	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Absent: No habitat onsite.
North American porcupine Erethizon dorsatum	CSSC	Broadleaved upland forest; Closed-cone coniferous forest; Cismontane woodland; Lower montane coniferous forest; North coast coniferous forest; Upper montane coniferous forest	Wide variety of coniferous and mixed woodland habitat.	Potential to occur: Suitable habitat present.
Sierra Nevada red fox Vulpes vulpes necator	FPE/CT	Alpine dwarf scrub; Alpine; Broadleaved upland forest; Meadow & seep; Riparian scrub; Subalpine coniferous forest; Upper montane coniferous forest; Wetland	Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	Absent: No habitat onsite.
Fisher Pekania pennanti	CSSC	North coast coniferous forest; Old-growth; Riparian forest	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Absent: No habitat onsite.
Western pond turtle Emys marmorata	CSSC	Aquatic; Artificial flowing waters; Klamath/North coast flowing waters; Klamath/North coast standing waters; Marsh & swamp; South coast flowing waters; South coast standing waters; Sacramento/San Joaquin flowing waters; Sacramento/San Joaquin standing waters	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Absent: No habitat onsite.
Grady's Cave amphipod Stygobromus gradyi	CSSC	Limestone	Known only from springs and caves in the Mother Lode karst region.	Absent: No habitat onsite.
Graham's Cave amphipod Stygobromus grahami	CSSC	Aquatic	Found only in caves.	Absent: No habitat onsite.
Wawona riffle beetle Atractelmis wawona	CSSC	Aquatic	Strong preference for inhabiting submerged aquatic mosses.	Absent: No habitat onsite.
Cosumnes stripetail Cosumnoperla hypocrena	CSSC	Aquatic	Found in intermittent streams on western slope of central Sierra Nevada foothills in American and Cosumnes River basins.	Absent: No habitat onsite.
Grubbs' cave harvestman Banksula grubbsi	CSSC	Limestone	Species is troglobitic.	Absent: No habitat onsite.
Tuolumne button-celery Eryngium pinnatisectum	1B.2	Cismontane woodland; Lower montane coniferous forest; Vernal pool; Wetland	Volcanic soils; vernal pools and mesic sites within other natural communities. 65-915 m.	Absent: No habitat onsite.
Stebbins' lomatium Lomatium stebbinsii	1B.1	Chaparral; Lower montane coniferous forest	Thin, gravelly volcanic clay in open yellow pine forest. Grows where other vegetation is	Absent: No habitat onsite.

			absent. 1140-2350 m.	
Jepson's dodder Cuscuta jepsonii	1B.2	Broadleaved upland forest; Lower montane coniferous forest; Upper montane coniferous forest	Primary host species are Ceanothus diversifolius and Ceanothus prostratus. 1200-2745 m.	Absent: No habitat onsite.
Nissenan manzanita Arctostaphylos nissenana	1B.2	Closed-cone coniferous forest; Chaparral	Usually on metamorphics, associated w/ other chaparral species. 485-1005 m.	Potential to occur: Suitable habitat present.
Brandegee's clarkia Clarkia biloba ssp. brandegeeae	4.2	Chaparral; Cismontane woodland; Lower montane coniferous forest	Often in roadcuts. 75-915 m.	Potential to occur: Suitable habitat present.
Stanislaus monkeyflower Erythranthe marmorata	1B.1	Cismontane woodland; Lower montane coniferous forest	300-1435 m.	Potential to occur: Suitable habitat present.
Saw-toothed lewisia Lewisia serrata	1B.1	Broadleaved upland forest; Lower montane coniferous forest; Riparian forest	Shaded, north-facing moss-covered, metamorphic rock cliffs. 800-1435 m.	Absent: No habitat onsite.
Parry's horkelia Horkelia parryi	1B.2	Chaparral; Cismontane woodland; Ione formation	Openings in chaparral or woodland; especially known from the Ione Formation in Amador County. 85-1115 m.	Absent: No habitat onsite.
Yellow-lip pansy monkeyflower Diplacus pulchellus	1B.2	Lower montane coniferous forest; Meadow & seep	Vernally wet sites. Soils can be clay, volcanic, or granitic. 670-1950 m.	Absent: No habitat onsite.
Felt-leaved violet Viola tomentosa	4.2	Lower montane coniferous forest; Subalpine coniferous forest; Upper montane coniferous forest	In open, conifer forest in dry, gravelly soils. 1035-2015 m.	Potential to occur: Suitable habitat present.
Three-bracted onion Allium tribracteatum	1B.2	Chaparral; Lower montane coniferous forest; Upper montane coniferous forest	Volcanic slopes and ridges. 880-2835 m.	Absent: No habitat onsite.
Pleasant Valley mariposa-lily Calochortus clavatus var. avius	1B.2	Lower montane coniferous forest	Josephine silt loam and volcanically derived soil; often in rocky areas. 300-1710 m.	Potential to occur: Suitable habitat present.
Red Hills soaproot Chlorogalum grandiflorum	1B.2	Chaparral; Cismontane woodland; Lower montane coniferous forest; Ultramafic	Occurs frequently on serpentine or gabbro, but also on non-ultramafic substrates; often on "historically disturbed" sites. 265-1695 m.	Potential to occur: Suitable habitat present.
Prairie wedge grass Sphenopholis obtusata	2B.2	Cismontane woodland; Meadow & seep; Wetland	Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	Absent: No habitat onsite.
Scalloped moonwort Botrychium crenulatum	2B.2	Bog & fen; Lower montane coniferous forest; Meadow & seep; Marsh & swamp; Upper montane coniferous forest; Wetland	Moist meadows, freshwater marsh, and near creeks. 1185-3110 m.	Absent: No habitat onsite.

*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 CNDDB, unless otherwise noted.

***Definitions of Occurrence Probability Rankings:

Present: Species was observed during site visit. Or
Present: Species has been previously documented to occur within the Study Area.
Potential to occur: Suitable habitat present.
Low potential to occur: Marginal habitat is present.
Absent: No habitat onsite.

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 Project Area or the surrounding Study Area.

4.3.3. Analyses of Likelihood of Occurrence of Special-status Species

The special-status species identified in Section 4.3.1 were further assessed for their likelihood to occur within the Study Area based upon previously documented occurrences, field surveys, their habitat requirements, and the quality and extent of any suitable habitat within the Study Area. Each species was ranked for its likelihood to occur within the Study Area: a “present” rank was given for a species that was observed in the Study Area during the field visit or is known to occur within the Study Area based upon documented occurrences; a "potential to occur" rank was given for species that were not detected during current field surveys, but essential habitat elements exist within the Study Area; a "low potential to occur" rank was given for species that were not detected during current field surveys, and where habitat elements exist within the Study Area or vicinity, but the quality of that habitat is degraded or of poor quality, and/or where Study Area conditions and land uses deter its use of the Study Area; and an “absent” rank was given for species with no known observations within the Study Area or vicinity, and where no suitable habitat exists within the Study Area. The results of these analyses are summarized in the following table.

The following special-status species were determined to have a potential to occur within the Study Area:

Animals

- Sharp-shinned hawk (Accipiter striatus)
- Long-legged myotis (Myotis volans)
- Silver-haired bat (Lasionycteris noctivagans)
- Hoary bat (Lasiurus cinereus)
- North American porcupine (Erethizon dorsatum)

Plants

- Nissenan manzanita (Arctostaphylos nissenana)
- Brandegee's clarkia (Clarkia biloba ssp. brandegeeae)
- Stanislaus monkeyflower (Erythranthe marmorata)
- Felt-leaved violet (Viola tomentosa)
- Pleasant Valley mariposa-lily (Calochortus clavatus var. avius)
- Red Hills soaproot (Chlorogalum grandiflorum)

The chaparral and forest habitats within the Study Area have potential to harbor special-status plant species because rare plants reported by CNDDB to occur in the region use chaparral and pine forest habitat, especially on metamorphic and volcanic soils. Similar habitats occur in the Project Area and surrounding Study Area. Special-status animals also have a potential to occur in the chaparral and forest habitats.

The CNDDB has mapped an occurrence of great gray owl (*Strix nebulosa*) within the Study Area. The actual location of this occurrence has been obscured by the CNDDB in order to protect the nest for this species. This species has a low potential to occur as only marginal habitat is present; there is a lack of old growth forest in the vicinity.

4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES

The USFWS National Wetland Inventory reported no water features within the Project Area, but the Inventory did report the following water features within the Study Area (see Exhibits): two riverine features.

A preliminary 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 (i.e., channels) 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 1,000 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 field survey determined that the Project Area does not contain any channels or wetlands. The following water features were detected within the larger Study Area during the field survey (see Exhibits):

- two ephemeral channels (Class III watercourses): Cedar Creek and an unnamed tributary of Brownsville Creek

There are no vernal pools or other isolated wetlands in the Study Area.

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.

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?*

The Project Areas are located in chaparral and pine forest habitat, which will be impacted by project implementation. Special-status plants have a potential to occur in these habitats because rare plant species have been reported in similar habitats in the region by the CNDDB. A botanical survey was performed during our site survey. No special-status plants were observed within the Project Area or the surrounding Study Area, but this survey was performed outside of the blooming period of most rare plants occurring in the region. Without an additional botanical survey performed during the blooming period, we cannot be certain that special-status plants will not be impacted by project implementation. This is a potentially significant impact before mitigation.

Several special-status animal species have a potential to occur in Project Areas. No special-status animals were observed within the Project Area or the surrounding Study Area. However, special-status

species could migrate into Project Areas between the time that the field survey was completed and the start of construction. This is a potentially significant impact before mitigation.

Special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the Project Area. The Project Area, and adjacent trees, contain suitable nesting habitat for various bird species. However, no active nests were observed during the field survey. If construction activities are conducted during the nesting season, nesting birds could be directly impacted by tree removal and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, Project construction is considered a potentially significant adverse impact to nesting birds.

Recommended Mitigation Measures

An additional botanical survey is recommended because our field survey was not performed during the blooming period of most regionally-occurring rare plants. The survey should be focused on rare plants that have been reported in the vicinity by the CNDDB and performed during the blooming period of the majority of target species. The survey should also focus on habitat types that are more likely to harbor rare species. With the implementation of this mitigation measure, adverse impacts upon special-status plant species would be reduced to a less-than-significant level.

Because special-status species that occur in the vicinity could migrate onto the Study Area between the time that the field survey was completed and the start of construction, a pre-construction survey for special-status species should be performed by a qualified biologist to ensure that special-status species are not present. If any listed species are detected, construction should be delayed, and the appropriate wildlife agency (CDFW and/or USFWS) should be consulted and project impacts and mitigation reassessed. With the implementation of this mitigation measure, adverse impacts upon special-status species would be reduced to a less-than-significant level.

If construction activities would occur during the nesting season (typically February through August), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS 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. With the implementation of this mitigation measure, adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

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 Project Area and surrounding Study Area are not within any designated listed species’ critical habitat. The Study Area contains two channels, which are special-status habitats due to their potential to attract wildlife or harbor rare plants and because these resources are protected by multiple laws. The Project Area does not contain special-status habitats and is setback from the channels such that no direct impacts will occur.

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 several water resources within the surrounding Study Area: two Class III Watercourses. Potential direct impacts to water resources could occur during construction by modification or destruction of stream banks or riparian vegetation or the filling of wetlands or channels. However, there are no water resources within the Project Areas. The cannabis cultivation area is setback at least 400 feet from watercourses and vegetative buffers are present. Because of these avoidance measures, no direct impacts to water resources are expected.

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 must enroll for coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ). Implementation of a stormwater pollution prevention plan, and erosion control plan, along with regular inspections, will ensure that construction activities do not pollute receiving waterbodies.

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 file a Notice of Intent and 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. Cultivators who enroll in Cannabis General Order must also comply with the Minimum Riparian Setbacks, as summarized in the following table. The Project would be considered to have a significant adverse impact on jurisdictional water resources if it would be non-compliant with these requirements. The minimum riparian setbacks apply to 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 proposed project is compliant with the setback requirements of Cannabis Cultivation Order WQ 2019-0001-DWQ.

Minimum Riparian Setbacks

Common Name	Watercourse Class	Distance
Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs	I	150 ft.
Intermittent watercourses or wetlands	II	100 ft.
Ephemeral watercourses	III	50 ft.
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established riparian zone vegetation

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?*

The Study Area is within mapped habitat areas "Essential Connectivity Areas" and "Natural Landscape Blocks" as delineated by the California Essential Habitat Connectivity Project (CDFW 2021d). The open space and the stream corridors in the Study Area facilitate animal movement and migrations. While 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 movement and the majority of the open space in the Study Area would still be available.

Implementation of the proposed project would necessitate erection of security fences around the cultivation compounds. These fences do not allow animal movement and may act as a local barrier to wildlife movement. However, the fenced cultivation areas are surrounded by open space, allowing wildlife to move around these fenced areas. Thus, implementation of the proposed project is a less than significant impact upon wildlife movement. 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?*

As designed, construction of the project will not require the removal of mature oak trees, but may require the removal of commercial tree protected CALFIRE or the conversion of timberland. This is a potentially significant impact before mitigation.

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. The Study Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Recommended Mitigation Measures

El Dorado County requires mitigation for the removal of 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.

6. REFERENCES

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, and T.J. Rosatti, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition, thoroughly revised and expanded. University of California Press, Berkeley, California. 1,600 pp.

Calflora. 2021. Calflora, the on-line gateway to information about native and introduced wild plants in California. Internet database available at http://calflora.org/.

California Department of Fish and Wildlife. 2021a. RareFind, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California. (updated monthly by subscription service)

California Department of Fish and Wildlife, 2021b. California's Plants and Animals. Habitat Conservation Planning Branch, California Department of Fish and Wildlife, Sacramento, California. http://www.dfg.ca.gov/hcpb/species/search_species.shtml.

California Department of Fish and Wildlife. 2021c. California's Wildlife. California Wildlife Habitat Relationships System, Biogeographic Data Branch, California Department of Fish and Wildlife. Internet database available at http://www.dfg.ca.gov/whdab/html/cawildlife.html.

California Department of Fish and Wildlife. 2021d. California Essential Connectivity Project., Habitat Conservation Planning Branch, California Department of Fish and Wildlife. Internet database available at https://wildlife.ca.gov/Data/BIOS.

California Department of Fish and Wildlife. 2021e. List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. Vegetation Classification and Mapping Program. Available on the Internet at: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities.

California Native Plant Society. 2021. Inventory of Rare and Endangered Plants. Rare Plant Scientific Advisory Committee, David P. Tibor, convening editor. California Native Plant Society. Sacramento, California. Internet database available at http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi. 92 pp.

Lanner, R. M. 2002. Conifers of California. Cachuma Press, Los Olivos, California. 274 pp.

Natural Resources Conservation Service. 2021. Web Soil Survey. National Cooperative Soil Survey, U.S. Department of Agriculture. NRCS Soils Website (Internet database and digital maps) available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

NatureServe. 2021. NatureServe Explorer: An online encyclopedia of life. NatureServe, Arlington, Virginia. Internet database available at http://www.natureserve.org/explorer.

Pavlik, B. M., P. C. Muick, S. G. Johnson, and M. Popper. 1991. Oaks of California. Cachuma Press and the California Oak Foundation. Los Olivos, California. 184 pp.

Sawyer, J. O., and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento, California. Available electronically at http://davisherb.ucdavis.edu/cnpsActiveServer/index.html.

Sibley, D. A. 2003. The Sibley Field Guide to Birds of Western North America. Alfred A. Knopf, Inc., New York, New York.

Stuart, J. D., and J. O. Sawyer. 2001. Trees and Shrubs of California. California Natural History Guides. University of California Press, Berkeley, California. 467 pp.

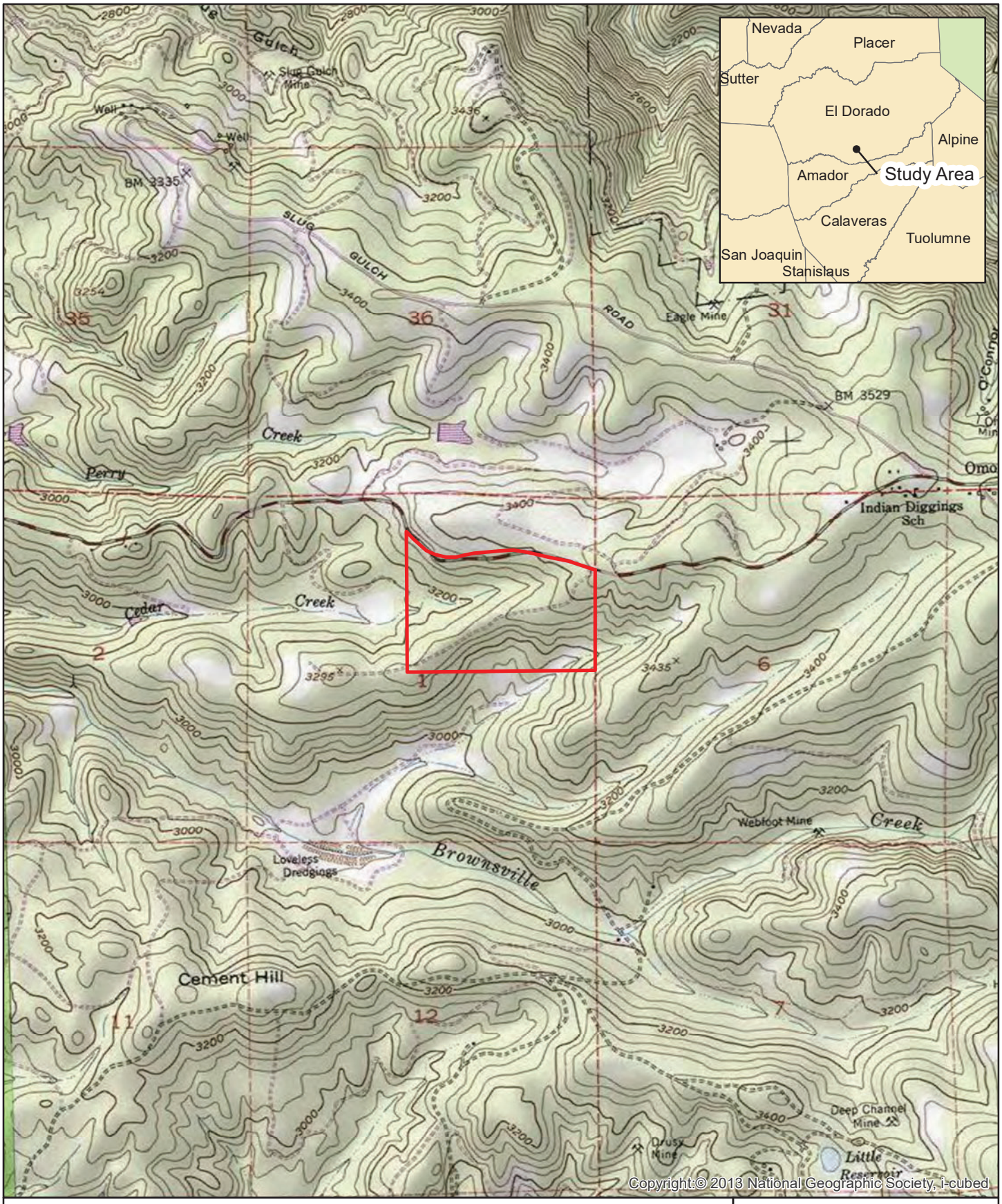
Sunset Western Garden Collection. 2021. Sunset Climate Zones. Sunset Publishing Corporation. Available on the Internet at: https://www.sunsetwesterngardencollection.com/climate-zones.

University of California at Berkeley. 2021a. Jepson Online Interchange for California Floristics. Jepson Flora Project, University Herbarium and Jepson Herbarium, University of California at Berkeley. Internet database available at http://ucjeps.berkeley.edu/interchange.html.

University of California at Berkeley. 2021b. CalPhotos. Biodiversity Sciences Technology Group, University of California at Berkeley. Internet database available at http://calphotos.berkeley.edu/

United States Fish and Wildlife Service. 2021. Wetlands Digital Data. National Wetlands Inventory Center. Digital maps downloaded from the Internet at https://www.fws.gov/wetlands/.

EXHIBITS



Study Area

0 0.25 0.5 Miles

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5600 Omo Ranch Road
Study Area Location Map

NATURAL INVESTIGATIONS COMPANY

Map Date 10/25/2021

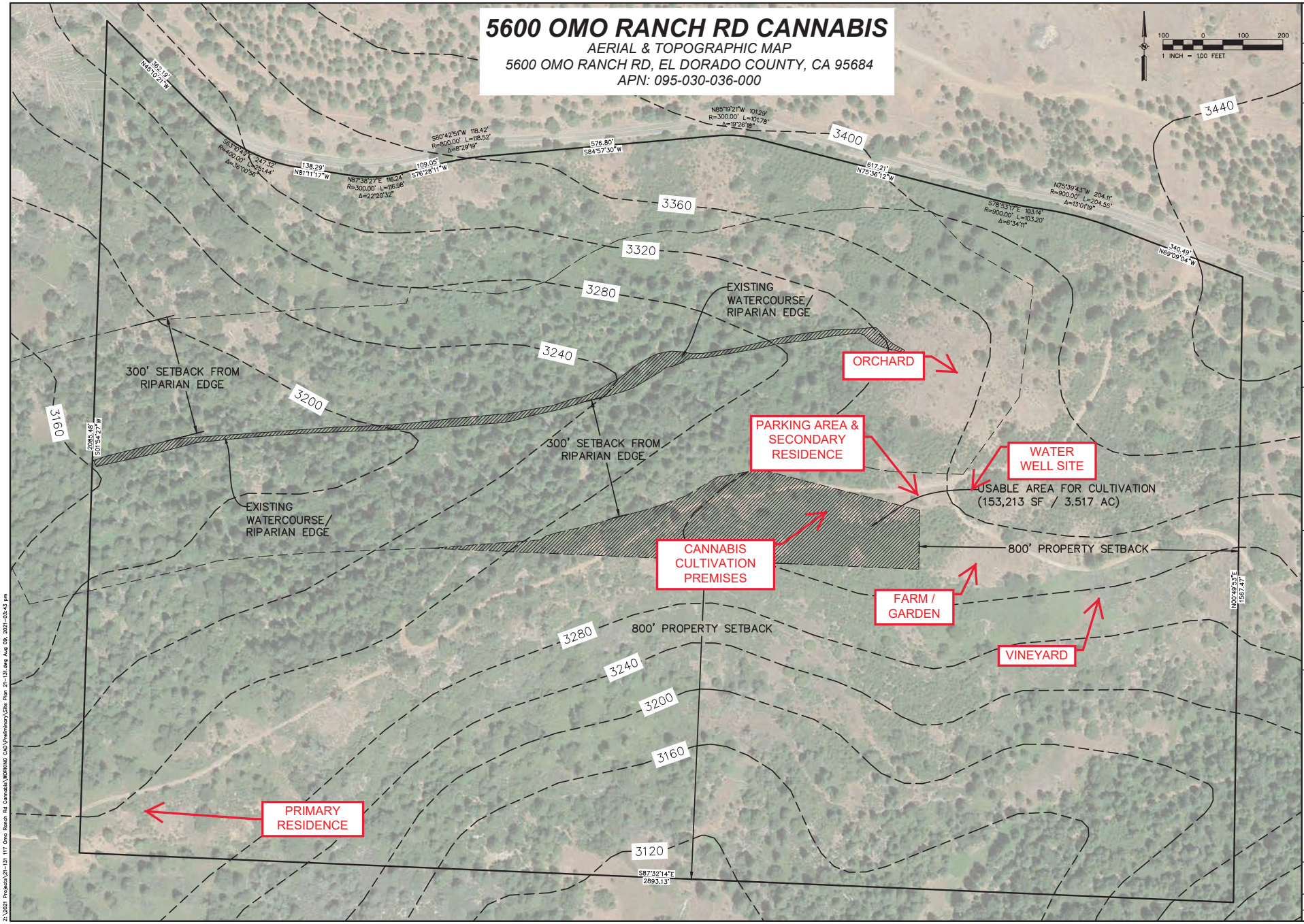
Omo Ranch 1952 Quadrangle Photorevised 1973:Township 8N, Range 12E, Section 1

5600 OMO RANCH RD CANNABIS

AERIAL & TOPOGRAPHIC MAP

5600 OMO RANCH RD, EL DORADO COUNTY, CA 95684

APN: 095-030-036-000



NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY	APPR'D

BY	CHECK
DESIGN	
DRAWN	
QUANT.	

ORIGINAL SCALE IS IN INCHES

REGISTERED PROFESSIONAL ENGINEER ROBERT T. EVANS No. C040666 Exp. 3-31-21 CIVIL STATE OF CALIFORNIA

RFE ENGINEERING, INC
2000 Douglas Blvd. Suite 150, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.rfengineering.com

ARCHON HOLDINGS, LLC
701 12TH STREET
SACRAMENTO, CA 95814
CONTACT: KEVIN MCCARTY
PH: (775) 240-3055

5600 OMO RANCH RD CANNABIS
5600 OMO RANCH RD.
EL DORADO COUNTY, CA 95684
APN: 095-030-036-000

AERIAL & TOPOGRAPHIC MAP

Sheet
C1
1 of 1
08/09/2021

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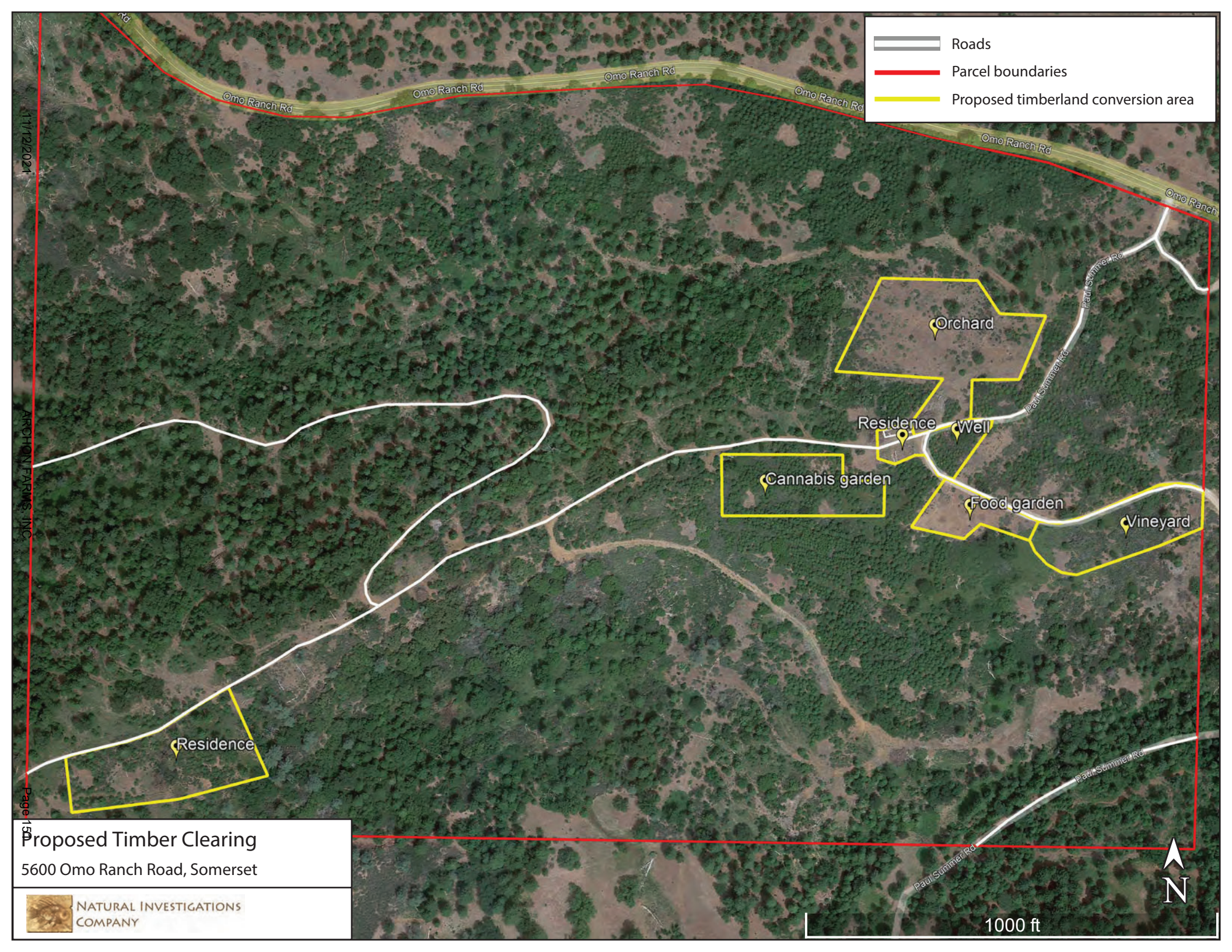
RFE PROJECT 21-131 – 117 OMO RANCH RD CANNABIS; 117 OMO RANCH RD, EL DORADO COUNTY, CA 95684


Roads
Parcel boundaries
Proposed timberland conversion area
Omo Ranch Rd
Omo Ranch Rd
Omo Ranch Rd
Omo Ranch Rd
Omo Ranch
Paul Summer Rd
Paul Summer Rd
Paul Summer Rd
Orchard
Residence
Well
Cannabis garden
Food garden
Vineyard
Residence
11/12/2021
ARCHON FARMS, INC.
Page 15
Proposed Timber Clearing
5600 Omo Ranch Road, Somerset
Natural Investigations Company
N
1000 ft

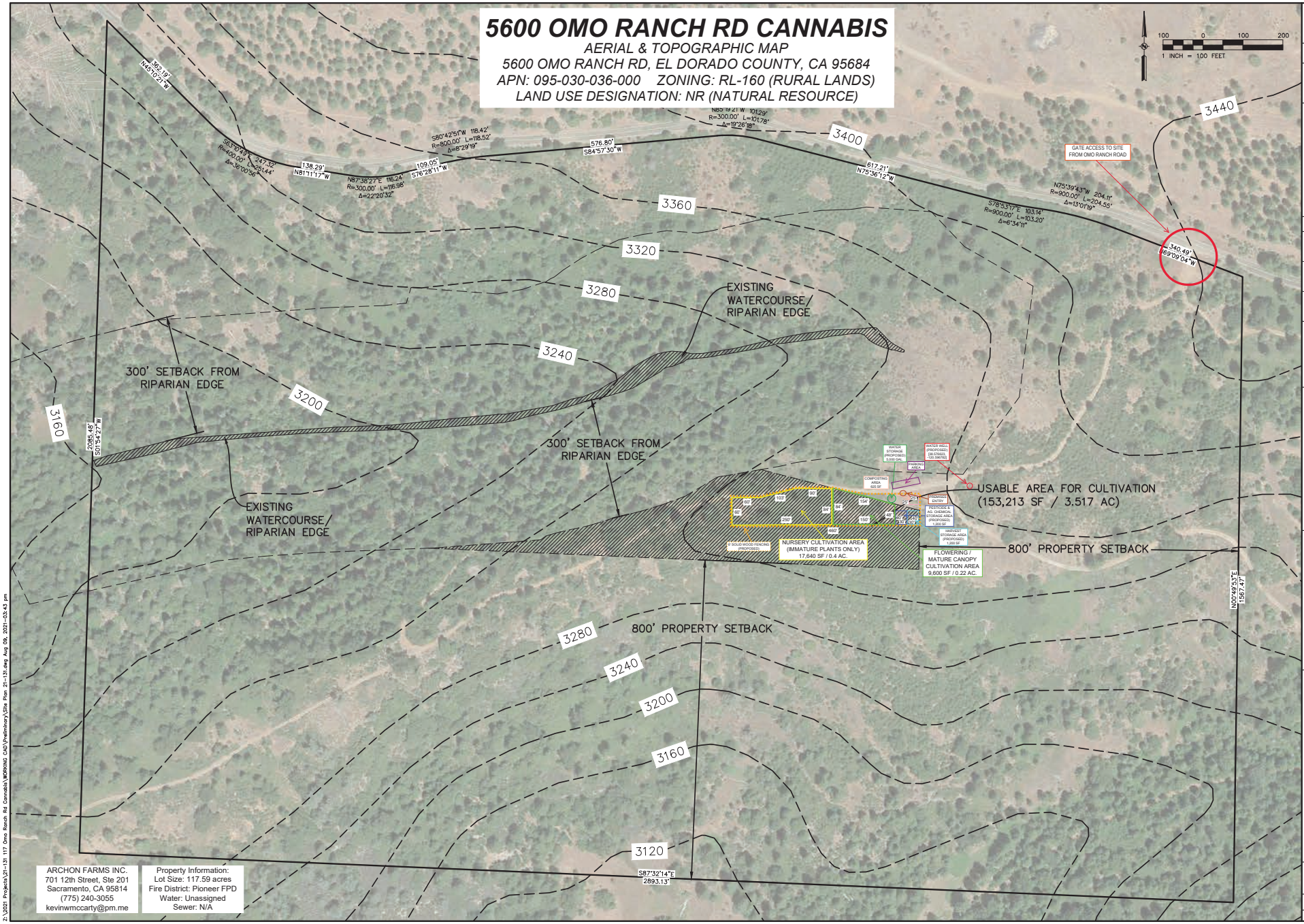
5600 OMO RANCH RD CANNABIS

AERIAL & TOPOGRAPHIC MAP

5600 OMO RANCH RD, EL DORADO COUNTY, CA 95684

APN: 095-030-036-000 ZONING: RL-160 (RURAL LANDS)

LAND USE DESIGNATION: NR (NATURAL RESOURCE)



ARCHON FARMS INC.	Property Information:
701 12th Street, Ste 201	Lot Size: 117.59 acres
Sacramento, CA 95814	Fire District: Pioneer FPD
(775) 240-3055	Water: Unassigned
kevinwmccarty@pm.me	Sewer: N/A

NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY	APPR'D

DESIGN | DRAWN | QUANT. | BY | CHECK | ORIGINAL SCALE IS IN INCHES

REGISTERED PROFESSIONAL ENGINEER ROBERT T. EVANS No. C040666 Exp. 3-31-21 CIVIL STATE OF CALIFORNIA

RFE ENGINEERING, INC.
2000 Freedom Blvd. Suite 150, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ARCHON FARMS INC.
701 12TH STREET
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CONTACT: KEVIN MCCARTY
PH: (775) 240-3055

5600 OMO RANCH RD CANNABIS
5600 OMO RANCH RD
EL DORADO COUNTY, CA 95684
APN: 095-030-036-000

AERIAL & TOPOGRAPHIC MAP

Sheet C1

1 of 1

08/09/2021

RFE PROJECT 21-131 – 117 OMO RANCH RD CANNABIS; 117 OMO RANCH RD, EL DORADO COUNTY, CA 95684

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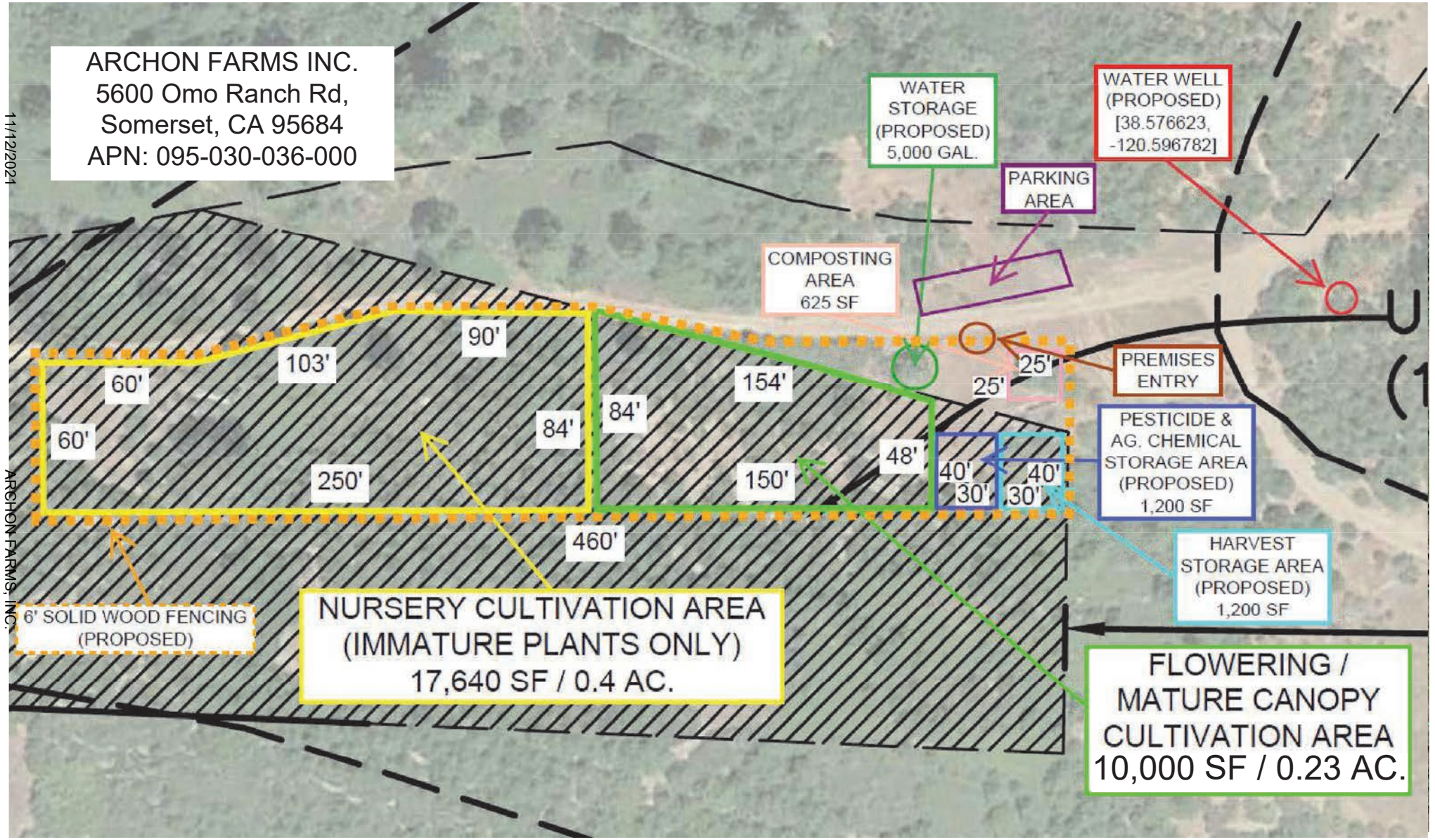


11/12/2021

ARCHON FARMS, INC.

100 0 100 200 FEET

November 7, 2021

Cannabis Cultivation Premises Aerial Zoom Map - 5600 Omo Ranch Rd

Search Results: Parcels

Override 1

County Outline

Highway Labels

Highways

Major Roads

Major Roads

Minor Roads

Cities

Parcels

Rivers

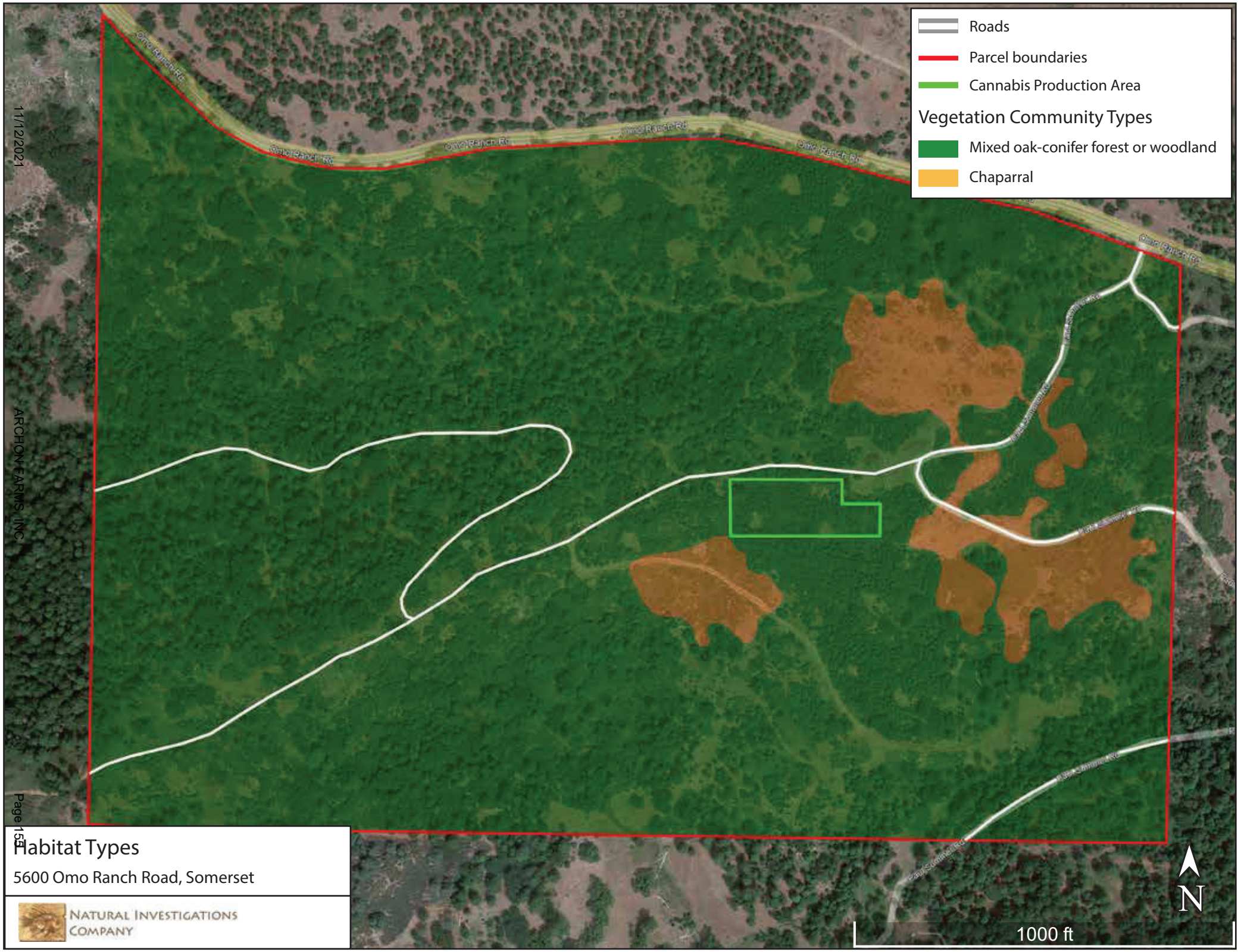
Lakes

USGS Section Lines

Soils

N E S W

Data Sources: California Department of Fish and Wildlife. 2021. RareFind 5.x, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California. (updated monthly by subscription service)



11/12/2021

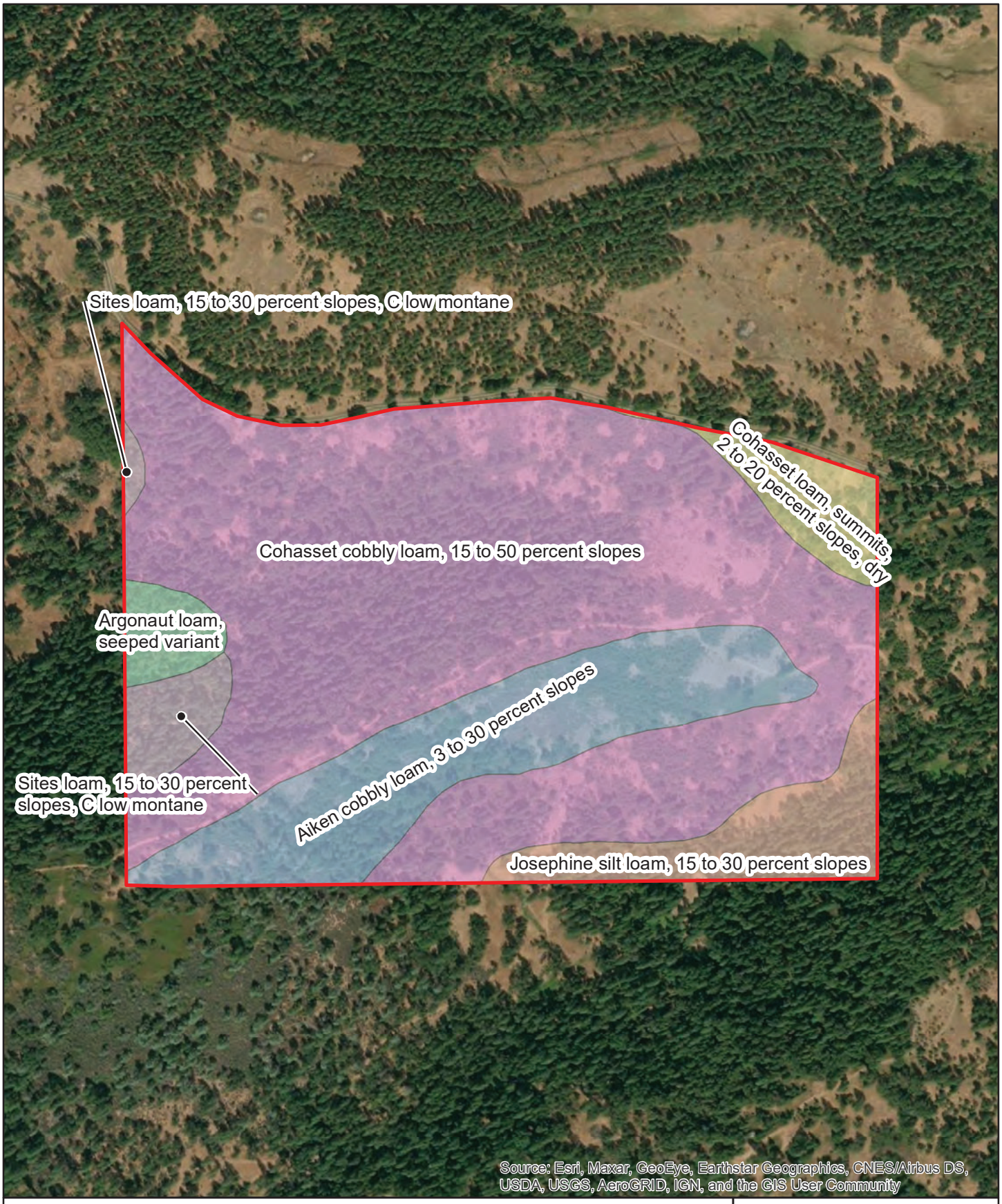
ARCHON FARMS, INC.

Page 153

Habitat Types

5600 Omo Ranch Road, Somerset

Natural Investigations Company



Study Area

0 400 800 Feet

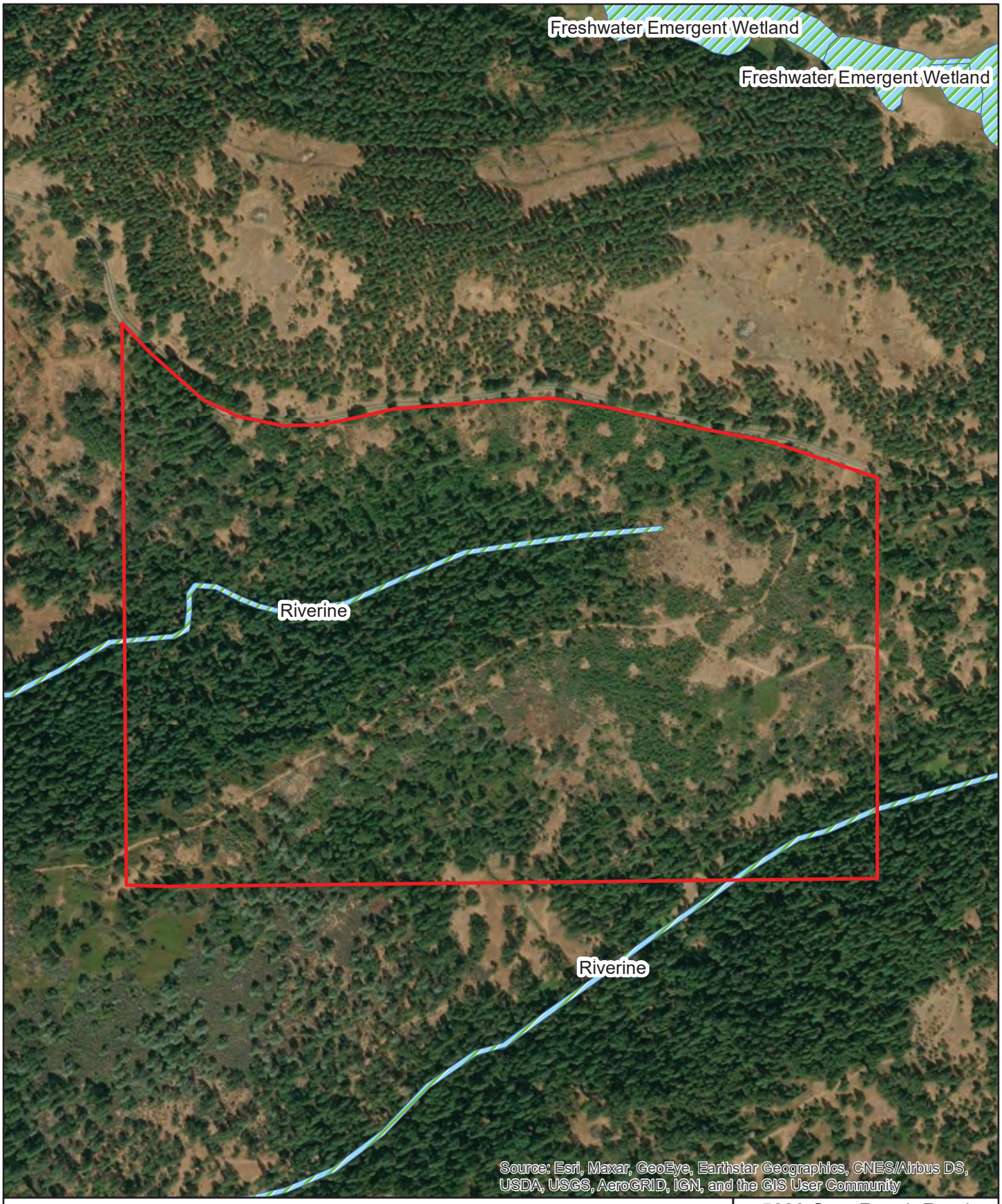
1:6,000

5600 Omo Ranch Road
USDA Soils Map

Natural Investigations Company

Map Date 10/25/2021

Omo Ranch 1952 Quadrangle Photorevised 1973:Township 8N, Range 12E, Section 1



Study Area

Wetlands and Channels

0 400 800 Feet

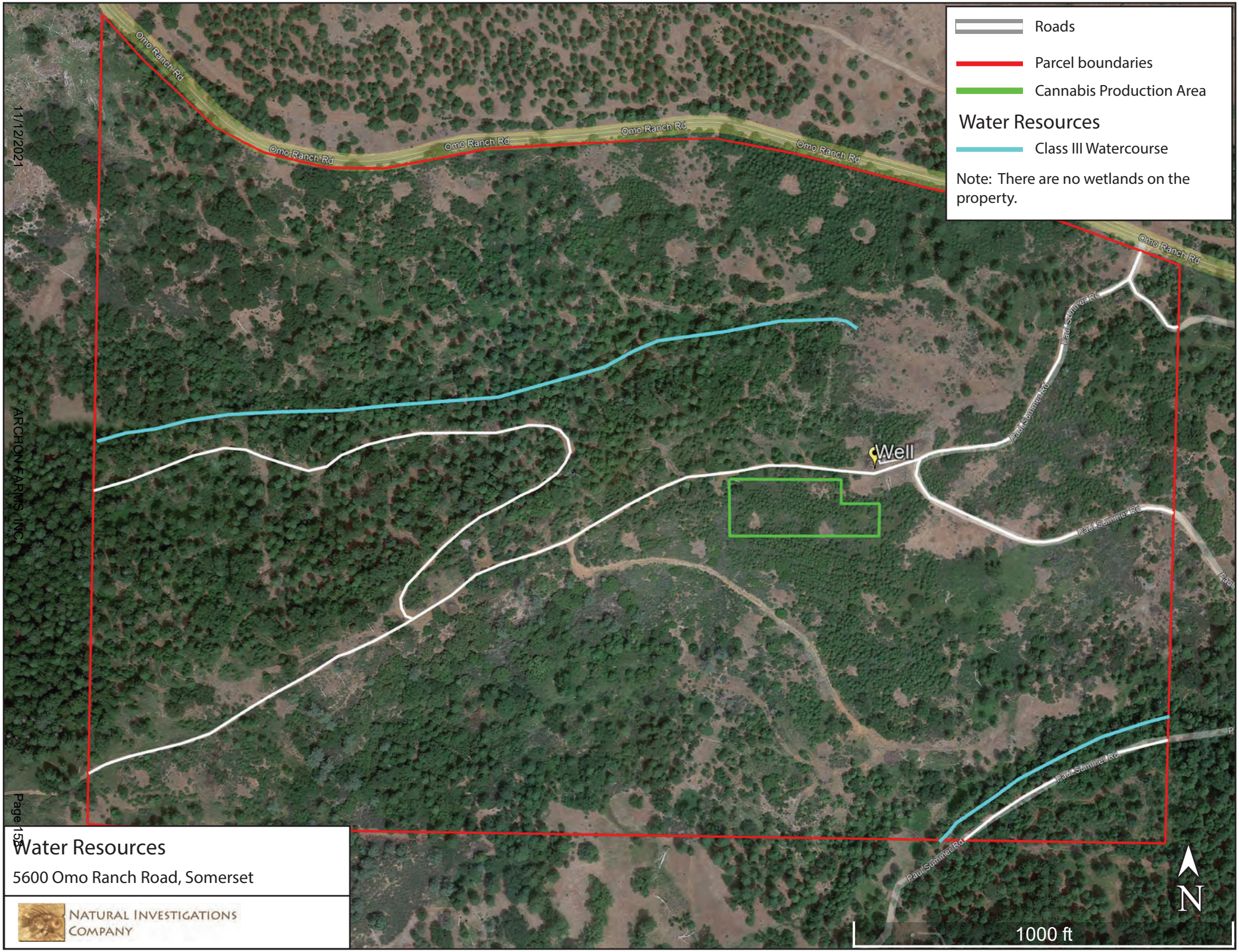
1:6,000

5600 Omo Ranch Road
National Wetlands Inventory
Features Map

Natural Investigations Company

Map Date 10/25/2021

Omo Ranch 1952 Quadrangle Photorevised 1973:Township 8N, Range 12E, Section 1



Water Resources

5600 Omo Ranch Road, Somerset

Natural Investigations Company

APPENDIX 1: USFWS SPECIES LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Consultation Code: 08ESMF00-2022-SLI-0238
Event Code: 08ESMF00-2022-E-00690
Project Name: 5600 Omo Ranch Road, Somerset

October 28, 2021

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

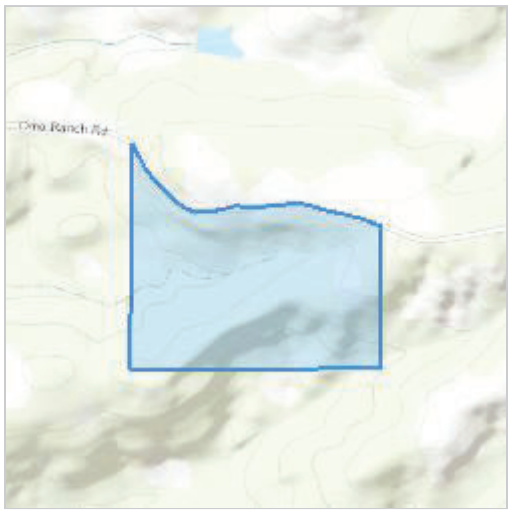
This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2022-SLI-0238
Event Code: Some(08ESMF00-2022-E-00690)
Project Name: 5600 Omo Ranch Road, Somerset
Project Type: AGRICULTURE
Project Description: Agriculture
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.5775022,-120.6003302,14z



Counties: El Dorado County, California

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/2891

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/321

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX 2: CHECKLIST OF PLANTS DETECTED IN THE STUDY AREA

Appendix 2:

Plants Observed at 5600 Omo Ranch Road, Somerset on October 27, 2021

Common Name	Scientific Name
White fir	*Abies concolor*
Yarrow	*Achillea millefolium*
Goatgrass	*Aegilops triuncialis*
Mountain dandelion	*Agoseris sp.*
Bentgrass	*Agrostis sp.*
Whiteleaf manzanita	*Arctostaphylos viscida ssp. viscida*
California mugwort	*Artemisia douglasiana*
Lemmon's wild ginger	*Asarum lemmonii*
Milkweed	*Asclepias sp.*
Lady fern	*Athyrium filix-femina*
Slender wild oat	*Avena barbata*
Brodiaea	*Brodiaea sp.*
Ripgut brome	*Bromus diandrus*
Soft chess	*Bromus hordeaceus*
California brome	*Bromus sitchensis var. carinatus*
Cheat grass	*Bromus tectorum*
Incense cedar	*Calocedrus decurrens*
Morning glory	*Calystegia sp.*
Italian thistle	*Carduus pycnocephalus*
Wedge leaf ceanothus	*Ceanothus cuneatus*
Deerbrush	*Ceanothus integerrimus var. macrothyrsus*
Maltese star thistle	*Centaurea melitensis*
Yellow star thistle	*Centaurea solstitialis*
Sierran mountain misery	*Chamaebatia foliolosa*
Chicory	*Cichorium intybus*
Bull thistle	*Cirsium vulgare*
Clarkia	*Clarkia sp.*
Mountain dogwood	*Cornus nuttallii*
Dove weed	*Croton setiger*
Dogtail grass	*Cynosurus echinatus*
Tall flatsedge	*Cyperus eragrostis*
Sticky cinquefoil	*Drymocallis glandulosa*
Medusa-head grass	*Elymus caput-medusae*
Blue wildrye	*Elymus glaucus*
Tall willowherb	*Epilobium brachycarpum*
Goldenfleece	*Ericameria arborescens*
Yerba santa	*Eriodictyon californicum*
Buckwheat	*Eriogonum sp.*
Wooly sunflower	*Eriophyllum lanatum*
Pacific fescue	*Festuca microstachys*
Rattail sixweeks grass	*Festuca myuros*

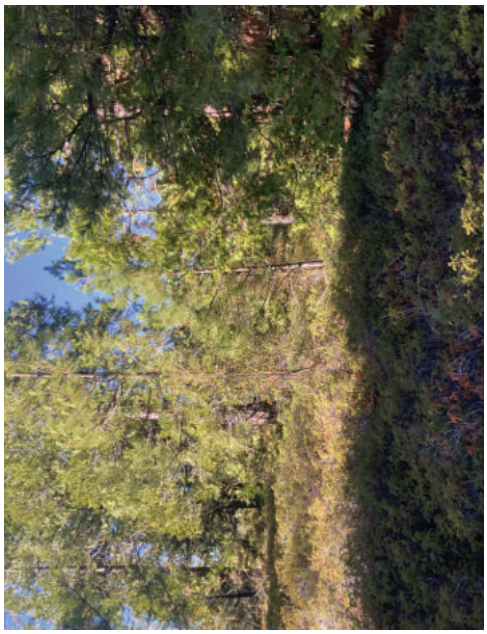
Common Name	Scientific Name
Red fescue	*Festuca rubra*
Mexican bedstraw	*Galium mexicanum*
Climbing bedstraw	*Galium porrigens*
Bedstraw	*Galium sp.*
Great Valley gumplant	*Grindelia camporum*
Toyon	*Heteromeles arbutifolia*
White flowered hawkweed	*Hieracium albiflorum*
Klamath weed	*Hypericum perforatum*
Baltic rush	*Juncus balticus*
Common rush	*Juncus effusus*
Keckiella	*Keckiella sp.*
Prickly lettuce	*Lactuca serriola*
Lessingia	*Lessingia sp.*
Pink honeysuckle	*Lonicera hispidula*
Chaparral honeysuckle	*Lonicera interrupta*
Lupine	*Lupinus sp.*
Tarplant	*Madia sp.*
Penstemon	*Penstemon sp.*
Phacelia	*Phacelia sp.*
American mistletoe	*Phoradendron leucarpum*
Sugar pine	*Pinus lambertiana*
Ponderosa pine	*Pinus ponderosa*
Gray pine	*Pinus sabiniana*
Bluegrass	*Poa sp.*
Sierra milkwort	*Polygala cornuta*
California cudweed	*Pseudognaphalium californicum*
Douglas fir	*Pseudotsuga menziesii*
Canyon live oak	*Quercus chrysolepis*
California black oak	*Quercus kelloggii*
Gooseberry	*Ribes sp.*
California rose	*Rosa californica*
Himalayan blackberry	*Rubus armeniacus*
Whitestem raspberry	*Rubus leucodermis*
California blackberry	*Rubus ursinus*
Blue elderberry	*Sambucus nigra ssp. caerulea*
Sanicle	*Sanicula sp.*
Giant sequoia	*Sequoiadendron giganteum*
Sidalcea	*Sidalcea sp.*
Tumble mustard	*Sisymbrium altissimum*
Canada goldenrod	*Solidago elongata*
Needlegrass	*Stipa sp.*
Common snowberry	*Symphoricarpos albus*
Creeping snowberry	*Symphoricarpos mollis*
Tall sock-destroyer	*Torilis arvensis*

Common Name	Scientific Name
Poison-oak	*Toxicodendron diversilobum*
Salsify	*Tragopogon sp.*
Vinegar weed	*Trichostema lanceolatum*
Rose clover	*Trifolium hirtum*
Clover	*Trifolium sp.*
Western vervain	*Verbena lasiostachys*
Vetch	*Vicia sp.*

APPENDIX 3: SITE PHOTOS





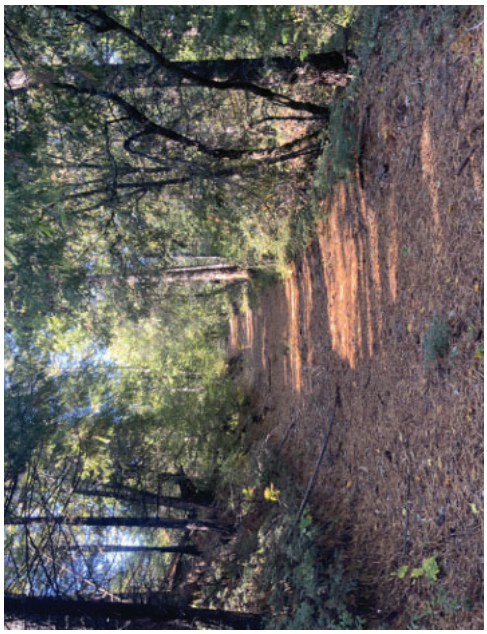



























Appendix D

North Central Information Center Letter

California Historical Resources Information System

NORTH CENTRAL INFORMATION CENTER

AMADOR
EL DORADO
NEVADA
PLACER
SACRAMENTO
YUBA

California State University, Sacramento
6000 J Street, Folsom Hall, Suite 2042
Sacramento, California 95819-6100
phone: (916) 278-6217
fax: (916) 278-5162
email: ncic@csus.edu

9/29/2021 NCIC File No.: ELD-21-77

Kevin McCarty
Archon Holdings LLC
701 12th Street
Sacramento, CA 95814

Records Search Results for
Cannabis Cultivation Area Within APN: 095-030-036-000 / 117 Omo Ranch Road, El Dorado County, CA 95684

Kevin McCarty:

Per your request received by our office on 9/29/2021, a complete records search was conducted by searching California Historic Resources Information System (CHRIS) maps for cultural resource site records and survey reports in El Dorado County within a 1/4-mile radius of the proposed project area.

Review of this information indicates that the proposed project area contains **zero (0)** recorded indigenous-period/ethnographic-period resource(s) and **zero (0)** recorded historic-period cultural resource(s). Additionally, **two (2)** cultural resources study report(s) on file at this office cover(s) a portion of the proposed project area: 9472 and 12517. The proposed cultivation area has been surveyed by report 9472 in 2002 and report 12517 between 2013 and 2016.

Outside the proposed project area, but within the 1/4-mile radius, the broader search area contains **zero (0)** recorded indigenous-period/ethnographic-period resource(s) and **two (2)** recorded historic-period cultural resource(s): P-09-4683 (developed spring with walnut tree) and P-09-4684 (stock pond with dam). Additionally, **seven (7)** cultural resources study report(s) on file at this office cover(s) a portion of the broader search area: 4975, 6232, 9450, 9469, 9480, 9488, and 9496.

In this part of El Dorado County, archaeologists locate indigenous-period/ethnographic-period habitation sites "along streams or on ridges or knolls, especially those with southern exposure" (Moratto *1984*: 290). This region is known as the ethnographic-period territory of the Northern Sierra Miwok. The Northern Sierra Miwok occupied foothills and mountains of the Mokelumne and Calaveras river drainages (Levy *1978*: 398). The proposed project search area is situated in the Sierra Nevada foothills about 380 feet south of Cedar Creek. Reports 9472 and 12517 have surveyed the proposed cultivation area with negative results for indigenous-period/ethnographic-period cultural resources. Given the extent of known cultural resources and the environmental setting, there is **low potential** for locating indigenous-period/ethnographic-period cultural resources in the immediate vicinity of the proposed project area.

Within the search area, the 1870 GLO plat of T8N, R12E shows evidence of a nineteenth-century road to the north which is now Omo Ranch Road. The 1952 Omo Ranch 7.5' USGS topographical map shows evidence of the current alignment of Omo Ranch Road. Reports 9472 and 12517 surveyed the proposed

cultivation area with negative results for historic-period cultural resources. Given the extent of known cultural resources and patterns of local history, there is **low potential** for locating historic-period cultural resources in the immediate vicinity of the proposed project area.

LITERATURE REFERENCED DURING SEARCH:
In addition to the official records and maps for sites and studies in El Dorado County, the following inventories and references were also reviewed: National Register of Historic Places and California Register of Historical Resources - Listed properties; California Inventory of Historic Resources (*1976*); California State Historical Landmarks; California Points of Historical Interest; Office of Historic Preservation Built Environment Resources Directory (*2020*); Office of Historic Preservation Archaeological Determinations of Eligibility (*2012*); Caltrans State and Local Bridge Surveys; Gold Districts of California (Clark *1970*); California Gold Camps (Gudde *1975*); California Place Names (Gudde *1969*); Historic Spots in California (Hoover et al. *1966* [1990]); Trail of the First Wagons Over the Sierra Nevada (Graydon *1986*); California Archaeology (Moratto *1984*); and the Smithsonian Institution's Handbook of North American Indians, Volume 8, California (Levy *1978*).

SENSITIVITY STATEMENT:

1) With respect to cultural resources, it appears that the proposed project area **is not sensitive**.

2) Should the lead agency/authority require a cultural resources survey, a list of qualified local consultants can be found at http://chrisinfo.org. Please forward copies of any resulting reports and resource records from this project to the North Central Information Center (NCIC) as soon as possible. The lead agency/authority and cultural resources consultant should coordinate sending documentation to NCIC. Please note that local planning agencies rarely, if ever, send reports and resource records to our office. Digital materials are preferred and can be sent to our office through our file transfer system or on a CD by mail via USPS to the address on the top of the first page. Hard copies may also be mailed.

3) If cultural resources are encountered during the project, avoid altering the materials and their context until a qualified cultural resources professional has evaluated the project area. Project personnel should not collect cultural resources. Indigenous-period/ethnographic-period resources include: chert or obsidian flakes, projectile points, and other flaked-stone artifacts; mortars, grinding slicks, pestles, and other groundstone tools; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include: stone or adobe foundations or walls; structures and remains with square nails; mine shafts, tailings, or ditches/flumes; and refuse deposits or bottle dumps, often located in old wells or privies.

4) Identified cultural resources should be recorded on DPR 523 (A-L) historic resource recordation forms, available at https://ohp.parks.ca.gov/?page_id=28351.

5) Review for possible historic-period cultural resources has included only those sources listed in the referenced literature and should not be considered comprehensive. The Office of Historic Preservation has determined that buildings, structures, and objects 45 years or older may be of historical value. If the area of potential effect contains such properties not noted in our research, they should be assessed by an architectural historian before commencement of project activities.

   Due to processing delays and other factors, it is possible that not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. Please contact North Central Information Center at ncic@csus.edu or (916) 278-6217 if you have any questions about this records search.

Sincerely,

Paul Rendes, Coordinator
North Central Information Center

Appendix E

Soils Report

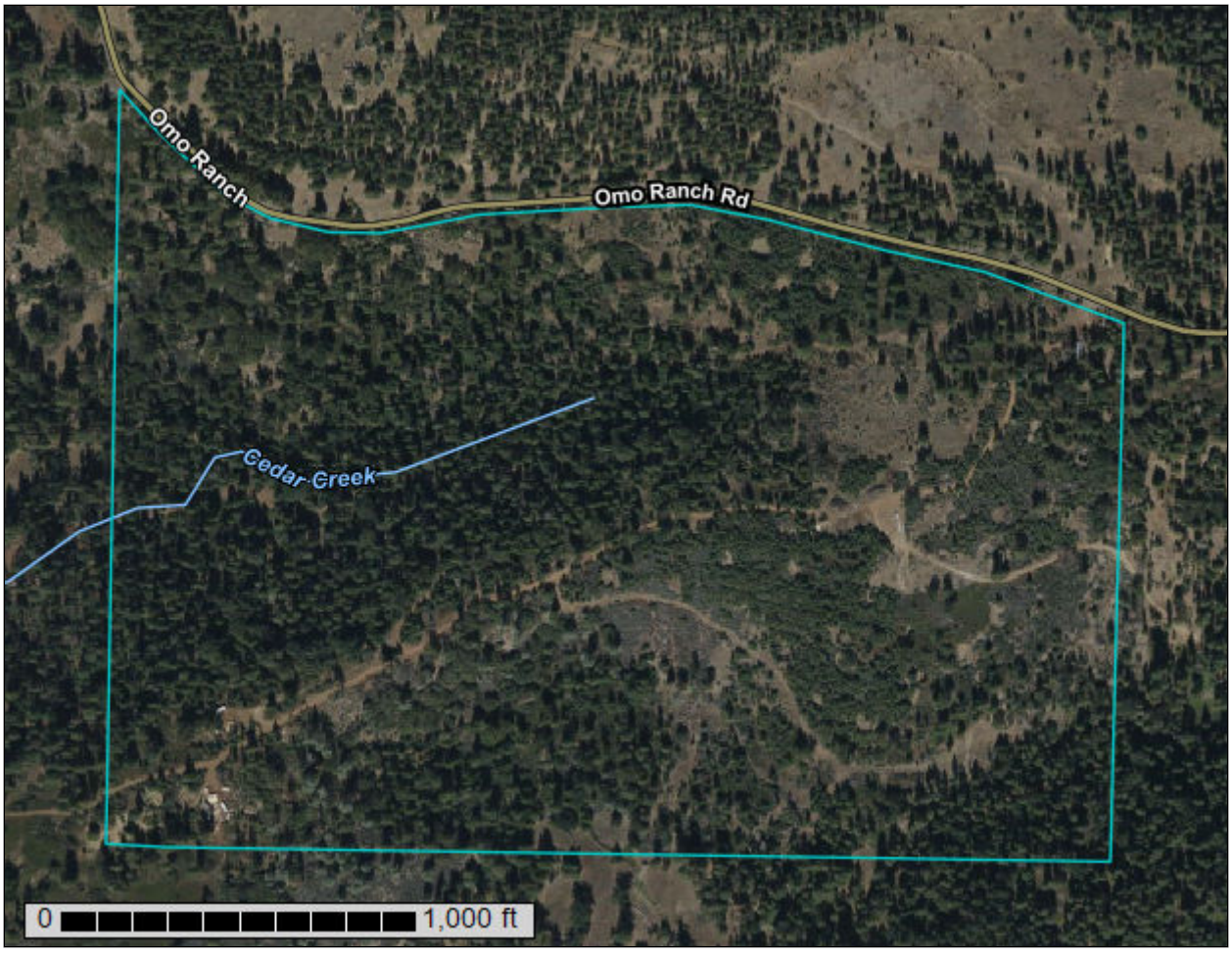
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for El Dorado Area, California



October 23, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

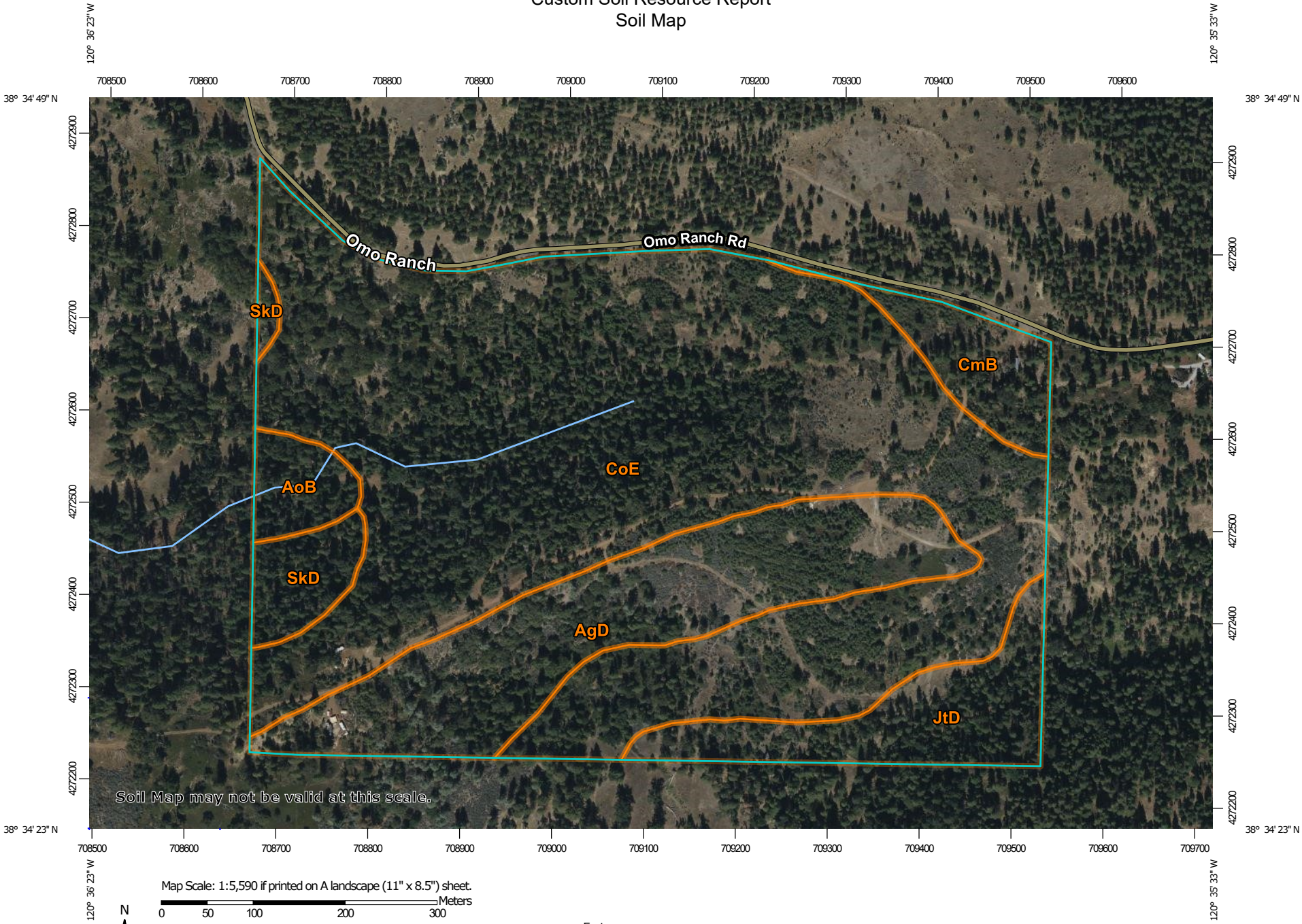
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Dorado Area, California
Survey Area Data: Version 15, Aug 31, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 3, 2022—Oct 6, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgD	Aiken cobbly loam, 3 to 30 percent slopes	19.8	17.3%
AoB	Argonaut loam, seeped variant	2.6	2.3%
CmB	Cohasset loam, summits, 2 to 20 percent slopes, dry	4.5	3.9%
CoE	Cohasset cobbly loam, 15 to 50 percent slopes	76.0	66.2%
JtD	Josephine silt loam, 15 to 30 percent slopes	8.4	7.3%
SkD	Sites loam, 15 to 30 percent slopes, C low montane	3.4	3.0%
Totals for Area of Interest		**114.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

El Dorado Area, California

AgD—Aiken cobbly loam, 3 to 30 percent slopes

Map Unit Setting

National map unit symbol: hhy9
Elevation: 1,200 to 1,500 feet
Mean annual precipitation: 30 to 65 inches
Mean annual air temperature: 50 to 61 degrees F
Frost-free period: 150 to 225 days
Farmland classification: Farmland of local importance

Map Unit Composition

Aiken and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aiken

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Andesitic conglomerate and/or residuum weathered from tuff breccia

Typical profile

H1 - 0 to 15 inches: cobbly loam
H2 - 15 to 35 inches: cobbly clay loam
H3 - 35 to 72 inches: cobbly clay

Properties and qualities

Slope: 3 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Cohasset

Percent of map unit: 3 percent

Hydric soil rating: No

Aiken

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Mccarthy

Percent of map unit: 3 percent
Hydric soil rating: No

Iron mountain

Percent of map unit: 2 percent
Hydric soil rating: No

Sites

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Musick

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Hydric soil rating: No

AoB—Argonaut loam, seeped variant

Map Unit Setting

National map unit symbol: hhyg
Elevation: 1,800 to 4,000 feet
Mean annual precipitation: 40 inches
Mean annual air temperature: 54 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Argonaut variant and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Argonaut Variant

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gleyed residuum weathered from slate

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 17 inches: silty clay loam
H3 - 17 to 32 inches: clay
H4 - 32 to 36 inches: weathered bedrock

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 32 to 36 inches to paralithic bedrock
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 24 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 11 percent
Landform: Fan remnants
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Landform: Drainageways
Hydric soil rating: Yes

Unnamed

Percent of map unit: 2 percent
Landform: Drainageways
Hydric soil rating: Yes

CmB—Cohasset loam, summits, 2 to 20 percent slopes, dry

Map Unit Setting

National map unit symbol: 2w8c2
Elevation: 2,600 to 4,570 feet
Mean annual precipitation: 40 to 52 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Cohasset and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cohasset

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from volcanic breccia and/or conglomerate

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A1 - 2 to 8 inches: loam
A2 - 8 to 16 inches: loam
Bt1 - 16 to 24 inches: loam
Bt2 - 24 to 37 inches: clay loam
Bt3 - 37 to 48 inches: loam
Cr - 48 to 57 inches: cemented bedrock

Properties and qualities

Slope: 2 to 20 percent
Depth to restrictive feature: 39 to 79 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C
Ecological site: F022AW004CA - Mesic Mountains <40" ppt
Hydric soil rating: No

Minor Components

Aiken
Percent of map unit: 4 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Cohasset
Percent of map unit: 4 percent
Hydric soil rating: No

Crozier
Percent of map unit: 4 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Mccarthy
Percent of map unit: 3 percent
Hydric soil rating: No

CoE—Cohasset cobbly loam, 15 to 50 percent slopes

Map Unit Setting
National map unit symbol: hhzf
Elevation: 2,000 to 5,000 feet
Mean annual precipitation: 50 inches
Mean annual air temperature: 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of local importance

Map Unit Composition
Cohasset and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cohasset

Setting
Landform: Ridges

Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Conglomerate derived from andesite and/or residuum weathered from volcanic rock

Typical profile

H1 - 0 to 14 inches: cobbly loam
H2 - 14 to 46 inches: cobbly clay loam
H3 - 46 to 50 inches: weathered bedrock

Properties and qualities

Slope: 15 to 50 percent
Depth to restrictive feature: 46 to 50 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F022AW004CA - Mesic Mountains <40" ppt
Hydric soil rating: No

Minor Components

Aiken

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Crozier

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Mccarthy

Percent of map unit: 3 percent
Hydric soil rating: No

Josephine

Percent of map unit: 2 percent
Hydric soil rating: No

Sites

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Iron mountain

Percent of map unit: 2 percent
Hydric soil rating: No

JtD—Josephine silt loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hj06
Elevation: 1,200 to 5,000 feet
Mean annual precipitation: 50 inches
Mean annual air temperature: 55 degrees F
Frost-free period: 125 to 260 days
Farmland classification: Farmland of local importance

Map Unit Composition

Josephine and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Josephine

Setting

Landform: Ridges, mountain slopes
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Concave
Across-slope shape: Concave, convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

H1 - 0 to 14 inches: silt loam
H2 - 14 to 33 inches: clay loam
H3 - 33 to 50 inches: very gravelly silty clay loam
H4 - 50 to 54 inches: weathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 50 to 54 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Mariposa

Percent of map unit: 5 percent
Landform: Ridges, mountain slopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Concave
Across-slope shape: Convex, concave
Hydric soil rating: No

Sites

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Josephine

Percent of map unit: 5 percent
Hydric soil rating: No

SkD—Sites loam, 15 to 30 percent slopes, C low montane

Map Unit Setting

National map unit symbol: 2x29f
Elevation: 1,710 to 3,840 feet
Mean annual precipitation: 37 to 60 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 200 to 275 days
Farmland classification: Farmland of local importance

Map Unit Composition

Sites and similar soils: 85 percent
Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sites

Setting

Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metasedimentary rock

Typical profile

Oi - 0 to 3 inches: slightly decomposed plant material
A - 3 to 17 inches: loam
BAt - 17 to 24 inches: loam
Bt - 24 to 56 inches: clay
BCt - 56 to 72 inches: clay
Cr - 72 to 79 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 39 to 79 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Boomer

Percent of map unit: 9 percent
Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Mariposa

Percent of map unit: 5 percent
Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Landform: Mountains

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix F

Noise Assessment

Environmental Noise Assessment

5600 Omo Ranch Road Greenhouses

El Dorado County, California

November 11, 2021

Project #211005

Prepared for:

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INTRODUCTION

The 5600 Omo Ranch Road Greenhouse project is located in El Dorado County, California. The project will include the construction of six greenhouses. The proposed greenhouses will will be connected at the gutter. The greenhouses will be serviced by various fans and mechanical equipment. There are two sensitive receptors within the project vicinity. The purpose of this analysis is to ensure the project meets the noise requirements of El Dorado County at the adjacent residential uses.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

Table 1: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing
Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.		

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

REGULATORY CONTEXT

El Dorado County

The El Dorado County General Plan establishes noise level performance standards for noise sensitive land uses affected by non-transportation noise sources. **Table 2** shows the County standards. The Rural Region noise standards apply to the land uses adjacent to the Project.

Table 2: El Dorado County Exterior Noise Limits

Noise Level Descriptor	Daytime 7 a.m. – 7 p.m.		Evening 7 p.m. – 10 p.m.		Night 10 p.m. – 7 a.m.	
	Community / Rural Centers	Rural Regions	Community / Rural Centers	Rural Regions	Community / Rural Centers	Rural Regions
Hourly L_{eq}, dBA	55	50	50	45	45	40
Maximum Level (L_{max}), dBA	70	60	60	55	55	50

1. Each of the noise levels specified above shall be lowered by 5 dBA for simple tone noises, noises consisting primarily of unamplified speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses, such as caretaker dwellings.
2. The Director can impose noise level standards which are up to 5 dBA less than those specified above, based upon a determination of existing low ambient noise levels in the vicinity of the project site.
3. The exterior noise level standard shall be applied as follows:
   a. In Community Regions, at the property line of the receiving property;
   b. In Rural Centers and Regions, at a point 100 feet away from a sensitive receptor or, if the sensitive receptor is within the Platted Lands Overlay (-PL) where the underlying land use designation is consistent with Community Region densities, at the property line of the receiving property or 100 feet away from the sensitive receptor, whichever is less; or
   c. In all areas, at the boundary of a recorded noise easement between affected properties.

Based upon **Table 2**, the County establishes acceptable noise levels of 50 dBA L_{eq} for daytime (7:00 a.m. to 7:00 p.m.), 45 dBA L_{eq} for evening (7:00 p.m. to 10:00 p.m.), and 40 dBA L_{eq} for nighttime (10:00 p.m. to 7:00 a.m.) operations. This analysis assumes that all fans would operate during nighttime hours. Therefore, the project will need to meet a property line noise level of 40 dBA L_{eq}.

It should be noted that steady-state fan noise does not fluctuate greatly. Therefore, the average (L_{eq}) standard is the most relevant standard. Exceedances of the County's maximum (L_{max}) standards, which are 10 dBA higher, are not predicted to occur.

EVALUATION OF PROJECT GENERATED NOISE AT ADJACENT SENSITIVE RECEPTORS

Greenhouses

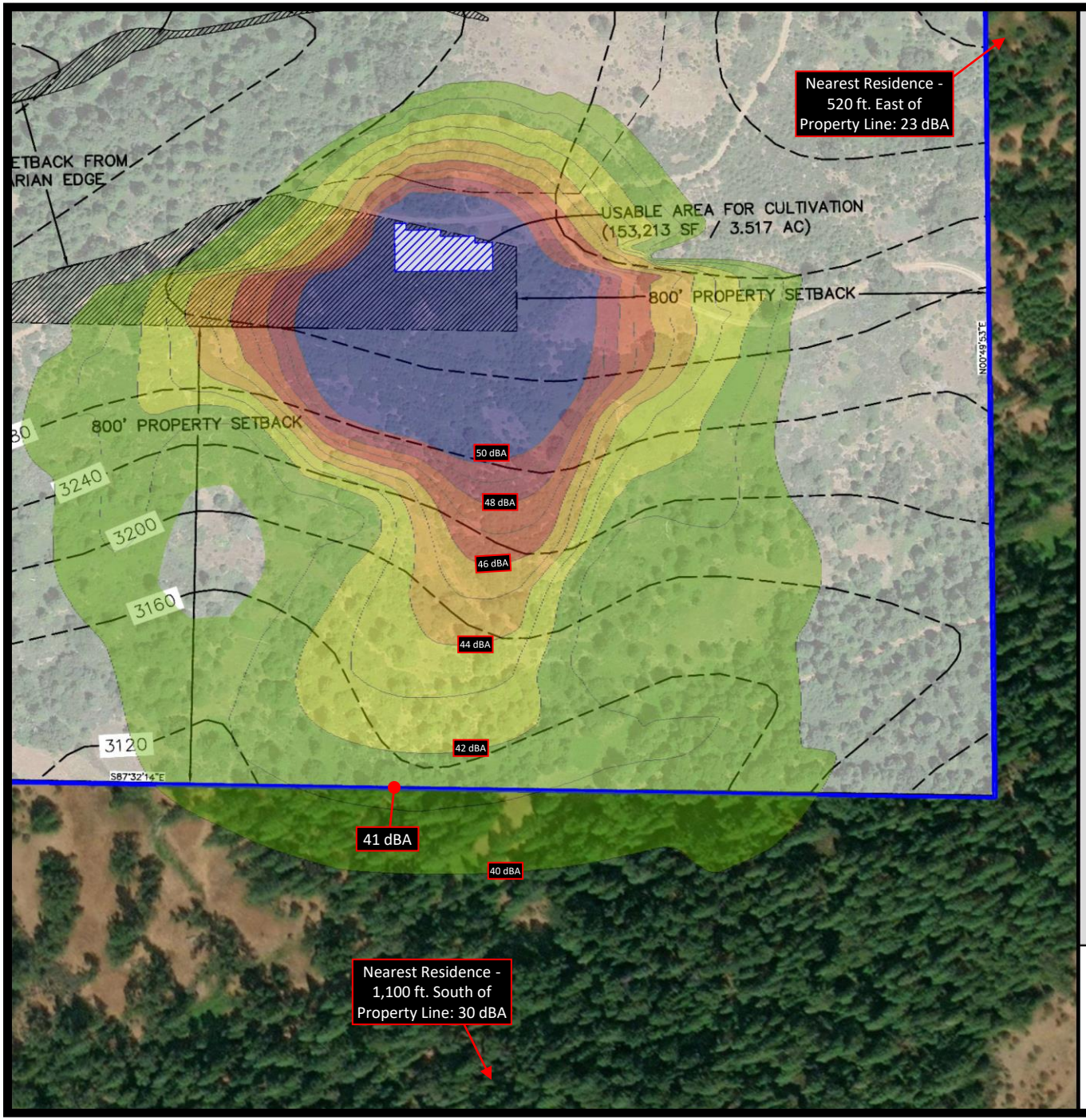
The project proposes the construction of six new greenhouses. Each greenhouse will have two 36-inch Wall Master Box Fans. Saxelby Acoustics utilized previously collected sound level data for similar end wall fans to assess the project noise generation. Noise level data was collected for two 42-inch Schaefer end wall fans. It was determined that the fans generated noise levels of approximately 61 dBA at 50 feet. The measurements taken includes several HAF interior circulation fans; therefore, Saxelby Acoustics conservatively included 8 of these fans in the project model.

It was also assumed that each greenhouse could contain a heater. Saxelby Acoustics utilized manufacturer's sound level data for heaters used in similar projects. The referenced heater had a thermal output of 220,000 BTUh and a reported sound level of 58 dBA at 15 feet. The heaters would be mounted approximately 8-12 feet above ground in each greenhouse.

Results

Noise level data was converted to sound power levels and input into the noise modeling program SoundPLAN. Inputs to the model included sound power levels for the proposed equipment, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation.

Based upon the SoundPLAN noise model of the proposed project layout, the proposed fans are predicted to generate noise levels up to 30 dBA at a location 100 feet away from the nearest residential use. These noise levels will comply with the El Dorado County nighttime (10:00 p.m. to 7:00 a.m.) noise standard of 40 dBA L_{eq}. See **Figure 1** for predicted noise levels at the adjacent property lines.



5600 Omo Ranch Road Greenhouses

El Dorado County, California

Figure 1

Project Noise Contours (dBA L_{eq})

Noise Level, dB(A)	
40 <	<= 42
42 <	<= 44
44 <	<= 46
46 <	<= 48
48 <	<= 50
50 <	

Legend

- Proposed Greenhouses
- Property Boundary

Scale 1:250

0 50 100 200 300 400 feet

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CONCLUSIONS

The proposed project is predicted to meet the El Dorado County 40 dBA L_{eq} nighttime noise standard as planned. This analysis assumes that the project will include twelve 30-inch end wall fans, up to 48 HAF interior circulation fans, and six heaters.

Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix G

Wildland Fire Safe Plan

Archon Farms Inc.

Wildland Fire Safe Plan

Prepared for:

Kevin McCarty

Prepared by:

California Reforestation Inc.
Leon J. Manich
#1970
22230A So Colorado River Drive
Sonora. CA 95370

October 22, 2021

Archon Holdings LLC

Approved by:

Pioneer Fire District **7061 Mt. Aukum Rd,** **Somerset, CA**	**Date**
CAL FIRE Amador-Eldorado Unit	**Date**

Prepared by:

Leon J Manich **RPF 1970**	**Date**

Contents

I. Purpose and Scope

Wildfire has become a major concern throughout the Sierra Foothills. The history of recent catastrophic events that have taken lives and destroyed millions in property have brought the problem to the forefront. It is essential to plan for fire safety with every activity. The increasing density of people and increase in fuels create a dangerous combination of potential ignition and wildfire. The hot dry summers in the area continue to create dangerous explosive fire potential. The 2021 fire season included the Caldor Fire that originated east of the parcel and burned over the pass into the Tahoe Basin. These events bring home the potential impacts of wildfire.

The purpose of this plan is to assess the wildfire risks from the Archon Cannabis cultivation project and establish measures to protect the infrastructure of the project as well as protecting the flora and fauna of the area.

The risk of wildfire on the project area will be increased due to the increase in human activity. The risk of fire escaping the area will be somewhat lessened as to the establishment of reduced fuel loading in selected area and the establishment of a water source on site. Fire entering the area from outside will remain the same. Landowners are trying to control fuels but the area has low population density and is dominated with rural parcels. Property adjacent to the project is managed by Sierra Pacific Industries the largest private timberland owner in California. They are actively managing their holdings to control acceptable fuel conditions.

State and County regulations provide the basic guidelines for fuel management in and around structures. This plan takes these measures and builds on their principles. A key element to success of the plan is a commitment to maintaining conditions as vegetation grows in the future.

An essential element in creating a fire safe area is implementation of fuel management over the landscape. An advantage on the parcel is that the surrounding parcels are privately held. The nearest public land is adjacent to the to the southwest of the subject parcel and owned by the Bureau of Land Management (BLM). There nearest public land after that is about a mile north in the Cosumnes River canyon. All the local landowners need to work together to secure funding and support fuel reduction activities.

II. Fire Plan Limitations

The Wildland Fire Safe Plan for the Archon Farms cultivation project does not guarantee that a wildfire will not start or burn through the area. The plan is designed to reduce the intensity of the fire and provide firefighters access to water and increase safety for ingress and egress. The plan will improve the safety of infrastructure developed by Archon to conduct the cannabis operation.

III. Wildland Fire Safe Plan

1. Project Description

The Archon Farms cultivation project is located south of Omo Ranch Road approximately 1 mile west of Omo Ranch. The parcel consists of 117.59 acres with the northern border Omo Ranch Road. North of the parcel is Perry Creek and south is Brownsville Creek. The parcel is located in the headwaters of Cedar Creek. There are no Class I watercourses on the parcel. A dominate ridge runs through the property from the northeast to the southeast. Paul Summer road a native surface road runs along the ridge. The parcel has supported commercial timber harvests in the past and the road system on the parcel provides adequate access for this purpose.

The project will include the development of a well, establishment of cultivation hoop houses, a cannabis processing structure, an orchard, a food garden, a vineyard, a rural campground, and construction of two residences. Total acreage affected by development is approximately 8 acres. As the project develops portions of Paul Summer Road will be improved with a rock or other base to provide better access. Associated with the well will be a 5,000 gallon water storage facility for fire protection. It is anticipated the project may take up to 5 years for completion.

The parcel is in the Pioneer Fire District and within the CALFIRE Amador-El Dorado Unit.

2. Project Vegetation (Fuels)

Overall vegetation on the parcel is described as low elevation Mixed Conifer. Dominate species are Ponderosa Pine with Sugar Pine, Douglas Fir, White Fir, and Incense Cedar. The Wildlife-Habitat Relationship (WHR) for the area would be PPN (Ponderosa Pine) size class 3 and 4, with moderate to dense cover. There

are rocky areas along the ridge with open patches. Slopes are gentle and entire area is accessible to tractor operations. The area has supported commercial harvest in the past the last major entry occurring about 20 years ago. The best stocking is associated with the north facing slope along Cedar Creek. Size of the over story is small to medium saw logs. Portions of the area were planted and currently support 20 year old plantations. Trees are healthy and some Giant Sequoia are growing well. These stands have not received any pre-commercial thinning or fuel reduction work. As a result ladder fuels are present and the area is overstocked. Inter-tree spacing is too tight with crowns very close or touching. Understory consists of manzanita, bear clover, and other brush. If a fire were to go through the area most of these stands would not survive. On the poorer sites Live Oak and Black Oak with brush are dominate.

3. <u>Problem Statements</u>

A. The continuity of fuels combined with the topography would result in rapid destructive escalation of a wildfire.

Heavy fuels with continuity is the most serious wildfire problem.

B. Risk of fire ignition will increase with project.

The increase in human activity increases the probability of ignition.

C. Provisions must be made to maintain fuel treatments and levels.

The key to fuel reduction is an aggressive maintenance program. If maintenance does not occur benefits from initial clearing reduce rapidly and after 5 years are negligible. Maintenance should include all tools available including manual, biological, and chemical methods.

D. Infrastructure losses are highly correlated to inadequate fuel management.

A high number of structures lost in wildfire are a result of inadequate maintenance of adjacent fuels.

E. Maintenance if ingress and egress.

Maintaining adequate ingress and egress is to survivability. Road clearances allow escape routes and access for emergency vehicles.

4. Goals

A. Modify the current structure of fuels to improve fire safety.
B. Reduce size and intensity of wildfires.

C. Ensure defensible space is established and maintained around infrastructure.
D. Improve safety along access routes.

5. Wildfire Mitigation Measures

Wildfire mitigation measures are designed to achieve goals by establishing and maintaining defensible space around infrastructure. The Wildfire Fire Safe Plan emphasizes the establishment and maintenance around structures and along roads.

Building materials should be used that are fire resistant. Metal siding, non-wood roofing, fire resistant decking, and other nonflammable materials should be used.

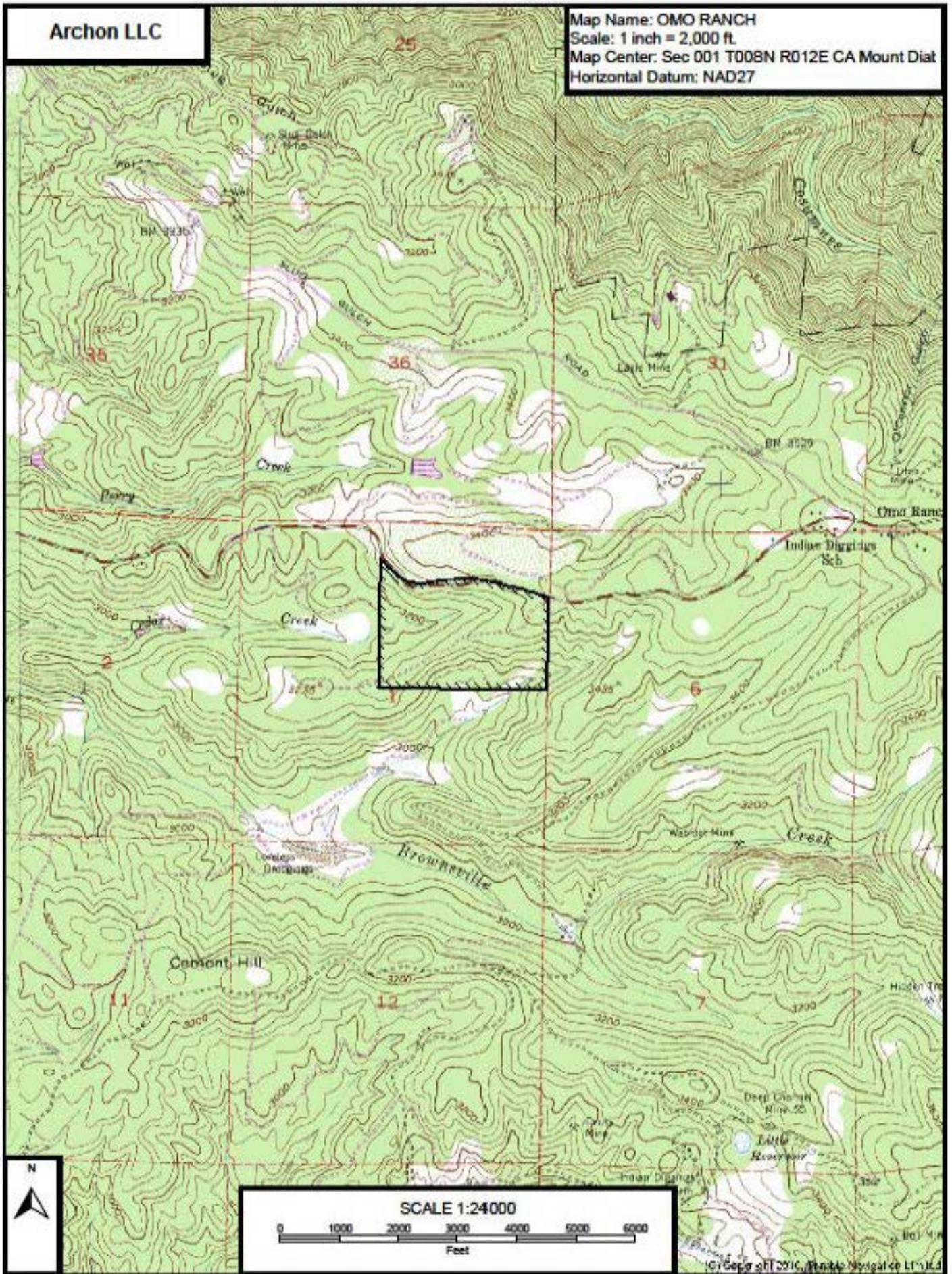
With the establishment of the well water storage should be designed to easily provide access to fire suppression vehicles. Construction of the new residence should include a fire suppression system.

Mitigation Measures:

- Access road should be minimum 12 feet wide with invisible turnouts and turnaround bubble at the end of the property line.
- Access off Omo Ranch road should be gated with access given to Fire District and CAL FIRE.
- Noncombustible building materials should be used.
- A minimum of 100' around structures shall be maintained. Within this zone the first 30 feet shall be clear of all vegetation. The area from 30 to 100 feet shall be thinned to these specifications.
    1) Crowns of leave trees shall be kept a minimum of 10 feet distance.
    2) Trees shall be limbed to 10 feet.
    3) Any shrubs within zone shall have spacing equal to twice their height between plants.
    4) All dead wood and brush shall be moved out of zone.
    5) Areas shall be maintained on a yearly basis with all necessary work completed by June 1.
- Main Access Road:
    1) No overhanging limbs shall be allowed along road.

2) A minimum of 50 feet shall be maintained as a shaded fuel break meeting the specifications listed above for the 30 to 100 feet around structures.

- To help the overall fire safety landowner should engage with NRCS or CAL FIRE to secure cost share funding and conduct fuel reduction on the entire property.
- Establish a 300’ wide fuel break following the road along the ridge to allow defensible space for fire suppression activities.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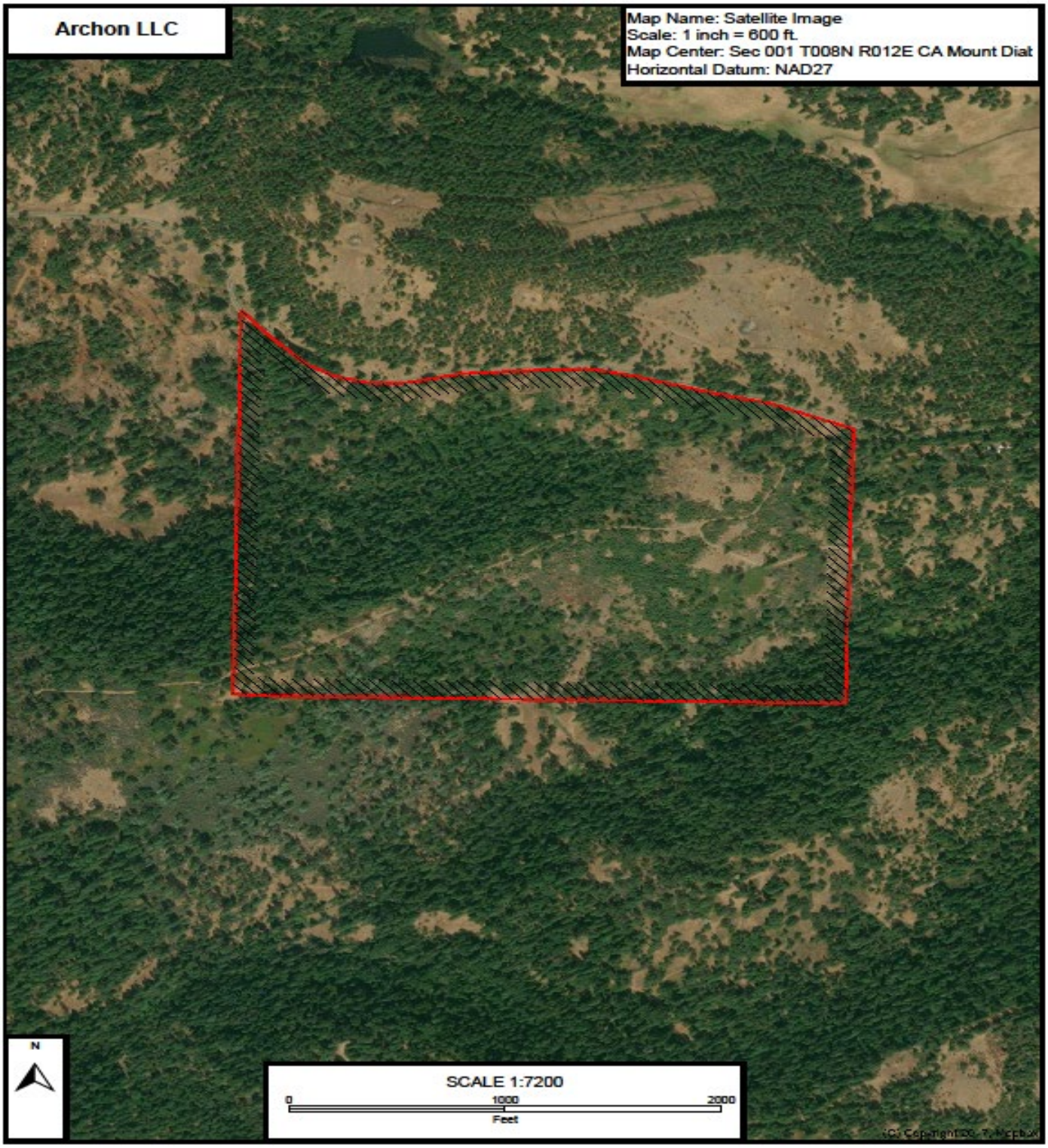
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Appendix H

AB 52 Consultation Record

COMMUNITY DEVELOPMENT SERVICES
PLANNING AND BUILDING DEPARTMENT
http://www.edcgov.us/DevServices/

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planning@edcgov.us

LAKE TAHOE OFFICE:
924 B Emerald Bay Rd
South Lake Tahoe, CA 96150
(530) 573-3330
(530) 542-9082 Fax

December 7, 2021

Colfax-Todds Valley Consolidated Tribe
Pamela Cubbler, Treasurer
P.O. Box 4884
Auburn, CA 95604

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Ms. Dear Ms. Cubbler,

This letter is in response to your request received on March 6, 2018 for formal notification of proposed projects within the Colfax-Todds Valley Consolidated Tribe Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

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6. Buildings / Storage Structures consisting of:
    a. Pesticide and AG chemical storage area proposed (1,200 SF)
    b. Harvest Storage Area proposed (1,200 SF)

The property, identified by Assessor's Parcel Number 095-030-036, consists of 117.59 acres, and is located on the south side of Omo Ranch Road, approximately 1 mile west of the intersection with Slug Gulch Road, **in the Somerset area**.

County Planner: Aaron Mount
Phone: 530-621-5345 **Email: aaron.mount@edcgov.us**

Site plans are attached and additional project documentation can be viewed using this link: https://drive.google.com/drive/folders/17oq8F5koEkTTof_UA1TtGokjDeWJJG-A?usp=sharing

This project is subject to the cultural resources provisions of CEQA Assembly Bill 52 (AB52), which require Native American outreach. Pursuant to AB52, the County is soliciting input from Native American organizations and representatives listed with the Native American Heritage

Commission to identify cultural resources and properties of concern to the Native American Community.

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cc. Clyde Prout, Chairperson

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924 B Emerald Bay Rd
South Lake Tahoe, CA 96150
(530) 573-3330
(530) 542-9082 Fax

December 7, 2021

Ione Band of Miwok Indians
Sara D. Setshwaelo, Chairwoman
P.O. Box 699
Plymouth, CA 95668

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Ms. Setshwaelo,

This letter is in response to your request received on March 7, 2016 for formal notification of proposed projects within the Ione Band of Miwok Indians Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

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(530) 542-9082 Fax

December 7, 2021

Nashville-El Dorado Miwok
Mr. Cosme Valdez
Interim Chief Executive Officer
P.O. Box 580986
Elk Grove, CA 95758

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Mr. Valdez,

This letter is in response to your request received on July 15, 2016 for formal notification of proposed projects within the Nashville-El Dorado Miwok Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

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December 7, 2021

Shingle Springs Band of Miwok Indians
Ms. Regina Cuellar, Chairwoman
P.O. Box 1340
Shingle Springs, CA 95682

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Ms. Cuellar,

This letter is in response to your request received on July 15, 2016 for formal notification of proposed projects within the Shingle Springs Band of Miwok Indians Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

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cc. James Sarmento, Executive Director of Cultural Resources

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December 7, 2021

Tsi Akim Maidu
Mr. Don Ryberg, Chairperson
P.O. Box 510
Browns Valley, CA 95918

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Mr. Coney,

This letter is in response to your request received on July 15, 2016 for formal notification of proposed projects within the T'si-Akim Maidu-Colfax Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

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cc. Grayson Coney, Cultural Director

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South Lake Tahoe, CA 96150
(530) 573-3330
(530) 542-9082 Fax

December 7, 2021

United Auburn Indian Community of the Auburn Rancheria — CERTIFIED MAIL
Gene Whitehouse, Chairman
10720 Indian Hill Road
Auburn, CA 95603

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Mr. Whitehouse,

This letter is in response to your request received on February 18, 2020 for formal notification of proposed projects within the United Auburn Indian Community of the Auburn Rancheria's Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

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County Planner: Aaron Mount
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December 7, 2021

Washoe Tribe of Nevada and California
Darrel Cruz, Director
Washoe Tribal Historic Preservation Office
919 Highway 395 South
Gardnerville, NV 89410

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0008/Archon Commercial Cannabis Cultivation** a Proposed Project within the County of El Dorado

Dear Mr. Cruz,

This letter is in response to your request received on May 2, 2016 for formal notification of proposed projects within the Washoe Tribe of Nevada and California Geographic Area of Traditional and Cultural Affiliation.

CCUP21-0008/Archon Commercial Cannabis Cultivation (Archon Farms Inc., Kevin McCarty/RFE Engineering, Inc.): A Commercial Cannabis Use Permit request for commercial cannabis cultivation. The project will include:

1. Nursery Cultivation Area (immature plants only) totaling 17,640 SF.
2. There will also be a Flowering / Mature Canopy Cultivation Area with Hoop House Greenhouse totaling 10,000 SF (there will be six (6) greenhouses of various dimensions ranging from 1,440 SF to 1,800 SF).
3. Water well proposed.
4. Water storage proposed (5,000 gallons).
5. Composting area (625 SF)
6. Buildings / Storage Structures consisting of:
    a. Pesticide and AG chemical storage area proposed (1,200 SF)
    b. Harvest Storage Area proposed (1,200 SF)

The property, identified by Assessor's Parcel Number 095-030-036, consists of 117.59 acres, and is located on the south side of Omo Ranch Road, approximately 1 mile west of the intersection with Slug Gulch Road, **in the Somerset area**.

County Planner: Aaron Mount
Phone: 530-621-5345 **Email: aaron.mount@edcgov.us**

Site plans are attached and additional project documentation can be viewed using this link: https://drive.google.com/drive/folders/17oq8F5koEkTTof_UA1TtGokjDeWJJG-A?usp=sharing

This project is subject to the cultural resources provisions of CEQA Assembly Bill 52 (AB52), which require Native American outreach. Pursuant to AB52, the County is soliciting input from Native American organizations and representatives listed with the Native American Heritage Commission to identify cultural resources and properties of concern to the Native American Community.

Please respond within 30 days of receipt of this letter to provide any information regarding archaeological sites, tribal cultural resources or areas of cultural importance known to occur within or near the project area and/or to request consultation with the County, if desired. In accordance with federal and state laws, information received in response to this letter will be kept confidential. If you have any questions regarding this project or require further information, please do not hesitate to contact us. We can be reached by phone 530-621-5355 or via email at planning@edcgov.us.

cc. Serrell Smokey, Chairperson

Commercial Cannabis Use Permit / Archon Farms

AERIAL & TOPOGRAPHIC MAP

5600 OMO RANCH RD, EL DORADO COUNTY, CA 95684 APN: 095-030-036-000 ZONING: RL-160 (RURAL LANDS)

LAND USE DESIGNATION: NR (NATURAL RESOURCE)

100 0 100 200

1 INCH = 100 FEET

NOT FOR CONSTRUCTION

BY	DESIGN	CHECK	NO.	REVISION	DATE	BY	APPRVD
	DRAWN						
	QUANT.						

0 1 2 ORIGINAL SCALE IS IN INCHES

REGISTERED PROFESSIONAL ENGINEER ROBERT F. EVICK No. C040666 Exp. 3-31-21 CIVIL STATE OF CALIFORNIA

RFE ENGINEERING, INC
Civil Engineers • Planners • Surveyors
2200 Douglas Blvd, Suite 230, Roseville, CA 95661
Ph: 916-772-7800 Fax: 916-772-7804
www.RFEengineering.com

ARCHON FARMS INC.
701 12TH STREET
SACRAMENTO, CA 95814
CONTACT: KEVIN MCCARTY
PH: (775) 240-3055

5600 OMO RANCH RD CANNABIS
5600 OMO RANCH RD
EL DORADO COUNTY, CA 95684
APN: 095-030-036-000

AERIAL & TOPOGRAPHIC MAP

Sheet **C1**

1 of 1

08/09/2021

RFE PROJECT 21-131 – 117 OMO RANCH RD CANNABIS; 117 OMO RANCH RD, EL DORADO COUNTY, CA 95684

Z:\2021 Projects\21-131 117 Omo Ranch Rd Cannabis\WORKING CAD\Preliminary\Site Plan 21-131.dwg Aug 09, 2021 - 03:43 pm

3562.19'
N45°10'21"W

S83°10'43"E 247.32'
R=400.00' L=251.44'
Δ=36°00'56"

138.29'
N81°11'17"W

N87°38'27"E 116.24'
R=300.00' L=116.98'
Δ=22°20'32"

109.05'
S76°28'11"W

S80°42'51"W 118.42'
R=800.00' L=118.52'
Δ=8°29'19"

576.80'
S84°57'30"W

N85°19'21"W 101.29'
R=300.00' L=101.78'
Δ=19°26'18"

617.21'
N75°36'12"W

N75°39'43"W 204.11'
R=900.00' L=204.55'
Δ=13°01'19"

S78°53'17"E 103.14'
R=900.00' L=103.20'
Δ=6°34'11"

340.49'
S69°09'04"W

GATE ACCESS TO SITE FROM OMO RANCH ROAD

2085.48'
S01°54'27"W

N00°49'53"E
1567.47'

S87°32'14"E
2893.13'

3440 3400 3360 3320 3280 3240 3200 3160 3120

EXISTING WATERCOURSE/ RIPARIAN EDGE

300' SETBACK FROM RIPARIAN EDGE

300' SETBACK FROM RIPARIAN EDGE

EXISTING WATERCOURSE/ RIPARIAN EDGE

WATER STORAGE (PROPOSED) 5,000 GAL.

WATER WELL (PROPOSED) [38.576623, -120.596782]

PARKING AREA

COMPOSTING AREA 625 SF

PREMISES ENTRY

PESTICIDE & AG. CHEMICAL STORAGE AREA (PROPOSED) 1,200 SF

HARVEST STORAGE AREA (PROPOSED) 1,200 SF

USABLE AREA FOR CULTIVATION (153,213 SF / 3.517 AC)

800' PROPERTY SETBACK

6' SOLID WOOD FENCING (PROPOSED)

NURSERY CULTIVATION AREA (IMMATURE PLANTS ONLY) 17,640 SF / 0.4 AC.

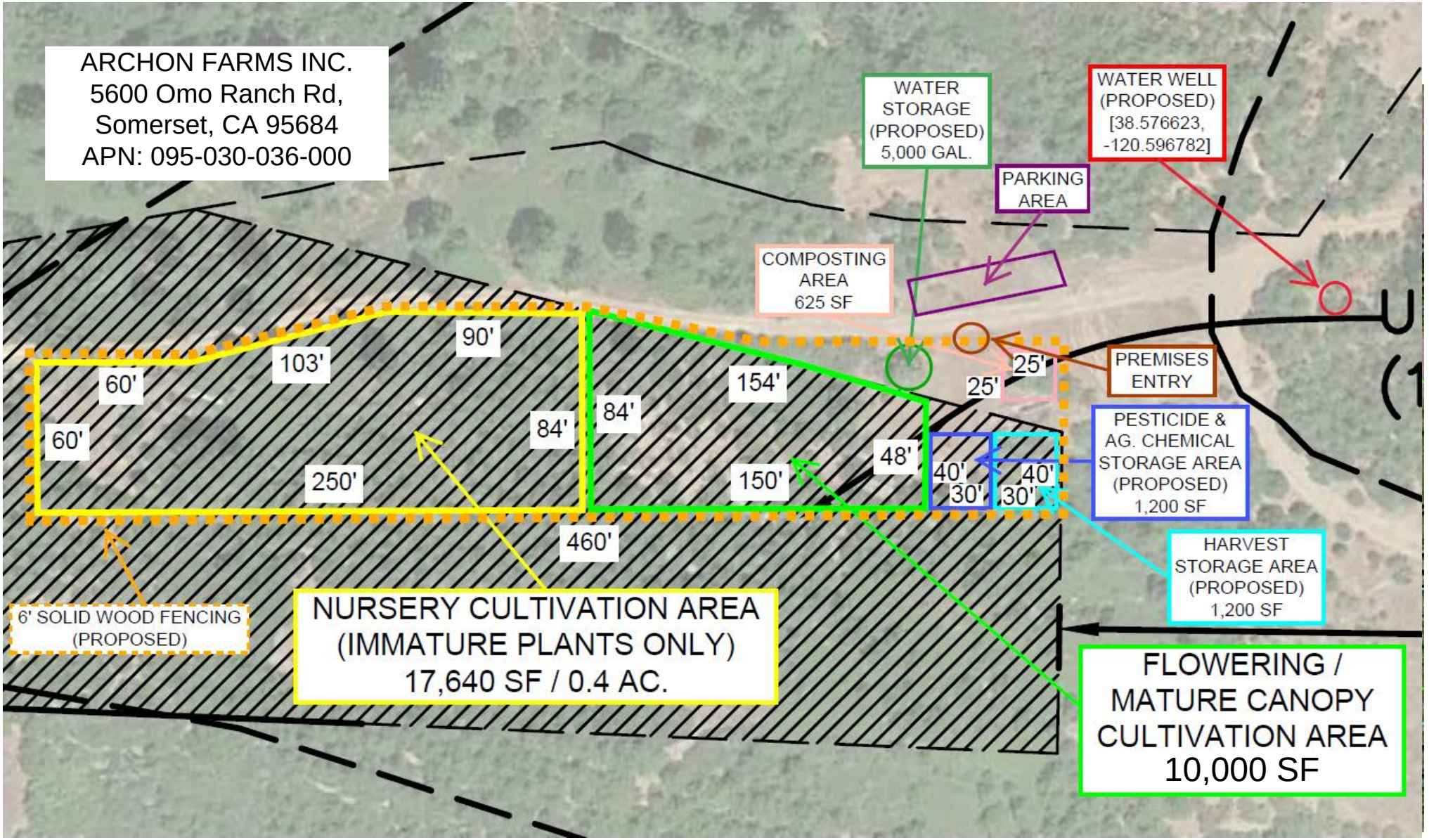
FLOWERING / MATURE CANOPY CULTIVATION AREA 10,000 SF / 0.23 AC.

800' PROPERTY SETBACK

60' 60' 103' 90' 84' 84' 154' 250' 150' 48' 460' 40' 40' 40' 40' 25'

ARCHON FARMS INC.
701 12th Street, Ste 201
Sacramento, CA 95814
(775) 240-3055
kevinwmccarty@pm.me

Property Information:
Lot Size: 117.59 acres
Fire District: Pioneer FPD
Water: Unassigned
Sewer: N/A



November 7, 2021

Cannabis Cultivation Premises Aerial Zoom Map - 5600 Omo Ranch Rd

Search Results: Parcels

Override 1

County Outline

Highway Labels

Highways

Major Roads

Major Roads

Minor Roads

Cities

Parcels

Rivers

Lakes

USGS Section Lines

Soils

N

W

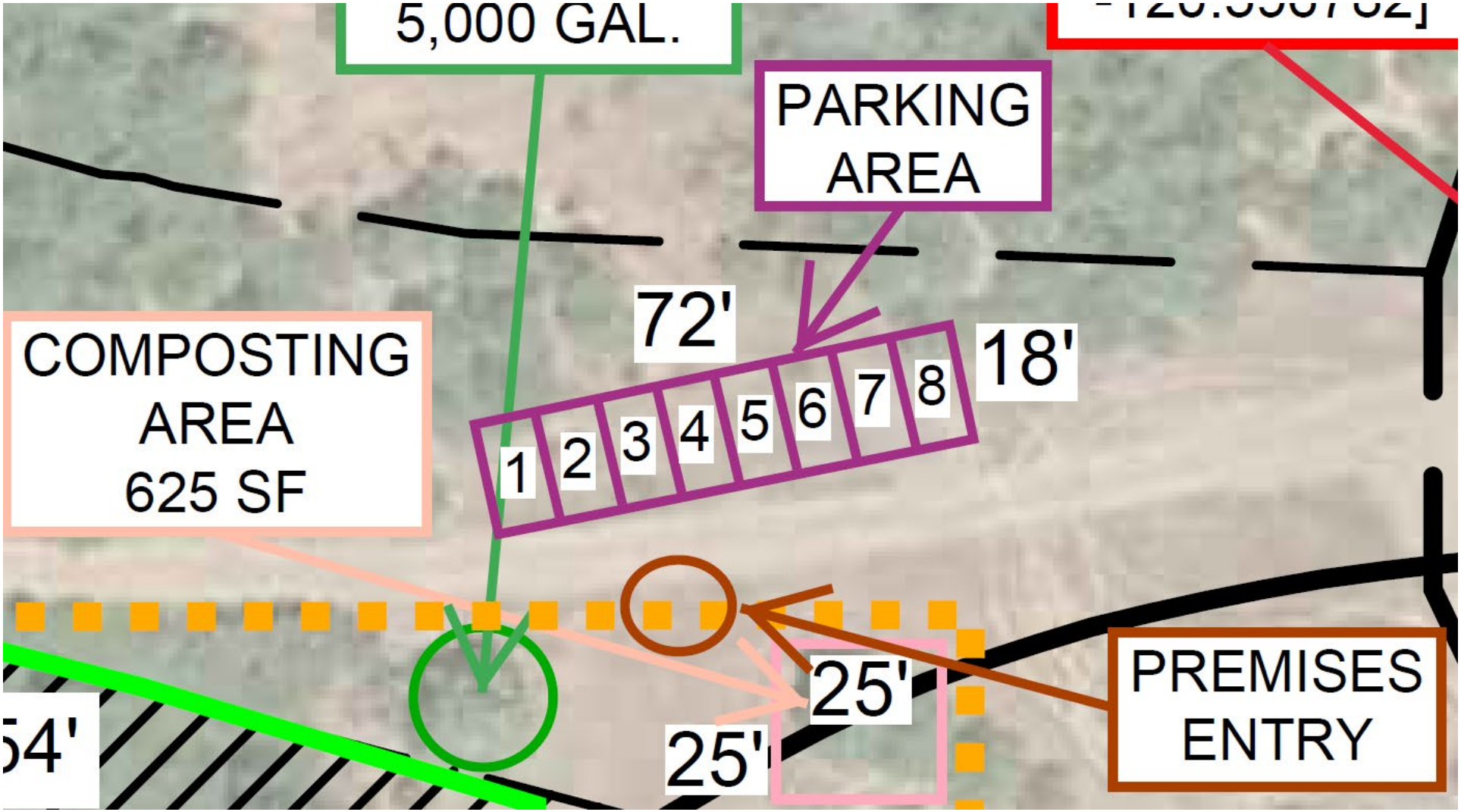
E

S

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

Commercial Cannabis Use Permit / Archon Farms

Parking Diagram



Commercial Cannabis Use Permit / Archo

Lighting Diagram

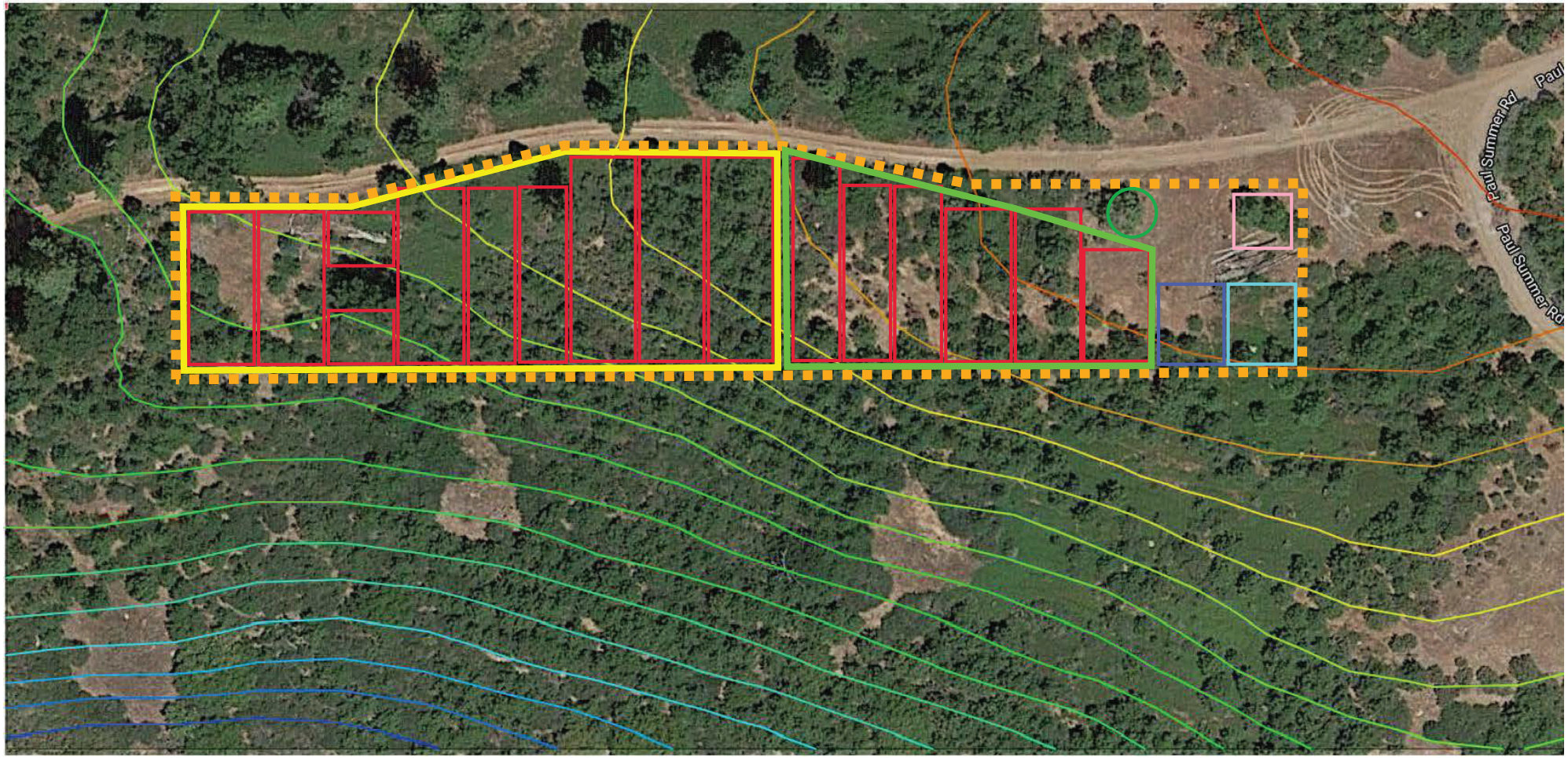
Canopy Lighting Energy Table					
Room	Canopy SF	Light Qty.	Watts / Light	Total Watts	Watts / SF
F-1	1680	16	600	9,600	5.7
F-2	1440	14	600	8,400	5.8
F-3	1440	14	600	8,400	5.8
F-4	1800	18	600	10,800	6.0
F-5	1800	18	600	10,800	6.0
F-6	1440	15	600	9,000	6.3
Total / Avg.	**9,600**	**95**	**600**	**57,000**	**5.9**

LEGEND / KEY

= 600 WATT LED GROW LIGHT

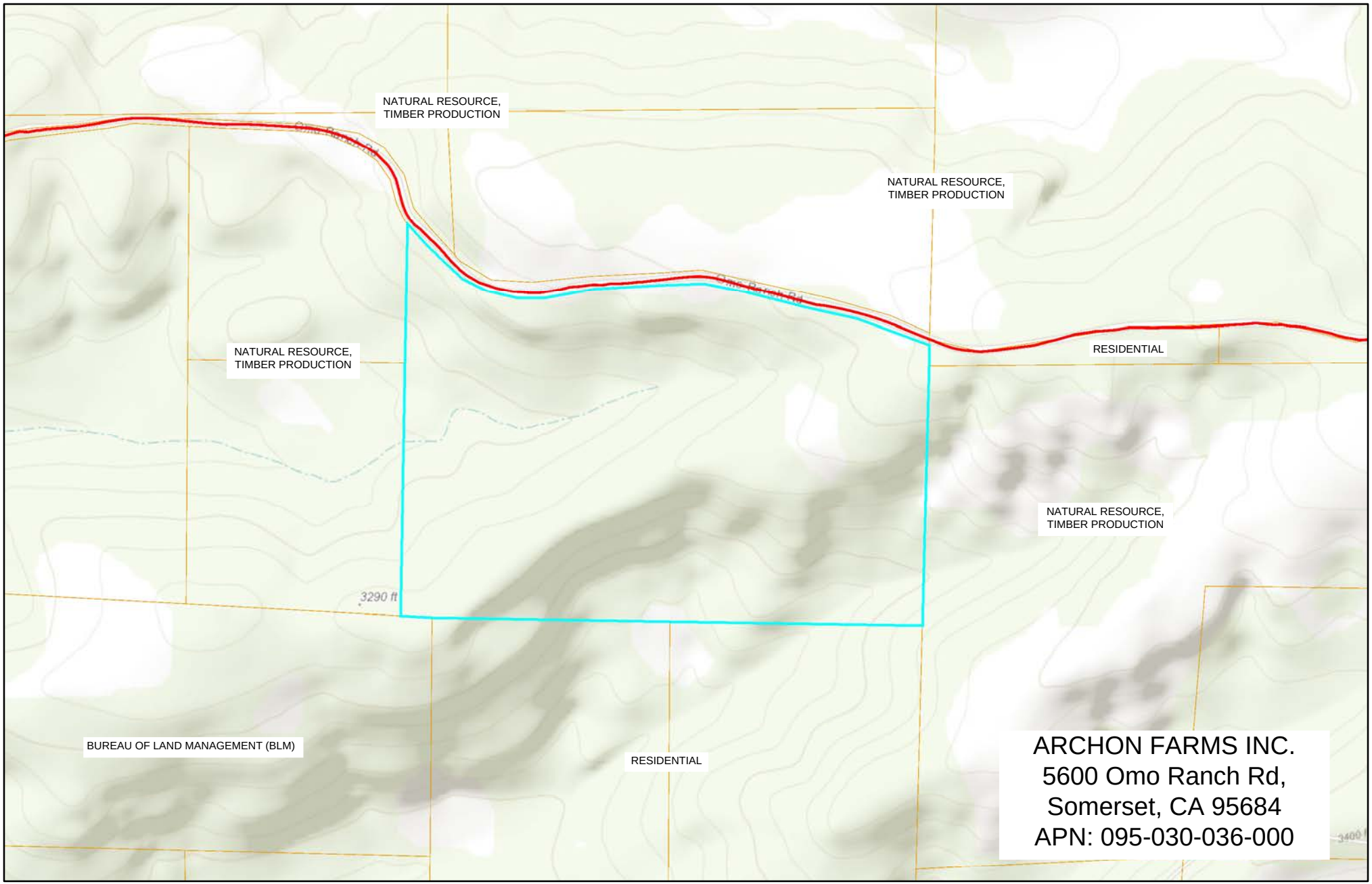
Commercial Cannabis Use Permit / Archon Farms

Preliminary Grading Plan / Contour Map



3286 ft
3291 ft
3296 ft
3301 ft
3306 ft
3311 ft
3316 ft
3321 ft
3326 ft
3331 ft
3336 ft
3341 ft
3346 ft
3351 ft
3356 ft
3361 ft
3366 ft
3371 ft

Footprint of each greenhouse structure (shown in red) and processing structures (shown in blue and cyan) to be lightly graded so that slope is made uniform -- not necessarily level. Cuts limited under four (4) feet. Fill limited under three (3) feet. Exempt from Grading Permit per CC 110.14.



November 7, 2021

Adjacent Property Use Map - 5600 Omo Ranch Rd

Search Results: Parcels

Override 1

County Outline

Highway Labels

Highways

Major Roads

Major Roads

Minor Roads

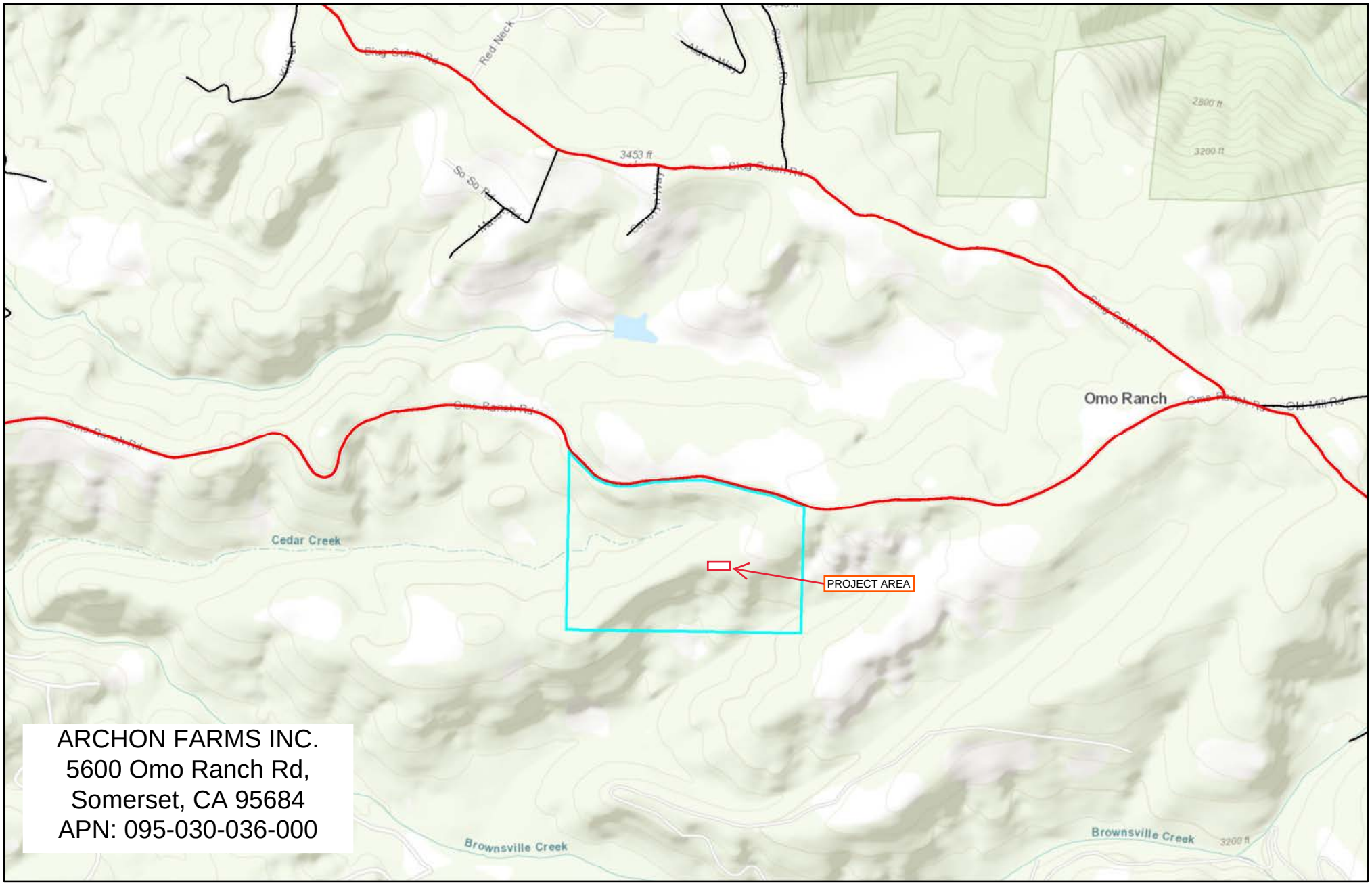
Cities

Parcels

Sources: Esri, HERE, Garmin, Intermap, incremer ;S, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

N W E S

0 250 500 750 1,000 Feet



ARCHON FARMS INC.
5600 Omo Ranch Rd,
Somerset, CA 95684
APN: 095-030-036-000

November 7, 2021

Vicinity Map - 5600 Omo Ranch Rd

Search Results: Parcels
Override 1
County Outline

Highway Labels
Highways

Major Roads
Major Roads
Minor Roads

Cities

Sources: Esri, HERE, Garmin, Intermap, incremer ;S,
FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

N
W E
S

0 570 1,140 1,710 2,280
Feet

117 OMO RANCH RD CANNABIS

AERIAL & TOPOGRAPHIC MAP

117 OMO RANCH RD, EL DORADO COUNTY, CA 95684

APN: 095-030-036-000

100 0 100 200

1 INCH = 100 FEET

N

362.19'
N45°10'21"W

S83°10'43"E 247.32'
R=400.00' L=251.44'
Δ=36°00'56"

138.29'
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3440
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EXISTING WATERCOURSE/ RIPARIAN EDGE

300' SETBACK FROM RIPARIAN EDGE

300' SETBACK FROM RIPARIAN EDGE

EXISTING WATERCOURSE/ RIPARIAN EDGE

USABLE AREA FOR CULTIVATION
(153,213 SF / 3.517 AC)

800' PROPERTY SETBACK

800' PROPERTY SETBACK

NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY	APPRVD

DESIGN
DRAWN
QUANT.
BY CHECK

ORIGINAL SCALE IS IN INCHES 0 1 2

REGISTERED PROFESSIONAL ENGINEER
ROBERT F. EYNON
No. C040666
Exp. 3-31-21
CIVIL
STATE OF CALIFORNIA

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2200 Sunrise Blvd, Suite 220, Rancho Cordova, CA 95670
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www.RFEengineering.com

ARCHON HOLDINGS, LLC
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SACRAMENTO, CA 95814
CONTACT: KEVIN MCCARTY
PH: (775) 240-3055

117 OMO RANCH RD CANNABIS
117 OMO RANCH RD
EL DORADO COUNTY, CA 95684
APN: 095-030-036-000

AERIAL & TOPOGRAPHIC MAP

Sheet
C1
1 of 1
08/09/2021

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RFE PROJECT 21-131 – 117 OMO RANCH RD CANNABIS; 117 OMO RANCH RD, EL DORADO COUNTY, CA 95684