PLANNING AND BUILDING DEPARTMENT

PLANNING DIVISION

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

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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: CCUP21-0004/Single Source

PROJECT LOCATION: The property, identified by Assessor's Parcel Number 046-710-017, consists of a 46.53-acre parcel, located on the north side of D'Agostini Drive, approximately 1 mile west of the intersection with Mt Aukum Road, in the Somerset area, Supervisorial District 2.

PROJECT DESCRIPTION: Commercial Cannabis Use Permit (CCUP) for the construction and operation of a cannabis cultivation, harvest, processing, and storage facility on a 47.7-acre parcel. The project would consist of approximately 87,120 square feet (sf) of full-time outdoor cannabis cultivation area, a 240-sf modular office, a solar power system, and eight 320-sf shipping containers. Processing would seasonally occur within a temporary tent which would be located within the cultivation area. The cannabis cultivation area would include approximately 1.28 acres of hoop houses located on the east portion of the project area. The applicant would access power using a combination of solar power, a backup generator which would be located within a 120-sf tough shed, and a connection with existing Pacific Gas & Electric (PG&E) infrastructure. The solar panel array would be located west of the cultivation area.

PUBLIC REVIEW PERIOD: The public review period for the Draft MND set forth in CEQA for this project is **30** days, beginning **January 30, 2024**, and ending **February 28, 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.edcgov.us/Government/planning/Cannabis/Pages/Cannabis-Current-Projects.aspx.

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: The public hearing for the MND is tentatively scheduled to be heard at the March 14, 2024 Planning Commission meeting. Please check the Planning Commission agenda at https://eldorado.legistar.com/Calendar.aspx for changes to this tentatively scheduled hearing date.

COUNTY OF EL DORADO
PLANNING AND BUILDING DEPARTMENT
KAREN L. GARNER, Director
January 29, 2024

DRAFT MITIGATED NEGATIVE DECLARATION

FILE: CCUP21-0004

PROJECT NAME: Single Source Solutions

NAME OF APPLICANT: Michael Pinette

ASSESSOR'S PARCEL NO.: 046-710-017-000 **SECTION:** 19 **T:** 9N **R:** 12E

LOCATION: The property, identified by Assessor's Parcel Number 093-032-071, consists of a 57.29-acre parcel, located south of the community of Somerset, and it is generally situated north and south of Perry Creek Road, in the Fair Play 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 operation within an approximately 7-acre cannabis premises. The cannabis premises includes four (4) outdoor cannabis cultivation areas with the following square footage: Area A-1 is 43,000 square feet (sf), Area B-1 is 10,000 sf, Area B-2 is 10,000 sf, and Area B-3 is 5,000 sf. Total square footage for outdoor cannabis cultivation is 68,000 sf. Additionally, the project would include support infrastructure such as a 1,500-sf greenhouse for immature plant canopy, a 1,500-sf compost area, a 160-sf chemical and secure storage building, a 1,152-sf drying storage building, two processing and harvest buildings (1,760-sf building in Phase 1 and 1,750-sf building in Phase 2), a 143-sf secure storage vault, a 117-sf office and shipping records building, and extensive fencing. Processing would be done on site.

☐ **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

Single Source Solutions Cannabis Cultivation Project

Administrative 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

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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 Practice
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
CMU	Concrete Masonry Unit
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
DVR	Digital Video Recorder
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
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
HCP	Habitat Conservation Plan
HS	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
LA	Limited Agricultural
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
NO_2	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
OSTR	On-Site Transportation Review
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-10	Range Land 10 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 CCUP21-0004/Single Source Solutions Inc. Commercial Cannabis Farm

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: John Muraco, Joe Wiseman, and Michael Pinette; 338 Olivadi Way, Sacramento CA 95835

Project Agent's Name and Address: Michael Pinette, P.O. Box 217, Mt Aukum CA 95656

Project Engineer's Name and Address: N/A

Project Location: The project site is located in south-west El Dorado County at 4941 D'agostini Dr, Somerset, CA, 95684. The project site is located east of CG Di Arie Vineyard, and it is generally situated north of the El Dorado/Amador County line and west of Mt. Aukum Rd. See Figure 1 for the Vicinity Map and Figure 2 for an Aerial Map of the project site. All figures are included as Appendix A to this Initial Study.

Assessor's Parcel Numbers (APNs): 046-710-17-100 **Acres:** 47.7

Sections: USGS Aukum 7.5-minute Quadrangle, Section 10 of Township: 8N, Range: 11E

General Plan Designation: Rural Residential (RR)

Zoning: Limited Agricultural, 20 acre Minimum (LA-20)

Description of Project: The project applicant is seeking a Commercial Cannabis Use Permit (CCUP) for the construction and operation of a cannabis cultivation, harvest, processing, and storage facility on a 47.7-acre parcel. The project would consist of approximately 87,120 square feet (sf) of full-time outdoor cannabis cultivation area, a 240-sf modular office, a solar power system, and eight 320-sf shipping containers. Processing would seasonally occur within a temporary tent which would be located within the cultivation area. The cannabis cultivation area would include approximately 1.28 acres of hoop houses located on the east portion of the project area. The applicant would access power using a combination of solar power, a backup generator which would be located within a 120-sf tough shed, and a connection with existing Pacific Gas & Electric (PG&E) infrastructure. The solar panel array would be located west of the cultivation area.

Surrounding Land Uses and Setting:

	Zoning	General Plan	Land Use/Improvements
Project Site	Limited Agricultural (LA-20)	Rural Residential (RR)	Wooded to sparsely wooded land, single family residence, driveway, other associated minor infrastructure, existing vineyard.
North	Planned Agricultural (PA-20)	Agricultural Lands (AL)	Undeveloped, wooded to densely wooded land
South	Rural Lands (RL-10)	RR	Single family residences, wooded to sparsely wooded land, D'agostini Dr.
East	LA-10, RL-10	RR	Undeveloped, wooded to sparsely wooded land
West	RL-10	RR	Rural Residential properties (single family residence), wooded to sparsely wooded land.

Environmental Setting: The project property is located in the hilly region of the Sierra Nevada Foothills, with

land that generally slopes upward from north to south. The project would include one cannabis cultivation area within the cannabis cultivation premises. The proposed cannabis cultivation area is a relatively flat vineyard. The site has a seasonal drainage stream located in the northern section of the parcel approximately 285 feet north of the proposed cannabis cultivation premises. No aquatic features are located within or immediately adjacent to the cannabis cultivation premises. Site elevations are generally highest in the south and lowest in the north, ranging from approximately 1,600 ft above mean sea level (amsl) in the north to approximately 2,100 ft amsl in the south. Drainage within the site generally flows east to west, eventually flowing into Flat Creek. The proposed project site is bordered to the north by undeveloped, wooded to densely wooded land; to the east by undeveloped, wooded to sparsely wooded land; to the south by D'agostini Dr., rural residential properties (single family residence), and wooded to sparsely wooded land; and to the west by rural residential properties (single family residence), wooded to sparsely wooded land. The project site contains four terrestrial vegetation communities: Developed, Annual Grassland, Cultivated/Planted Vineyards, and Ponderosa Pine. 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 – Building permits, Commercial Cannabis Operating Permit, Grading 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

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 Single Source Solutions Inc. Commercial Cannabis Farm (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 48-acre property in south-east El Dorado County at 4941 D'agostini Dr., Somerset, California (38°33'52.6"N 120°44'43.3"W). See Figure 1 for the regional vicinity map and Figure 2 for the aerial map of the project site (Note: All figures are in Appendix A). The property consists of one parcel: APN 046-710-17-100 (47.7 acres), and construction and operation of the cannabis cultivation premises would occupy approximately two acres of the project property which is hereafter referred to as the "cultivation site" (see Figure 3 for the site plan). The proposed project would consist of a cannabis cultivation facility that would be situated on terrain typical of the lower Sierra Nevada Foothills, ranging from flat ridges and valleys to gently and moderately sloping hillsides, and would be located in the central portion of the property. The project site is accessible via an existing gravel driveway located in the southern portion of the property leading off D'agostini Dr. The property is designated Rural Residential (RR) in the County's General Plan, and it is within the Limited Agriculture, 20-acre Minimum (LA-20) zone district. The proposed project property is under Williamson Act contract and has an active vineyard onsite. The vineyard would remain in active production once cannabis production begins and would continue to satisfy the site's Williamson Act requirements.

The proposed project property is bordered to the north by undeveloped, wooded to densely wooded land, to the east by undeveloped, wooded to sparsely wooded land, to the south by D'agostini Dr. with rural residential properties (single family residence) beyond, and to the west by rural residential properties (single family residence) and wooded to sparsely wooded land. The proposed project property consists of hilly terrain with elevations ranging from approximately 1,600 ft amsl in the northern area of the property to approximately 2,100 ft amsl in the southern area of the property. The cannabis cultivation area is relatively flat with a gentle slope up from north to south. Drainage within the site generally flows east to west, eventually flowing into Flat Creek. A small seasonal stream runs through the northern section of the property, approximately 285 ft north of the proposed cultivation area;

however, no permanent watercourses exist within or in the immediate vicinity of the cultivation area. An existing residence is located south of the cannabis cultivation premises but would not be used as part of the proposed project.

3.0 PROJECT DESCRIPTION

Single Source Solutions Inc. is applying for a Commercial Cannabis Use Permit (CCUP21-0004) for the construction and operation of a commercial cannabis cultivation (also referred to as the cannabis cultivation premises or premises). The proposed project would include the cultivation of approximately 87,120 sf (2 acres) of flowering outdoor cannabis canopy in a fenced, designated cannabis cultivation area, an existing water well and tank for irrigation and storage, proposed storage containers for processing and harvest storage, a fire hydrant, a temporary processing tent, a proposed prefab office, a proposed Tough Shed for chemical and solar electric equipment storage, parking spaces, portable toilet and handwashing station, and a solar panel array. Phase II of the proposed project would install 1.28 acres of hoophouses in the eastern portion of the 2-acre cultivation area. See Figure 3 for the site plan and Figure 4 for a detailed site plan. The closest offsite residence is located approximately 745 ft west of the cultivation area.

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

Cannabis Cultivation Areas

The proposed project would include the cultivation of a total of 87,120 sf of flowering outdoor cannabis canopy with a plan to install 1.28 of hoophouses equipped with shade cloth covers and carbon filters in the eastern portion of the cultivation area as part of Phase II. The cannabis cultivation area would be surrounded by 7-foot-high fencing encompassing an area of 2 acres.

Cannabis would be grown in an area currently used as a vineyard within a series of raised beds in rows and would use drip irrigation. The hoop houses would be roughly 7.5 ft tall, and the beds would be 3 ft tall on either side. Cultivation soil beds would be tilled seasonally. The cannabis would be sun grown from seed to maturity on the premises and harvested and processed onsite.

Support Structures and Infrastructure

A 240-sf modular office would also be located to the southwest of the cultivation site to house the licensing and compliance records for the project as well as security camera Digital Video Recorders (DVRs). Immediately to the east of the office, a 120-sf tough shed would be placed to house cultivation chemicals and fertilizers as well as solar equipment as an inverter, change controller, batteries, and backup generator. A compost area would be located within the fenced cannabis cultivation area. A 1,458-sf parking area would be constructed to the south of the cultivation area that would accommodate fire apparatus turnaround and worker parking. Additionally, eight 320-sf shipping containers would be located east of the proposed parking area and would be used to provide processing/harvest and administrative hold product storage space. Processing may also occur within a temporary tent structure that would be located within the cannabis cultivation area during seasonal activity. A seasonal portable toilet and hand-washing station would be located within the cultivation area.

Water would be obtained from an existing private well that is plumbed to irrigation manifolds that serve the existing vineyard. This well has a flow rate of 35 gallons per minute and would provide the main water supply for the 87,120 sf of flowering outdoor cannabis canopy and miscellaneous support and sanitary needs. The proposed project would include a fire hydrant located immediately south of the cultivation site connected to an existing water line.

The project applicant would use power from an existing PG&E connection to power the well and use renewable solar power for all other operations. This power would be provided by a proposed solar panel array which would be located west of the cultivation area. A backup generator is proposed to be used if clouds reduce the available power from solar.

Employees, Daily Trips, and Hours of Operation

The operation would have 4 full time employees; the project applicant/owner may hire up to 6 seasonal employees during harvest, as needed. It is anticipated that no fewer than one employee would be onsite under most circumstances and up to 10 employees would be onsite under peak conditions. An On-Site Transportation Review (OSTR; Appendix B) and a Vehicle Miles Traveled (VMT) Memorandum (Appendix C) were prepared by Prism Engineering on April 26, 2021, for the proposed project. Both the OSTR and VMT Memorandum (Memo) concluded that the project would generate up to 30 daily trips based on the worst-case seasonal harvest time employee count under peak conditions. Occasional small truck deliveries are anticipated but would not occur on a regular, daily basis. Hours of operation for the project would be 9:00 a.m. to 6:00 p.m.

Security Plan

Perimeter security for the cannabis cultivation premises would be provided by a 7-foot-high field game fence (6 ft of field game fencing and 1 foot of barbed wire) with 3 locked gates and solar powered motion sensor light and camera at the entrance of the cannabis cultivation area, the property line, the canopy, the trim area, the packaging and labeling areas, and harvest storage. Solar powered motion alarms and cameras would surround the exterior of the cultivation area, as well as all gate entrances to the property, and would be located next to the office, processing, and harvest storage areas. Foot and vehicle patrols, as well as drones and live or recorded security cameras may also be included. The applicant and family members, distributers, suppliers, and full-time/temporary employees would be the only personnel authorized to access the property via ID cards. Any potential temporary employees, government personnel with business onsite presenting valid identification, and any other visitors would be escorted through the limited access areas of the site by the project applicant. 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 cultivation area can be accessed via a gravel road that leads north from the residence. A hammerhead parking lot/turn around area would be constructed south of the cultivation area gate at the end of the driveway into the project site to accommodate worker parking and fire apparatus turnaround. An existing unpaved access road from the residence within the subject parcel would connect to the proposed cultivation area. The driveway from the house to the cultivation area would be improved and an approximately 54.8-foot-long concrete masonry unit (CMU) wall to be installed. The access driveway would be paved where ever the slope of the driveway exceeds 16 percent.

Six (9 ft x 16 ft) parking spaces and a hammerhead turnaround totaling 1,458 sf would be constructed south of the cannabis cultivation area. The parking area would be located between the access road and the cultivation area and would be located to the west of the proposed shipping containers.

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. Non-economically valuable cannabis waste would be composted on the project site, in the designated, secured 100 sf compost zone located within the proposed cultivation area. Recyclables and trash would be self-removed.

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.

Pest Management Plan

The applicant provided a Pest Management Plan that would be implemented for the proposed project and is included as Appendix D of this Initial Study. The applicant would use cultural, biological, and chemical pest management control methods. Cultural pest management methods would include mulching, exclusion (i.e. weeding and pruning),

and inclusion of companion plants and cover crops; as well as nutrient management, irrigation, and humidity and temperature management. For biological pest management control methods, the applicant would use predatory insects and microbes, as well as amending the soil with compost tea. Lastly, chemical control management methods would include pesticide management, and the use of Environmental Protection Agency (EPA) pesticide use protocols. A detailed list of pesticides and fungicides to be applied at any stage is included in Appendix D.

Construction Schedule and Equipment

Project construction would occur immediately upon project approval and acquisition of the required permits from the County and would occur in two phases. The first phase would prepare the 2-acre area for outdoor cultivation. The second phase would add hoop houses to a 1.28-acre portion of the cultivation area. Both phases are evaluated in this Initial Study. Construction of each phase would take approximately 2-3 months to complete. The applicant would use a tractor with box scraper to till the cannabis cultivation areas during construction of Phase I.

As part of the project, a 7 ft fence would be constructed around the 87,120-sf cannabis cultivation premises. The access road to the cultivation site (north of the residence) would be improved and widened to 12 feet. Improvements to the road would include paving of the driveway where slope exceeds 16 percent, installation of a CMU wall, and construction of a 300-sf turnout with 25-foot tapers. Straw wattles would be installed on either side of the road to prevent runoff, and exposed areas would be covered with hydroseed or approved mulch. A 1,458-sf parking area consisting of a hammerhead turnaround and six 144-sf parking spaces would be created to the right of the proposed cultivation area gate to accommodate worker parking and fire apparatus.

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

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: _____ Date: 1-18-24

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

Signature: _____ Date: 1-18-24

Printed Name: ~~Chris~~ Perry, Assistant Director Planning and Building 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		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 ponderosa pine, cultivated vineyard, and annual grassland with a single family residence onsite. The area proposed for the cannabis cultivation premises consists of an existing vineyard with non-native grassland. The project would include one cannabis cultivation area on the project parcel. The site has a small seasonal stream running east to west in the northeast portion of the parcel approximately 285 feet north of the cannabis cultivation premises. Site elevations are generally highest in the south and lowest in the north, and elevations range from approximately 1,600 ft amsl in the northern area of the property to approximately 2,100 ft amsl in the southern area of the property.

The project property is bordered to the north by densely to sparsely wooded land, to the east by undeveloped wooded to sparsely wooded land, to the south by D'agostini Dr and rural residential properties beyond (single family residence), and to the west by rural residential properties (single family residence) and densely to sparsely wooded land. The setting is rural, and the proposed cannabis cultivation premises 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 2022). 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 2022). 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 located in a valley adjacent to densely to sparsely 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 a single family

residence, 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 development may result in a change to the visual character of the site by redeveloping a vineyard as a cannabis cultivation area. However, the project site is surrounded by other wooded, privately-owned lands and is not visible from public vantage points. Therefore, the construction and operation 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 construction of a new outdoor commercial cannabis facility. Potential sources of light and glare include external 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 9:00 a.m. – 6:00 p.m., so the potential for any nighttime light or glare related to project operations would be minimized. The operation would not involve the use of any supplemental lighting for mature plants. 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) which requires outdoor lighting to be shielded and downward facing, 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 2023a), the following soil map units occur on the project property:

- Auberry rocky coarse sandy loam, 5 to 15 percent slopes (AsC): covers 16.5 percent of the parcel (7.9 acres);
- Auberry very rocky coarse sandy loam, 15 to 30 percent slopes (AtD): covers 22.5 percent of the parcel (10.7 acres);
- Musick very rocky sandy loam, 15 to 50 percent slopes (MtE): covers 53.9 percent of the parcel (25.7 acres);
- Placer diggings (PrD): covers 7.1% of the parcel (3.4 acres)

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 Grazing Land (CDC 2023a).

The project site contains four terrestrial vegetation communities: Developed, Annual Grassland, Cultivated/Planted Vineyards, and Ponderosa Pine. 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. The site does not have a known recent history of commercial timber harvesting. The property is designated for Rural Residential (RR) in the County's General Plan, and it is within the Limited Agricultural, 20-acre Minimum (LA-20) 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 Grazing Land (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.

On September 13, 2022, the El Dorado County Board of Supervisors adopted Resolution 139-2022, rescinding Resolution 188-2002 and revising the criteria for the establishment of agricultural preserves within the County of El

Dorado to allow that commercial cannabis cultivation could be a compatible use. Commercial Cannabis Cultivation on a parcel that has a pre-existing Williamson Act contract is a compatible use if all the following requirements are met:

a. Commercial cannabis cultivation shall not be used to qualify a parcel for a Williamson Act Contract.

b. The commercial cultivation of cannabis is in compliance with all other laws, including Division 10 of the Business and Professions Code and EDC Ordinance Code Chapter 130.42.

c. The contracted parcel that is proposing to be used to cultivate commercial cannabis continues to meet the County of El Dorado's criteria for establishing an agricultural preserve in this Resolution and El Dorado County Zoning Ordinance Code Section 130.40.060.

d. The Agricultural Commission reviews the application for a Commercial Cannabis Use Permit for outdoor or mixed-light cultivation to determine whether it qualifies for the above standards.

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 Grazing Land, 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, Farmland of Statewide Importance, or Locally Important Farmland (Farmland) to non-agricultural use, and any impacts would be **less than significant**.

b. **Agricultural Uses:** The property is zoned as Limited Agriculture, 20-acre Minimum (LA-20) and is currently under Williamson Act Contract. Cannabis cultivation is allowed on parcels zoned LA-20 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. On September 13, 2022, the County of El Dorado Board of Supervisors adopted Resolution 139-2022, allowing for the cultivation of cannabis on parcels under Williamson Act contract so long as certain requirements are met. The proposed project would keep the vineyard on the southern portion of the property in operation, which will continue to satisfy the requirements of the Williamson Act. Therefore, there would be a **less than significant** impact to Williamson Act Contracts.

c.-d. **Loss of Forest land or Conversion of Forest land:** The site contains four terrestrial vegetation communities: Developed, Annual Grassland, Cultivated/Planted Vineyards, and Ponderosa Pine. The site is not zoned or designated as Timber Production Zone (TPZ) or another forest land use. The cultivation area within the cannabis cultivation premises would be developed on land that is currently in use as a vineyard. Areas that are not identified as cultivated/planted vineyard within the cannabis cultivation premises are classified as annual grassland and ponderosa pine. No commercial tree species or oak trees have been removed for development of the site or are proposed for removal (14 CCR Section 895.1). 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 **no impact** for questions c) and d).

e. **Conversion of Prime Farmland or Forest Land:** The proposed project would develop up to 87,120 sf of cultivated/planted vineyard into a cannabis cultivation facility on an approximately 48-acre property, leaving approximately 46 acres of the property as undisturbed. The approximately 8-acre vineyard on the southern portion of the site would remain in active production even after implementation of the proposed project. 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, have a significant 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**	

A project-specific Odor Analysis was prepared for this project and is included as Appendix E to this Initial Study (EPS 2023). An Air Quality Technical Memo was prepared for this project and is included as Appendix F to this Initial Study.

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 2022).

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 in item 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 2022).

> 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 take approximately 2-3 months to complete. The applicant would use a tractor with box scraper to till the cannabis cultivation areas during construction of the proposed project. Additional construction activities on the project parcel would include on-site access roadway improvements consisting of paving where slopes exceed 16 percent and widening access to 12 feet to the on-site driveway leading to the project site. As described in Section 3.0, above, the project would disturb up to 87,120 sf which would involve the tilling of the cultivation areas and construction of 1.28 acres of proposed hoop houses on the east portion of the cultivation site. Conservatively assuming that the small tractor with box scraper to be used during project construction would burn 13.6 gallons per hour, the average daily diesel fuel use for the tractor and box scraper would be conservatively 136 gallons per day (assuming a 10-hour day) which is less than the 377 gallons per day screening level. Therefore, project construction emissions of ROG, NO_X, and other exhaust constituents would be less than significant.

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).

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 includes 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 30 daily trips during peak conditions 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). Therefore, the project trip generation of up to 30 daily trips would be far less than the expected trip generation for any of the development types listed in Table 5.2. 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 745 feet west from the cannabis cultivation premises. Although the project components are not setback a minimum of 800 ft on the western boundary, the applicant is seeking a setback reduction waiver from the County to allow for a reduction in the setback requirement. There are no daycare centers, schools, 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 toxics 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 toxics). "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 is 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 contribute 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 2022). 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 E). EPS used an air dispersion model to record 1 year (2023) of hourly wind and temperature data at Somerset and onsite measurements of odor intensity at other locations to conduct this analysis. The results of the analysis indicated the maximum odor intensity along the project property lines would range from below 6.2 Detection Threshold (DT) along the southwest property line to 2.81 DT, both of which are below El Dorado County's limit of 7 DT. The nearest residence is located 745 ft to the southwest and would have an odor intensity that is lower than the 3 DT at the southern property line. Since the odor intensity would be below 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 not be setback by at least 800 ft from the western property line. However, the applicant is seeking a setback reduction waiver from the County. Although the project would not meet the EDC Section 130.41.200 setback requirements, the Odor Report provided as Appendix E to this Initial Study concluded that the nearest residence is located 745 ft to the southwest and would have an odor intensity below the 7 DT threshold, and odor impacts would be less than significant. In addition, the ordinance includes standards for maximum allowable odors measured by the County at the property line using a field olfactometer. Based on the results of field measurements, the County may require installation of odor control options which may include, but are not limited to, the use of a greenhouse or hoop house that includes activated carbon filtration or equivalent odor abatement control equipment on the air exhaust (El Dorado County 2019). The applicant would also use wind mist deodorizer along the property line. To

prevent cannabis odors from exceeding El Dorado County's limit of 7 DT, the project applicant would install carbon filters in each of the proposed hoop houses as described in Appendix E – Odor Report. The project applicant would also employ a third-party to conduct odor monitoring at the property to confirm that cannabis odors do not exceed the county limit of 7 DT. If cannabis-related odor levels are detected at a level above the County limit of 7 DT, cannabis cultivation activities on-site would be halted and project impacts and mitigation would be reassessed as necessary. Compliance with the County Cannabis Ordinance for odor control would ensure that impacts associated with odors would be **less than significant with implementation of Mitigation Measure AQ-01.**

Mitigation Measure AQ-01: Odor Control

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 Greg Matuzak Environmental Consulting, LLC (2023) 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 G 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 approximately 2-acre area was the subject of the impact analysis. The entire 47.7-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.

The study area is located within the northern-central Sierra Nevada foothills. The terrain within the project area is typical of the lower Sierra Nevada foothills. The study area and vicinity are in climate Zone 12 - Stockton, defined by hot summers and cool winters without severe winter cold or humidity outside of the typical comfort zone (PG&E 2006).

Natural hydrologic sources for the project area include precipitation and surface runoff from adjacent lands. The project site receives an average of 39 inches of precipitation per year (NRCS 2020). Most precipitation is concentrated in the winter and early spring months, with summers being almost completely dry.

Survey Methods

Consulting biologist Greg Matuzak, Principal Biologist for Greg Matuzak Environmental Consulting, LLC, conducted a reconnaissance-level field survey on December 31st, 2020. 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. See Appendix G for a more detailed discussion of survey methods and results; results are summarized below.

Vegetation Communities

The BRA (Appendix G; Matuzak 2023) identified the following terrestrial vegetation communities on the property:

- Annual Grassland: Within the annual grasslands within the subject parcel, the following species are dominant: slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), softchess (*Bromus hordeaceus*), medusahead (*Taeniatherum caput-medusae*) and yellow-star thistle (*Centaurea solstitialis*). Most native grasslands in El Dorado County have been replaced by non-native invasive plants and the majority of the annual grassland habitat identified within the subject parcel is dominated by non-native annual grassland species and many are considered invasive. There is minimal annual grassland within the subject parcel; however, it is located within and adjacent to the Project area given the open and disturbed nature of the areas where previous disturbance and development have occurred within the subject parcel.

- Cultivated/Planted Vineyards: Two areas planted with vineyards include a large vineyard directly to the northeast of the southern entrance into the subject parcel (southern vineyard) and the large vineyard where the proposed Project will be located (northern vineyard).

- Ponderosa Pine: Ponderosa Pine is a co-dominant habitat type within the subject parcel along with annual grasslands and cultivated/planted vineyards as described above. Ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), and interior live oak trees (*Quercus wislizeni*) are the dominant species within this habitat type. Additionally, some scattered smaller California oak trees (*Quercus kelloggii*) were identified within the subject parcel and directly adjacent to the existing residence and cultivation area.

Wildlife Observations and Habitat Types

The following animals were detected within the study area during the field survey: American Robin (*Turdus migratorius*), dark-eyed junco (*Junco hyemalis*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), northern flicker (*Colaptes auratus*), and western scrub-jay (*Aphelocoma californica*).

The El Dorado County GIS habitat layer included in Appendix G identifies the subject parcel as containing areas that are Developed and areas that are mapped as Oak Woodlands. However, though a majority of the subject parcel is covered in woodlands, the Biological Resources Assessment found that the subject parcel is dominated by ponderosa pine woodlands and not oak woodland.

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 the Bios6 Print Table included in Appendix G, may occur or have documented historical occurrences in the vicinity of the study area: great gray owl (*Strix nebulosa*), nesting raptors, and other migratory birds.

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).

El Dorado County

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.

El Dorado County Oak Resources Conservation Ordinance (No. 5061)

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 plant or animal species were detected within the project area. State and federal databases did not report any special-status plant species in the study area. Project implementation would not directly impact any known special-status animal species; however, special-status animal species could move into the project area between the time the field survey was completed and the start of construction. This would be a potentially significant impact without mitigation. With implementation of mitigation measure BIO-1, the impacts would be reduced to a less than significant level.

Special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the project area. The project area contains trees, so there is potential for birds of prey to utilize trees in the study 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-1 and BIO-2, the impacts would be reduced to a less than significant level.

The project area contains ponderosa pine woodland, annual grasslands, planted/cultivated vineyards, and developed habitats. The habitats have a low potential for harboring special-status plant species for various reasons. Aggressive non-native grasses and forbs dominate the ground cover. The ponderosa pine habitats in the study area have potential to harbor special-status plant species, but these habitats would not be impacted by the proposed project. To ensure that no special-status plant species previously identified within the 9 Quad search or within the Aukum Quad where the project is located is impacted, prior to the implementation of future ground disturbing activities within the project disturbance areas, an additional special-status plant survey will be required to document the presence or absence of each of the special-status plant species with potential to occur within the project area. Therefore, project implementation would not directly impact any known special-status plant population with implementation of Mitigation Measure BIO-2.

Mitigation Measure BIO-1: Pre-Construction Nesting Bird and Raptor Survey

If construction activities occur during the nesting season (March 1st 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 within 14 days prior to construction activities. If any nesting raptors or protected birds are identified during such pre-construction surveys, trees or shrubs or grasslands with active nests should not be removed or disturbed, and a no-disturbance buffer should be established around the nesting site to avoid disturbance or destruction of the nest site until after the breeding season or after a qualified wildlife biologist determines that the young have fledged. The extent of these buffers would be determined by a qualified wildlife biologist and would depend on the special-status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed by a qualified wildlife biologist to make an appropriate decision on buffer distances based on the species and level of disturbance proposed in the vicinity of an active nest.

Monitoring Requirement: The mitigation measure shall be noted on all grading and development plans.

Monitoring Responsibility: El Dorado County Planning and Building Department

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

Prior to the implementation of ground disturbing activities within the project disturbance areas, an additional special-status plant survey shall be conducted by a qualified biologist during the relevant blooming season to document the presence or absence of each of the special-status plant species with potential to occur within the project area.

If any special-status plant species is documented within or directly adjacent to areas proposed for disturbance within the project area that are CNPS list 1A, 1B, 2A, or 2B per CEQA Guidelines Section 15380, or are listed under the ESA and/or CESA, protection of such plants would include complete avoidance, transplantation, and/or on or offsite restoration of the special-status plant species that could be impacted by such site disturbance.

Monitoring Requirement: The mitigation measure shall be noted on all grading and development plans.

Monitoring Responsibility: El Dorado County Planning and Building

With the implementation of these required mitigation measures, potential impacts on any plant or wildlife species identified as a candidate, sensitive, or special-status would be **less than significant with mitigation.**

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 project property contains a seasonal stream running east to west through the northern section of the parcel that provides habitat for special-status species. However, because the cannabis cultivation premises is setback greater than 225 ft from this seasonal stream, 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 225 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 225 ft from the seasonal stream.

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

d. **Migration Corridors:** Implementation of the proposed project would include the installation of a seven-foot-tall security fence around the cultivation compound that would preclude access by some species. The fenced cultivation area would be surrounded by woodland, 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.

The project site is not 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 not mapped within the California Department of Fish and Game (CDFG)-Designated Critical Winter or Critical Summer Range for the Grizzly Flat Herd (Koenigs 2010). The project would not have a significant impact on animal movement because the majority of the project property would still be available for animal movement as the proposed project would disturb approximately 2 acres of the total 47.7-acre parcel.

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 project would not require the removal of mature oak trees or 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, Pre-Construction Nesting Bird and Raptor Survey, would avoid any potential impacts to special-status species, nesting raptors, nesting birds, or other migratory birds. Mitigation Measure BIO-2, Pre-Construction Survey for Special-Status Plant Species, would avoid any potential impacts to special-status plants. 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 Cultural Resources Study, including a letter from the North Central Information Center regarding the proposed project site, was prepared by Historic Resource Associates and is included as part of Appendix H to this Initial Study.

According to the letter [internal citations omitted]:

> In this part of El Dorado County, archaeologists locate prehistoric-period habitation sites on elevated landforms near streams. 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. The proposed project search area is situated in the Sierra Nevada foothills and Flat Creek flows through the parcel. 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 1870 GLO plat of T8N, R11E shows evidence of a nineteenth-century vineyard, orchard, and house in the vicinity. The 1952 Aukum 7.5' USGS topographical map shows evidence of twentieth-century roads and buildings 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 as part of the Cultural Resource Study included as Appendix H.

The NCIC records search, which was conducted on January 28, 2020, indicated that one prior cultural resources study had been completed that covers a portion of the project site. Outside of the proposed project area, but within the 0.25-mile radius, the broader search area contains one prehistoric-period resource and one historic-period cultural resource. Additionally, one cultural resources study report on file covers a portion of the broader search area. The NCIC records search indicated that the site was not sensitive for cultural resources. A pedestrian survey within the project footprint was conducted by Dana E. Supernowicz, M.A., RPA of Historic Resource Associates on November 6, 2020, and no prehistoric or historical archaeological sites, features, or artifacts were identified in or near the project footprint. 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. 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**.

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 1 below provides a summary of California's electricity sources as of 2021.

TABLE 1.
California Electricity Sources 2021

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
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 2022 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 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 primarily be powered by solar power and a backup generator for use in emergencies, with the exception of the well which would be powered by an existing PG&E connection on the property. The applicant would use sun grown methods only, and security lighting would be powered by solar. The project is expected to source all electricity for operation from a proposed solar array to be located west of the cultivation site with the exception of the well which would be powered by an existing PG&E connection. 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 upward from north to south. The project would include one relatively flat cannabis cultivation area within the cannabis cultivation premises. The project site contains four terrestrial vegetation communities: Developed, Annual Grassland, Cultivated/Planted Vineyards, and Ponderosa Pine. Site elevations are generally highest in the south and lowest in the north, and elevations range from approximately 1,600 ft amsl in the northern area of the property to approximately 2,100 ft amsl in the southern area of the property.

According to the custom Soil Resource Report for this project (NRCS 2022; Appendix L), the following soil map units occur on the project property:

- Auberry rocky coarse sandy loam, 5 to 15 percent slopes (AsC): covers 16.5 percent of the parcel;
- Auberry very rocky coarse sandy loam, 15 to 30 percent slopes (AtD): covers 22.5 percent of the parcel;

- Musick very rocky sandy loam, 15 to 50 percent slopes (MtE): covers 53.9 percent of the parcel;
- Placer diggings (PrD): covers 7.1 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 located in a mountainous region, with land that generally slopes upward from north to south. The project would include one relatively flat 2-acre cannabis cultivation area within the cannabis cultivation premises. The site has a small seasonal stream running east to west in the northern part of the parcel, over 225 ft north of the cultivation site. Site elevations are generally highest in the south and lowest in the north, and elevations range from approximately 1,600 ft amsl in the northern area of the property to approximately 2,100 ft amsl in the southern area of the property. While these slopes do pose a risk for landslide potential, the slopes on the project premises are gradual and vegetated with ponderosa pines which minimize the landslide potential. All grading activities on-site would be required to comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance. Any potential impacts from implementation of the proposed project would be **less than significant**.

b. **Soil Erosion:** All grading activities on-site would be required to comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance including the implementation of pre- and post-construction BMPs. Implemented BMPs are required to be consistent with the County's California SWPPP issued by the SWRCB to reduce or eliminate run-off and erosion and implement sediment controls. Any grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the County of El Dorado Grading, Erosion, and Sediment Control Ordinance. Straw wattles would be installed on either side of the driveway proposed for resurfacing to minimize soil erosion, surrounding exposed areas would be covered with hydroseed or approved mulch, and an approximately 54.8-foot-long CMU wall would be installed along the southern border of the driveway to prevent soil erosion. With implementation of the BMPs and compliance with the El Dorado County Grading, Erosion, and Sediment Control Ordinance, 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 four soil map units, and the entirety of the project premises would be developed on soils classified under the Hotaw soils series (NRCS 2021). The Hotaw soils series are noted to have moderate to high erosive qualities (USDA 2018). The proposed development area would be graded to ensure that all development would occur on flat surfaces to minimize soil erosion. All grading activities would comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance. 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: Auberry rocky coarse sandy loam, 5 to 15 percent slopes (AsC); Auberry very rocky coarse sandy loam, 15 to 30 percent slopes (AsC); Musick very rocky sandy loam, 15 to 50 percent slopes (MtE); and Placer diggings (PrD). These soils are well-drained, and the Auberry, Musick, and Placer series 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, including the proposed prefab office, would require building permits from the El Dorado County Building Department. The 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 site includes a seasonal portable toilet and hand-washing station that serves the structures on the property. The property is located in a rural area of El Dorado County, and the single

family residence on-site is not considered a part of the cannabis cultivation project. Seasonal portable toilets would be utilized, and no septic tank or leach field would be located on the property. There would be **no impact**.

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: All grading activities would be required to comply with the El Dorado County Grading, Erosion, and Sediment Control Ordinance which would address potential impacts related to soil erosion, landslides, and other geologic impacts. Erosion control BMPs, including installation of straw wattles and covering of any exposed surfaces with hydroseed or approved mulch, would be implemented as part of the proposed project and further ensure impacts remain less than significant. 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.

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, approximately 2 to 3 months. 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. No cannabis waste material would be burned on-site, and no trees would be cut or burned. Burn piles for vegetation clearing and fuel breaks would occur in winter in accordance with CAL FIRE and

Pioneer Fire Department 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 maximum of 30 daily trips during peak conditions 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 (504 to 560 daily trips for 56 residences). Therefore, the project trip generation of 30 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. 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 will use water from an on-site well, eliminating GHG emissions related to treating and pumping water off-site. Power for the well would come from an existing on-site PG&E connection. 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 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 proposed 240-sf modular office that would be used for petroleum and agricultural product storage. Flammable materials storage would be kept in a designated area. 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.

The applicant provided a Pest Management Plan that would be implemented for the proposed project and is included as Appendix D in this Initial Study. The applicant would use cultural, biological, and chemical pest-management control methods. For cultural pest management control methods, seeds would begin with healthy pest free stock and soft sedimentary rock would be used in early season and throughout the growing season to remove unwanted material. Predator nematodes would also be applied periodically to the soil, starting in the preseason, to kill any larva and adult pests that live in the soil. Predator mites would be used on mother plants as their offspring to knock back any pests that were in the environment. For biological pest management control methods, the applicant would use other integrated pest management practices such as biological sprays like regalia, grandevo, and

venerate. Lastly, for chemical pest management control methods, the applicant would apply chemical controls first on a "hot spot" basis and use beneficial microbe products. A list of chemicals to be applied at any stage of plant growth is included in Appendix D, Pest Management Plan.

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 may 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 (CA 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 Perryman Airport-7CL9 airstrip, located approximately 9 miles north 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. A Fire Plan containing fire hazard reduction strategies was prepared for this project by Live Oak Wildfire Solutions and is included as Appendix I to this report. No applicable emergency plan would be affected by the project as proposed. Additionally, a gravel cul-de-sac turnaround is located at the end of the driveway for fire vehicle access and maneuvering and a water storage tank for emergency purposes. 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 Moderate Fire Hazard Severity Zone (FHSZ) of a State Responsibility Area (SRA) (CAL FIRE 2023). The Pioneer Fire Protection District is primarily responsible for structure fire protection services to the project site, and CAL FIRE is primarily

responsible for wildland fire suppression. The nearest fire station to the project site is River Pines Fire Station located approximately 1.24 miles southeast at County Road E16, River Pines, CA. CAL FIRE's nearest station is the CAL FIRE Amador El Dorado Unit (AEU) headquarters located approximately 18.5 miles north of the project site at 2840 Mt Danaher Rd, Camino, CA. The Pioneer Fire Protection District provides all risk, partly staffed/partly volunteer emergency services to the project area, and their nearest stations are Station 38, located 4.5 miles northeast of the site at 7061 Mt. Aukum Road, Somerset, CA. 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 I to this Initial Study (Live Oak Wildfire Solutions 2021).

The applicant would take several measures to reduce potential wildfire hazards, as recommended by the Fire Plan. A fire hydrant would be located immediately southwest of the cultivation site connected to an existing water line. Additionally, vegetation would be mowed, masticated, or cut to ground level each winter for effective fuel reduction. Defensible space around the structures, including the cannabis cultivation premises, would extend 300 ft from the structure to resist ignition and be kept clear of the dead vegetation. An evacuation plan would be prepared for the project site. The recommended measures from the Fire Safe Plan 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 above 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 39 inches of precipitation per year (NRCS 2022). Most precipitation is concentrated in the winter and early spring months, with summers being almost completely dry. The project property is located in a mountainous region, with land that generally slopes upward from north to south. The project would include one cannabis cultivation area in the center of the parcel. The cannabis cultivation area would be located in a flat area that has previously been used as a vineyard. The site has a small seasonal stream running across the northern portion of the parcel, approximately 285 ft north of the project site. Site elevations are generally highest

in the south and lowest in the north, ranging from approximately 1,600 ft amsl in the north to approximately 2,100 ft amsl in the south. Drainage within the site generally flows east to west, eventually flowing into Flat Creek. No permanent watercourses exist in the immediate vicinity of the cultivation area.

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 06017C1025E, revised September 26, 2008 (FEMA 2023).

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 low 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 one 2-acre cultivation area, in raised beds in rows, and would use drip irrigation using water from the existing on-

site well. Using drip irrigation would minimize irrigation runoff. The cannabis cultivation premises is setback more than 285 ft from the nearest seasonal 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:** An existing well is located on-site and currently provides water to the two existing vineyards on-site, including the 2-acre vineyard which would be converted to cannabis cultivation under the proposed project. The project premises is not located above a critically over drafted groundwater basin, and therefore, it is not anticipated that the project would deplete groundwater supplies. The existing onsite well has a flow rate of 35 gallons per minute and connects to a waterline leading to the cultivation area. 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:** A small seasonal stream runs through the northern section of the property, approximately 285 ft north of the proposed cultivation area. Drainage within the site generally flows east to west, eventually flowing into Flat Creek. The cannabis cultivation areas would be developed on land used as a vineyard and would only disturb the cultivation areas using a small tractor with box scraper. 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 straw wattles and other preventative measures, including covering exposed areas with hydroseed or approved mulch, on either side of the road to be improved to minimize sediment laden runoff and erosion.

The project would disturb more than one (1) or more acre of soil, and therefore, would 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. The project would also 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 06017C1025E, 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 Limited Agriculture, 20-acre Minimum (LA-20) and designated for Rural Residential (RR) in the El Dorado County General Plan. The intent of the LA-20 zone is to identify those lands most capable of supporting horticulture, aquaculture, ranching, and grazing, based on existing use, soil type, water availability, topography, and similar factors. The Limited Agricultural zone is distinguished from other agricultural zones because it provides limited opportunities for ranch marketing and commercial winery uses and shall generally be applied where those more intensive commercial uses may be undesirable. The purpose of the RR General Plan land use designation is to establish areas for residential and agricultural development. These lands typically have limited infrastructure and public services and would remain for the most part in their natural state. This category is appropriate for lands that are characterized by steeper topography, high fire hazards, and limited or substandard access as well as "choice" agricultural soils. The RR designation shall be used as a transition between Low Density Residential (LDR) and the Natural Resource (NR) designation. Clustering of residential units under allowable densities is encouraged as a means of preserving large areas in their natural state or for agricultural production. Typical uses include single family residences, agricultural support structures, a full range of agricultural production uses, recreation, and mineral development activities. The allowable density for this designation is one dwelling unit per 10 to 160 acres.

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 El Dorado County. The project property is not within or in the vicinity of an established community. Further, the proposed project would not 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 LA-20 zoning and RR 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 LA. 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 SR 50 and 8.6 miles south 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 and typical noise associated with surrounding rural residences. An Acoustic Assessment was prepared for this project and is included as Appendix K of the Initial Study.

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 small tractor with box scraper. 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, and a tractor with box scraper to maintain areas where vehicles drive and park.

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 30 daily trips under peak conditions under busiest assumptions but would generate far fewer trips on most days. Traffic counts are not available for the roads in the project vicinity. For transportation planning, the trip generation for typical single-family residences is 9 to 10 ADT. The project site would be accessed from D'agostini Drive.

Impact Summary

With adherence to the County Condition of Approval NOI-1 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**.

Conditions of Approval:

NOI-1. Construction Hours: Construction will occur between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally-recognized holidays.

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 tractor with box scraper. 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 Perryman Airport-7CL9 airstrip, located approximately 9 miles north 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 RR. Up to one single family dwelling unit per 10 to 160 acres is allowed on RR lands. 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, with the project planning to employ up to 4 full-time workers and up to 6 seasonal workers. While the addition of new employment opportunities could increase the County's population, it is anticipated that the employees would 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 a single-family residence on-site that would not be included as part of cannabis cultivation activities. 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 Moderate Fire Hazard Severity Zone of a State Responsibility Area (CAL FIRE 2021). 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 Moderate Fire Hazard Severity Zone of a SRA. The Pioneer Fire Protection District is primarily responsible for structure fire protection services to the project site, and CAL FIRE is primarily responsible for wildland fire suppression. The nearest fire station to the project site is River Pines Fire Station located approximately 1.24 miles southeast at County Road E16, River Pines, CA. CAL FIRE's nearest station is the CAL FIRE Amador El Dorado Unit (AEU) headquarters located approximately 18.5 miles northeast 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 stations are Station 38, located 4.5 miles northeast of the site at 7061 Mt Aukum Road (Pioneer Fire Protection District 2022). 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 Fire District to ensure all required fire protection measures are incorporated into the building plans. The proposed project would include a fire hydrant located immediately south of the cultivation site connected to an existing water line.

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 21.6 miles northwest of the site at 730 Main Street, Placerville, CA (Placerville Police Department, 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 5.7 miles' drive northeast of the site. 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 south via an existing gravel driveway that leads north from D'agostini Drive. The project site is located in a rural residential area that receives low vehicular traffic. The project site is located approximately 30 minutes' drive (approximately 19.4 miles) southeast of Placerville and approximately 14 minutes' drive (approximately 8.6 miles) southeast 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 on-site in the single-family residence and manage day to day operations. The owner would use a pickup truck to bring non-cannabis materials to and from the premises. The project is expected to generate a total of up to 30 daily trips under busiest assumptions but would generate far fewer trips on most days. Vehicles accessing the site would approach from D'agostini Drive via Omo Ranch Road; those commuting from outside the local community may reach Omo Ranch Road via Mt. Aukum Road. On D'agostini Drive, 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 30 daily trips during peak conditions. This includes any expected seasonal workers who would only be utilizing the site for a very limited portion of the year. The project is conservatively expected to generate up to 30 daily round trips under busiest assumptions but 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 emergency vehicle turnaround leading to the site from D'agostini Drive would be surfaced with gravel and would be 12 ft wide flaring out to 60 ft wide. Additionally, the applicant would use a tractor with box scraper to maintain areas where vehicles drive and park. Six (9 ft by 16 ft) parking spaces would be constructed south of the cultivation area. A cul-de-sac turnaround is located at the end of the driveway and would be surfaced with gravel 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 projects impact would be **less than significant.**

d. **Emergency Access:** The proposed project site would have adequate access for emergency vehicles. A cul-de-sac turnaround is located at the end of the driveway and would be surfaced with gravel to be used for emergency purposes. 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 J 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 June 28, 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 Tribal Cultural Resources (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 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 TRCs 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 June 28, 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**: A well was constructed on-site by a previous owner. This well would provide an initial flow rate of 35 gallons per minute and would be the main water supply for the proposed cultivation operation and miscellaneous support and sanitary needs. The well connects to an existing water line leading to the cultivation area, and plants would be watered using a drip-line irrigation system. 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 an on-site solar array system, with power to the well provided by PG&E. A PG&E Meter with 200 amps on the

main panel is existing at the entrance of the site. 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 on-site and serves the existing vineyards. This well would provide the main water supply for the proposed cultivation operation and miscellaneous support and sanitary needs. The well can provide an initial flow rate of 35 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 Waste Connections Materials Recovery Facility located at 4100 Throwita Way, Placerville CA. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, this facility has sufficient capacity to serve the County. 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, specifically to the Materials Recovery Facility located at 4100 Throwita Way in Diamond Springs, California. 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 located within the cultivation site 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 than 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 proposed project site is bordered to the north by wooded to sparsely wooded land; to the east by wooded to sparsely wooded land); to the south by D'agostini Dr.; and to the west by rural residential properties (single family residence), and sparsely to densely wooded land.

The project would be located in a Moderate Fire Hazard Severity Zone of an SRA (CAL FIRE 2023). The Pioneer Fire Protection District would be primarily responsible for structure fire protection services to the project site, and CAL FIRE is primarily responsible for wildland fire suppression. The nearest fire station to the project site is River Pines Fire Station located approximately 1.24 miles southeast at County Road E16, River Pines, CA. CAL FIRE's nearest station is the CAL FIRE Amador El Dorado Unit (AEU) headquarters located approximately 18.5 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 stations are Station 38, located 4.5 miles northeast of the site at 7061 Mt. Aukum Road (Pioneer Fire Protection District 2022). 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 proposed project would include a fire hydrant located immediately south of the cultivation site connected to an existing water line.

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 Moderate Fire Hazard Severity Zone of a State Responsibility Area (CAL FIRE 2021). 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 7.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 cul-de-sac turnaround is located at the end of the driveway to provide emergency vehicle access. It is anticipated that no more than one personnel would be on site under most circumstances and no more than 10 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 moderate fire hazard severity zone, a project-specific Fire Plan was prepared for the proposed project (Live Oak Wildfire Solutions 2021) and is included as Appendix I 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. Defensible space around the structures, including the cannabis cultivation premises, would extend 300 ft or to the slope break from the structure to resist ignition and be kept clear of the dead vegetation. 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. 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 06017C1025E, revised September 26, 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).

e. **Installation or Maintenance of Infrastructure.** As discussed under question g) in Section 7.IX, Hazards and Hazardous Materials, the Fire Plan found 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 300 ft to resist ignition and be kept clear of the dead vegetation. An evacuation plan would be prepared for the project site. 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** 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 4.2 miles northeast 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. Preparation of the CEQA document is underway for the Organic Farming Innovations Cannabis Farm and has not been released for public review yet.

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**.

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

California Air Resources Board (CARB). 2021. "Area Designation Maps/State and National." Last reviewed September 25, 2023. 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 October 31, 2023 and available at: https://codes.iccsafe.org/content/CAGBSC2019.

California Department of Conservation (CDC). 2023a. California Important Farmland Finder. Accessed on September 25, 2023 from: https://maps.conservation.ca.gov/DLRP/CIFF/.

2023b. Fault Activity Map of California. Accessed October 31, 2023 from: https://maps.conservation.ca.gov/cgs/fam/.

2023c. Farmland Mapping and Monitoring Program. Accessed October 31, 2023 from https://www.conservation.ca.gov/dlrp/fmmp.

2023d. Important Farmland Categories webpage. Accessed on October 31, 2023 from: https://www.conservation.ca.gov/dlrp/fmmp/Pages/prime_farmland_fmmp.aspx.

2023e. Williamson Act Program. Accessed on October 25, 2023 from: https://www.conservation.ca.gov/dlrp/wa.

2001. Mineral Land Classification of El Dorado County, California. Accessed on October 30, 2023 at https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc.

California Department of Forestry and Fire Protection (CAL FIRE). 2021. California Fire Hazard Severity Zone Viewer. Accessed on August 30, 2021 from: https://egis.fire.ca.gov/FHSZ/.

California Department of Toxic Substances Control (DTSC). 2023. Envirostor. Accessed October 31, 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 October 31, 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 Energy Commission (CEC). 2021a. 2020 Total System Electric Generation. Accessed September 7, 2021 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 September 7, 2021 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 September 7, 2021 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 September 7, 2021 from https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics

California Native Plant Society (CNPS). 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 September 7, 2021 and internet database available at http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi/Search?search=Sacramento.

California State Water Resources Control Board (SWRCB). 2023. Geotracker. Accessed on November 15, 2023 from: https://geotracker.waterboards.ca.gov/.

El Dorado County Air Quality Management District (EDCAQMD). 2021. Climate Change. Accessed September 7, 2021 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 September 7, 2021 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 September 7, 2021 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 September 7, 2021 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 September 7, 2021 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 September 7, 2021 from https://www.edcgov.us/Government/planning/Pages/zoning_ordinance.aspx.

2015a. Asbestos Review Areas, Western Slope, El Dorado County, California. Accessed on September 7, 2021 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 September 7, 2021 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 September 7, 2021 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 August 30, 2021 from: https://www.edctc.org/airport-land-use-commission

Environmental Permitting Specialists (EPS). 2023. Analysis of Odor at the Proposed Cannabis Cultivation Located in Somerset (El Dorado County), California.

Federal Emergency Management Agency (FEMA). 2023. FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated areas, no. 06017C1025E. Accessed on October 30, 2023 from: https://msc.fema.gov/portal/home.

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 February 17, 2021 from: INRMP_H-Migratory_Deer_Herds.pdf (edcgov.us)

Live Oak Wildfire Solutions. 2021. Fire Plan for the Parcel 046-710-017-100.

Matuzak, Greg. 2023. Updated Biological Resources Assessment. Greg Matuzak Environmental Consulting, LLC.

National Earthquake Hazards Reduction Program (NEHRP). 2016. Background and History. Accessed on September 7, 2021 and available online at: https://sgp.fas.org/crs/misc/R43141.pdf

Natural Investigations Company (NIC), Inc. 2020. Biological Resources Assessment for the Cannabis Cultivation Operation at 5445 Hawkeye Road, Somerset, California.

Natural Resources Conservation Service (NRCS). 2023a. Web Soil Survey of Single Source. Accessed September 19, 2023 at http://websoilsurvey.nrcs.usda.gov.

2023b. Weather for the City of Colfax, California. Accessed October 31, 2023 at: https://www.nrcs.usda.gov/wps/portal/wcc/home.

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. 2022. Accessed on September 7, 2022 from: http://pioneerfire.org/.

PG&E. The Pacific Energy Center's Guide to: California Climate Zones and Bioclimatic Design. October 2006.

United States Department of Agriculture (USDA). 2018. Official Series Description. Accessed on August 25, 2021 from: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053587.

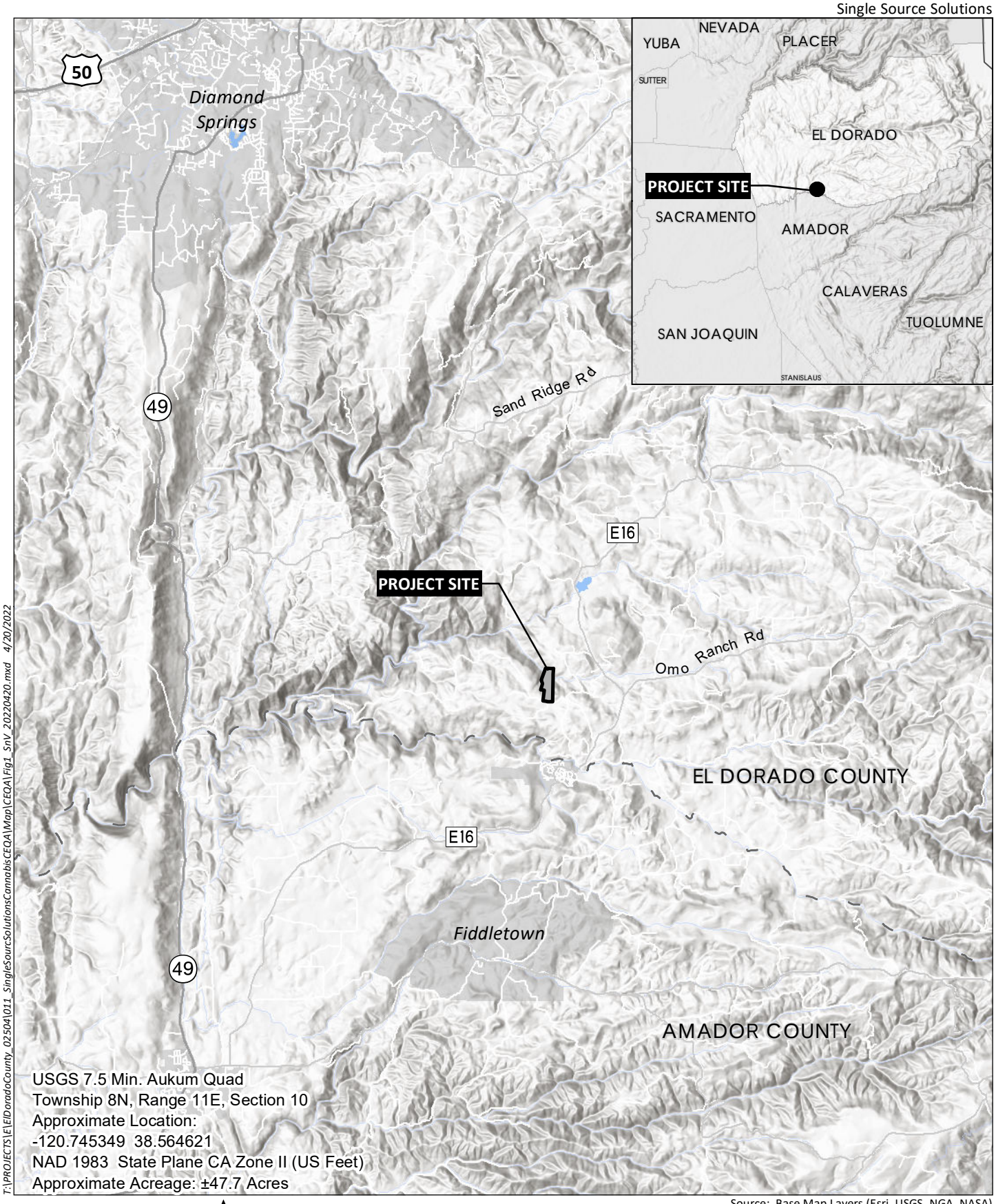
United States Environmental Protection Agency (USEPA). 2023. Superfund: National Priorities List. Accessed on November 15, 2023 from: https://www.epa.gov/superfund/superfund-national-priorities-list-npl.

2014. Summary of the Energy Policy Act. Accessed on September 7, 2021 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 September 7, 2021 from: https://pubs.usgs.gov/fs/fs-0071-00/fs-0071-00.pdf.

Appendix A

Figures



USGS 7.5 Min. Aukum Quad
Township 8N, Range 11E, Section 10
Approximate Location:
-120.745349 38.564621
NAD 1983 State Plane CA Zone II (US Feet)
Approximate Acreage: ±47.7 Acres

0 2 Miles

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

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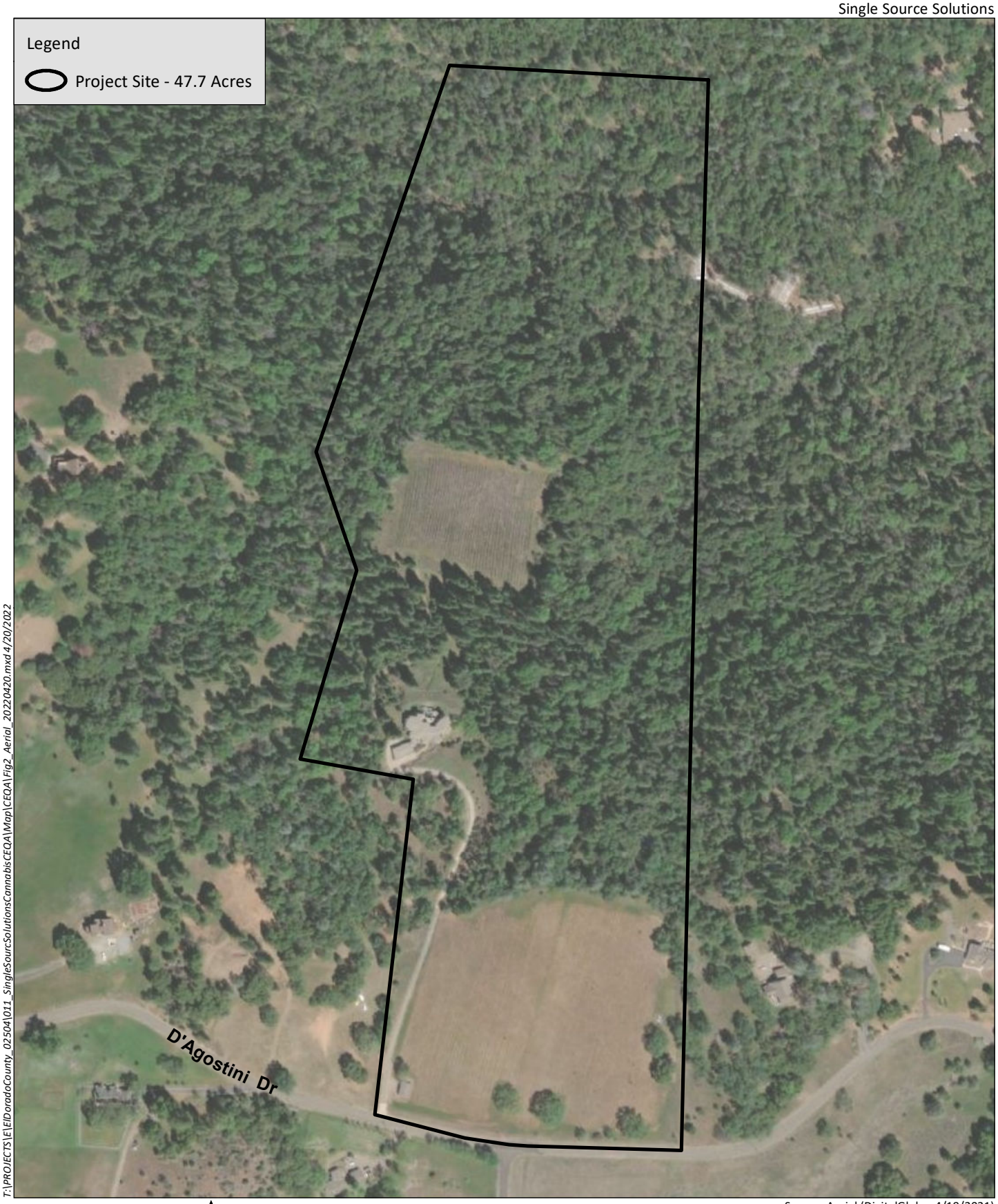
HELIX Environmental Planning

Vicinity Map

Figure 1



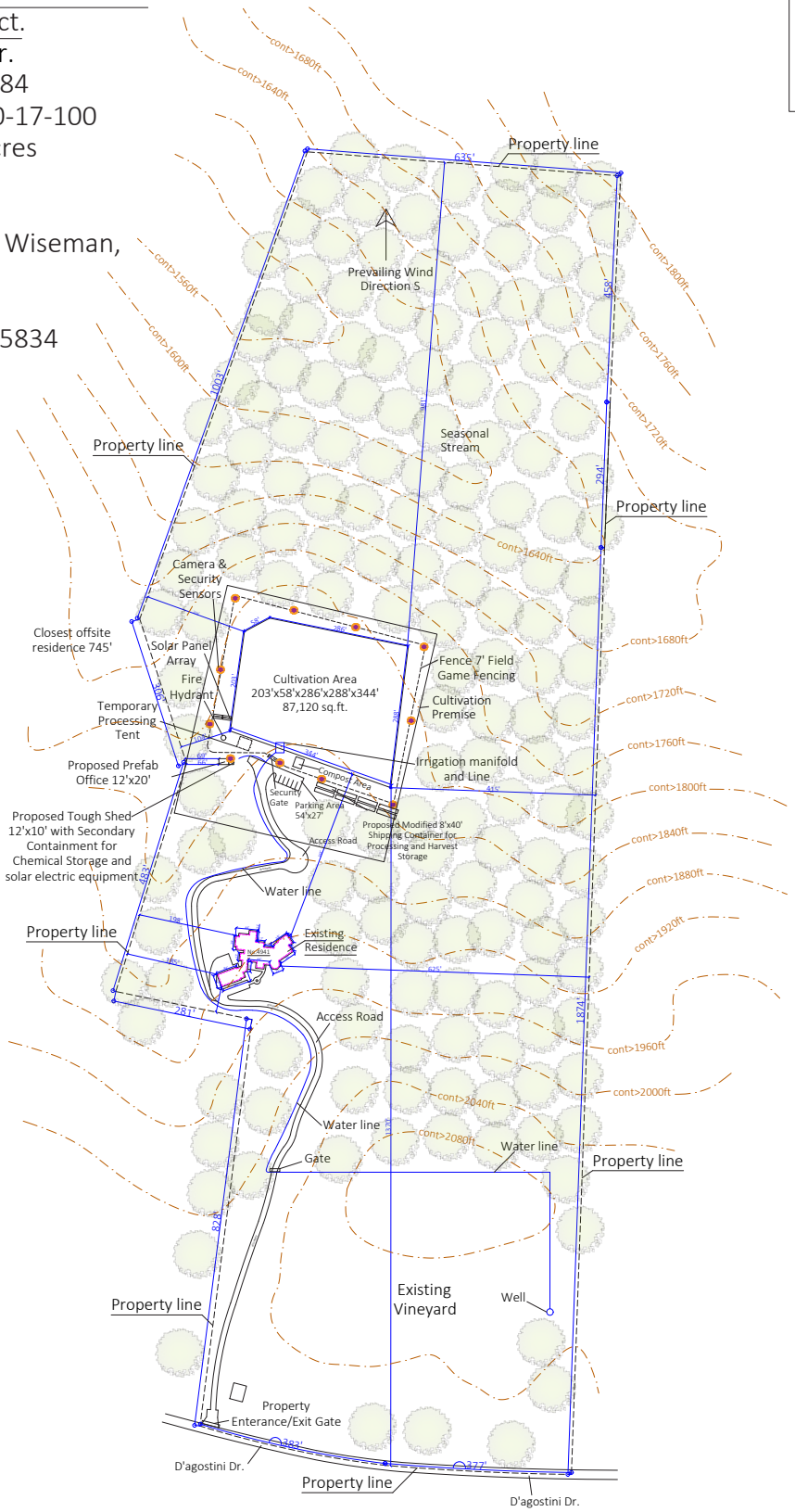
Source: Aerial (DigitalGlobe, 4/19/2021)

HELIX Environmental Planning

Aerial Map

Figure 2

PROPERTY DIAGRAM SITE PLAN
Pioneer Fire District.
4941 D'agostini Dr.
Somerset, CA 95684
Parcel ID: 046-710-17-100
Lot area: 46.53 Acres
Plot Size: 24"x36"
Owners:
John Muraco, Joe Wiseman,
Michael Pinette
338 Olivadi Way,
Sacramento, CA 95834



Source: GETASITEPLAN.COM

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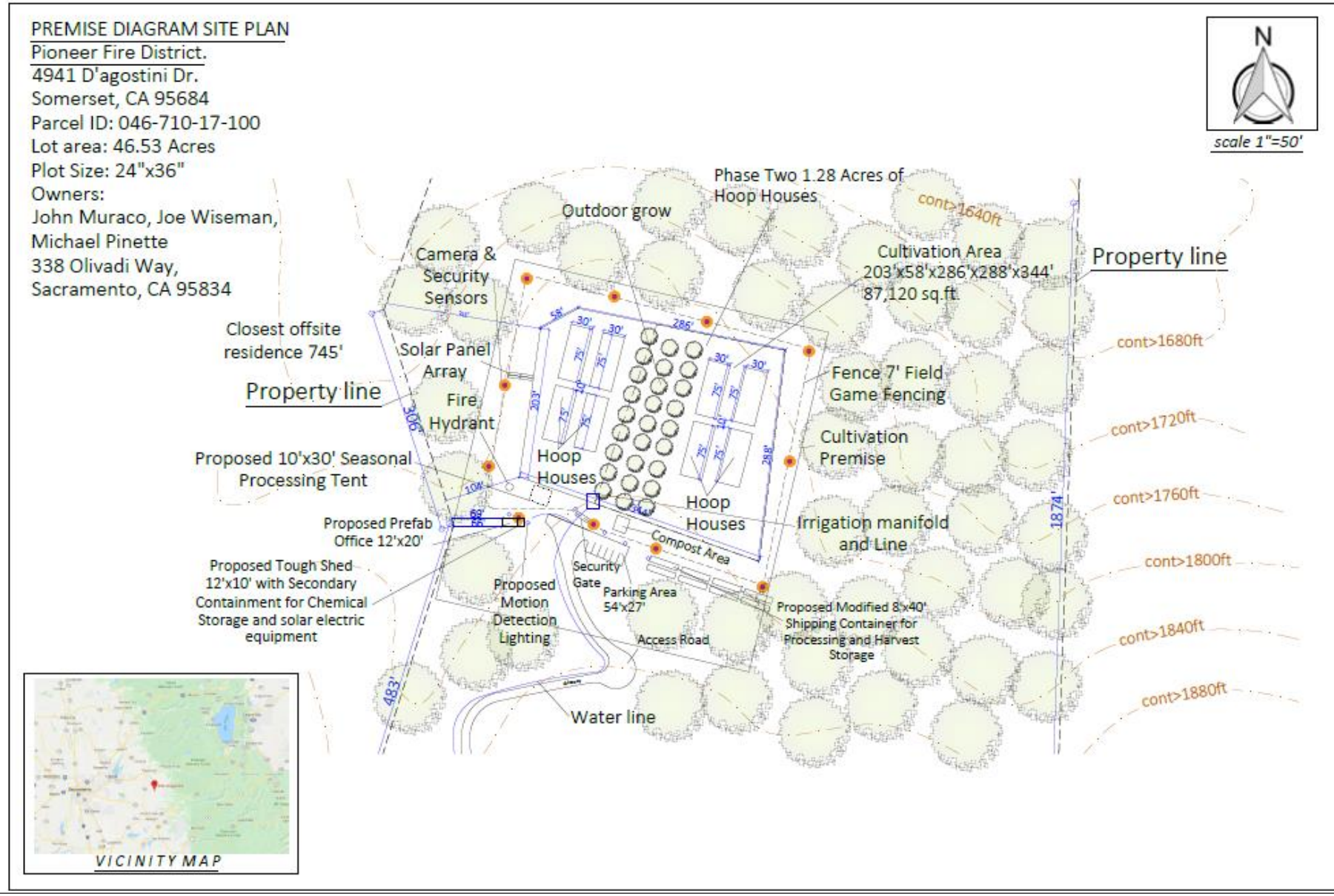
HELIX Environmental Planning

Site Plan

Figure 3



Source: GETASITEPLAN.COM

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HELIX Environmental Planning

Site Plan Detail

Figure 4

Appendix B

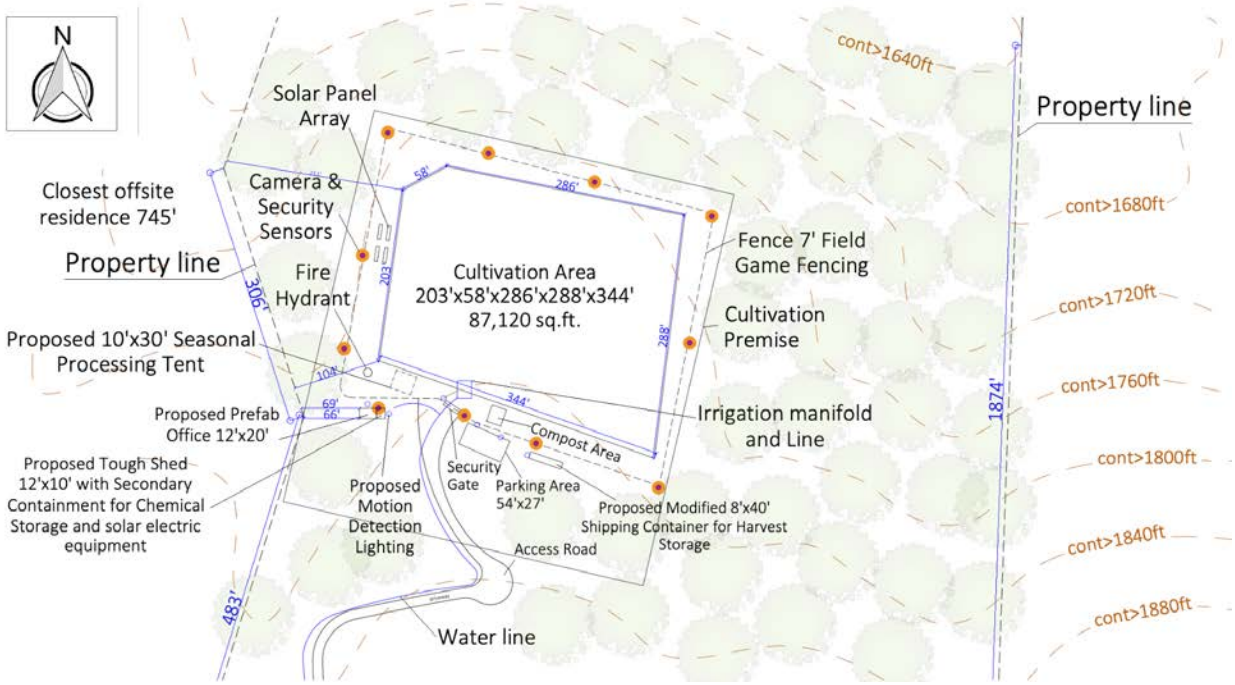
On-Site Transportation Review

On Site Transportation Review

Outdoor THC Cannabis Cultivation

4941 D'Agostini Road Somerset, CA 95634

Located In El Dorado County



Prepared for:

4941 D'Agostini Road Somerset, CA 95634

April 26, 2021

ON SITE TRANSPORTATION REVIEW

Authored by:

Grant P. Johnson, TE

PRISM ENGINEERING

Traffic Engineering & Transportation Planning

This OSTR has been prepared and certified by Grant P. Johnson, TE, Principal. Lic #1453

Table of Contents

Overview of OSTR Process

On the El Dorado County website under information pertaining to an On Site Transportation Review[1] (OSTR), the following items have been identified in a process that needs to be assessed in the OSTR:

> *"If an OSTR is required, the following information shall be evaluated and the findings signed and stamped by a registered Traffic Engineer or Civil Engineer, and shall be included with the project submittal.*
>
> The list below has also been augmented with an additional section on calculating the estimated Vehicle Miles Traveled (VMT) for the project for the with and without project scenario.

1. *Existence of any current traffic problems in the local area such as a high-accident location, non-standard intersection or roadway, or an intersection in need of a traffic signal*
2. *Proximity of proposed site driveway(s) to other driveways or intersections*
3. *A. Adequacy of vehicle parking relative to both the anticipated demand and zoning code requirements*
   B. Estimated Trip Distribution and VMT Calculations, with and without project
4. *Adequacy of the project site design to fully satisfy truck circulation and loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day*
5. *Adequacy of the project site design to provide at least a 25 foot minimum required throat depth (MRTD) at project driveways, include calculation of the MRTD*
6. *Adequacy of the project site design to convey all vehicle types*
7. *Adequacy of sight distance on-site*
8. *Queuing analysis of "drive-through" facilities"*

This report satisfies the requirements of the OSTR process by including a section for each of the eight items listed above, in the pages that follow.

Description of Project

The project seeks a license for 87,120 sq.ft of outdoor full-term cultivation THC cannabis. The project is located at 4941 D'agostini Dr. in Somerset, CA 95684, and has Parcel ID: 046-710-17-100. The Lot area is 46.53 Acres and is an existing agricultural operation growing grapes on the southernmost portion of the property. The property has an entrance and exit on D'Agostini Drive. The property has an existing residence, an existing well, and a security gate. The operation will have 4 full time and 5 to 6 seasonal temporary employees. Since the parcel has an existing agricultural operation (vineyard/grapes), the addition of commercial cannabis will create a de minimis amount of new traffic on D'Agostini Drive. Figure 1A shows the proposed site plan for the project. Figure 1B shows a more detailed site plan of the area where the cultivate will take place.

[1] https://www.edcgov.us/Government/dot/Documents/TIS_Initial_Determination_Form.pdf

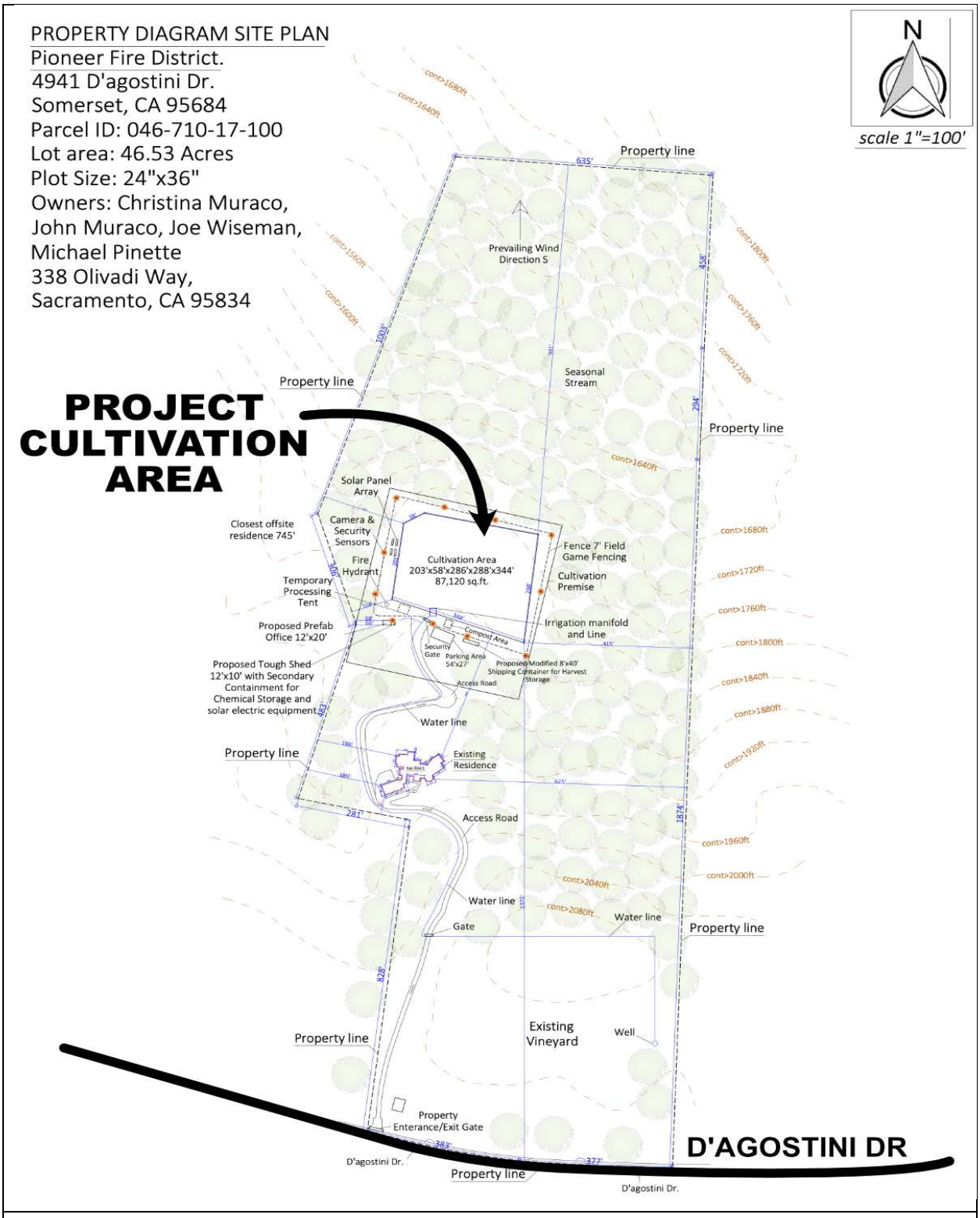


FIGURE 1A. SITE PLAN PROPOSED BUILDING STRUCTURES, EXISTING RESIDENCE, AND DRIVEWAY / PARKING AREA

The project will add a temporary 10’ x 30’ Seasonal Processing Tent, a proposed 12’ x 20’ Prefab Office, a proposed 12’ x 10’ Tough Shed for storage of chemicals and solar electric equipment, and a proposed 8’ x 40’ Shipping Container for Harvest Storage. There will also be security features (cameras, alarm sensors, lights, new fencing and gates), as well as a 54’ x 27’ parking area.

There are no close neighboring residences that can receive off-site impacts from the site. The project consists of agricultural farm uses for cannabis production, and will have no customers on site.

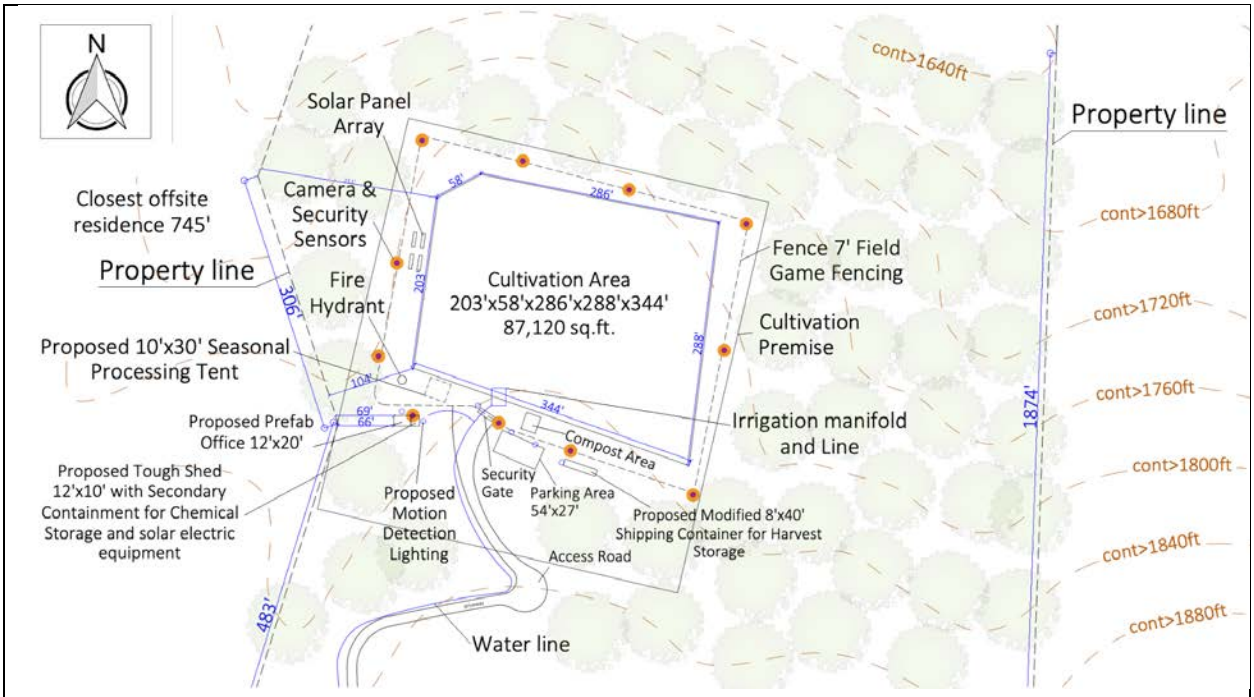


FIGURE 1B. PREMISE SITE PLAN DETAILS, 87,120 SF CULTIVATION AREA

The combined square footage of the structures that could be considered office and related light industrial uses, is 240 SF + 300 SF + 120 SF + 320, for a combined total square footage of 980 SF.

PARKING LOT EVALUATION

The parking situation on the site plan shows a parking area (27 feet by 54 feet) that is directly off the east side of the driveway hammerhead turnaround area at the end of the driveway. The driveway has a single connection to D’Agostini Drive, which has a main gate access with a throat width of 22 feet at the gate, and 36 feet of driveway throat length outside of the gate from the edge of D’Agostini Drive. The driveway has a minimum width of 12 feet which flares out to a maximum width of about 60 feet at the hammerhead ending of the driveway, interfacing directly with the parking area as shown in Figure 2. A 32 foot fire truck can easily make the turn-around in this hammerhead / parking area because there is a 40 foot inside radius pathway for the vehicle. A typical fire truck is 32 feet long, 10 feet wide, and has a wheelbase axle

separation of about 17 feet[2]. This means that it has a high level of maneuverability in tighter constrained areas because the front and rear bumpers extend approximately 7 feet beyond the wheels. This allows these vehicles to make tighter turns. This site plan was conservatively analyzed using a 40 foot turn radius, even though a 32 foot long fire truck can have a turn radius as little as 25 feet.

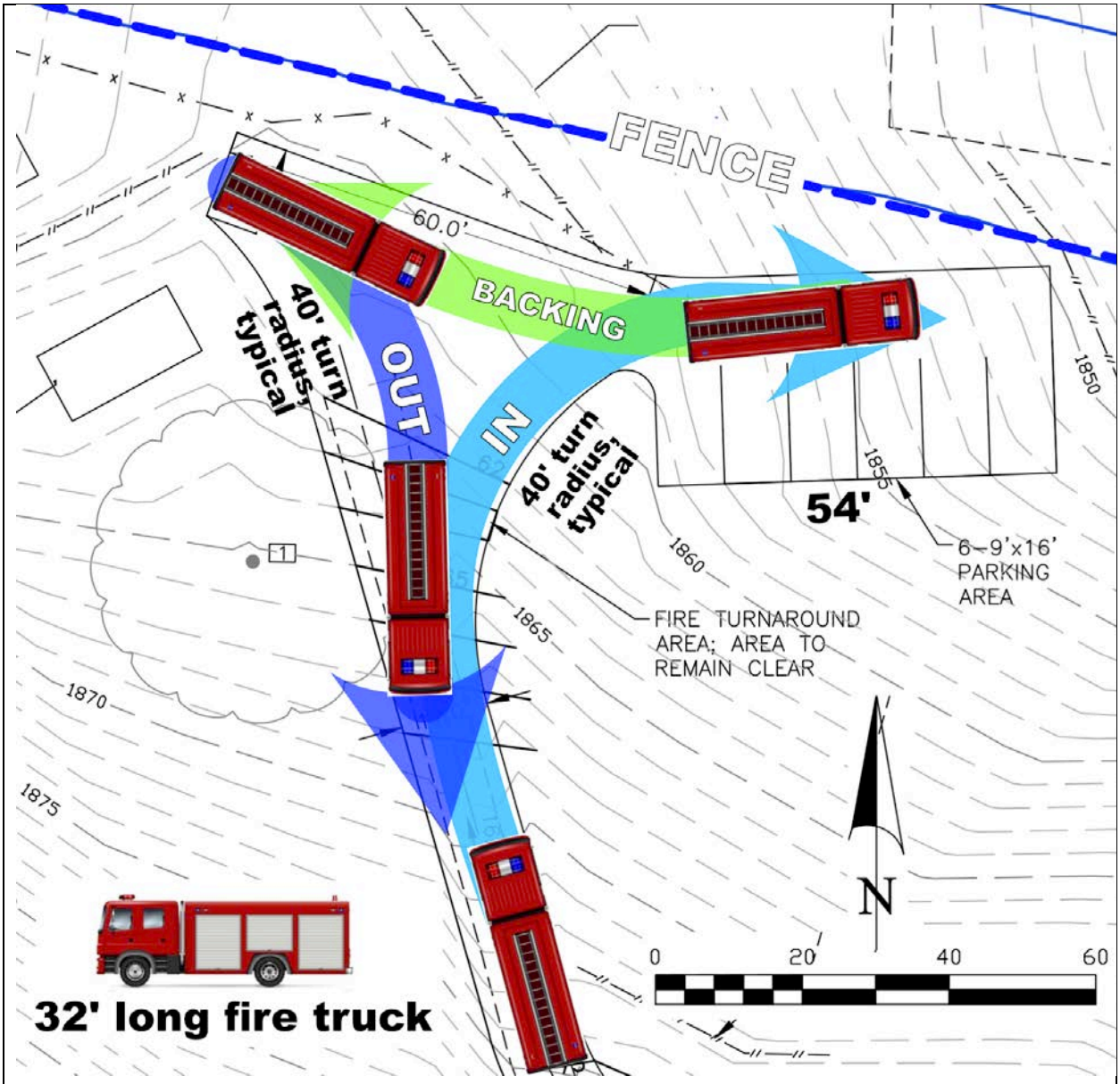


FIGURE 2. 32' LONG FIRE TRUCK, TURN AROUND MANEUVER, OK.

[2] https://www.amherstma.gov/DocumentCenter/View/24390/SUB2014-01-The-Retreat-Prelim-Subdiv-Fire-Dept-Apparatus-Dimensions?bidId= (Fire truck dimensions and specs typical of numerous jurisdictions)

OSTR Item #1: Existence of current traffic problems in the local area such as a high-accident location, non-standard intersection/roadway, or an intersection in need of a traffic signal

Traffic Accident History.

Over a five year period from Jan 1, 2016 to Dec 31, 2020, there were three (3) accidents in the vicinity of the Mt. Aukum Road and D'Agostini Road intersection in the Mount Aukum community. Figure 3 is an accident location map showing the location and type for each of these three accidents, each being injury accidents. Figure 3 also shows the detailed information about each accident.

A brief summary of Table 1, which corresponds to Figure 3, is that in the past five years there were only three accidents at or near to the intersection of Mt. Aukum Road and D'Agostini Road, one being a **sideswipe** accident at the intersection for two northbound vehicles, one of the drivers making an unsafe turn. The other two accidents were where the vehicle ran off the road and **hit a fixed object**. In both of these cases the driver was impaired with alcohol or drugs. All three accidents were injury accidents, but with no fatalities.

Based on this information, the traffic accident situation does not have any repeating patterns that would be relevant to the project, and all seem to be entirely separate and independent from each other, each due to driver error and not road design. The traffic control devices installed on the roadways in the vicinity of the Mt. Aukum Road and D'Agostini Road intersection are installed according to standard CAMUTCD guidelines and regulation based on my field inspection of the local roadways.

There were no accidents in 2017, or 2019. The accidents are shown in Table 1 below:

Table 1. Traffic Accident History Summary (*5 years, 2016-2020*)

Date of Accident	Type of Accident	Location of Accident	Injury or Fatal	Case ID
Oct 29, 2016	SB Car Ran Off Road, Hit Fixed Object	Mt Aukum Rd 120' n/o D'Agostini Rd	Injury	90314503
Oct 6, 2018	NB Car Sideswiped NB Car, Unsafe Turn	Mt Aukum Rd 5' s/o D'Agostini Rd	Injury	90833823
Nov 26, 2020	SB Car Ran Off Road, Hit Fixed Object	Mt Aukum Rd 1214' s/o Cedar Creek Rd Intersection	Injury	91358352

Source: SWITRS and TIMS Interface[3]

[3] https://tims.berkeley.edu TIMS SWITRS GIS Map By SafeTREC, UC Berkeley

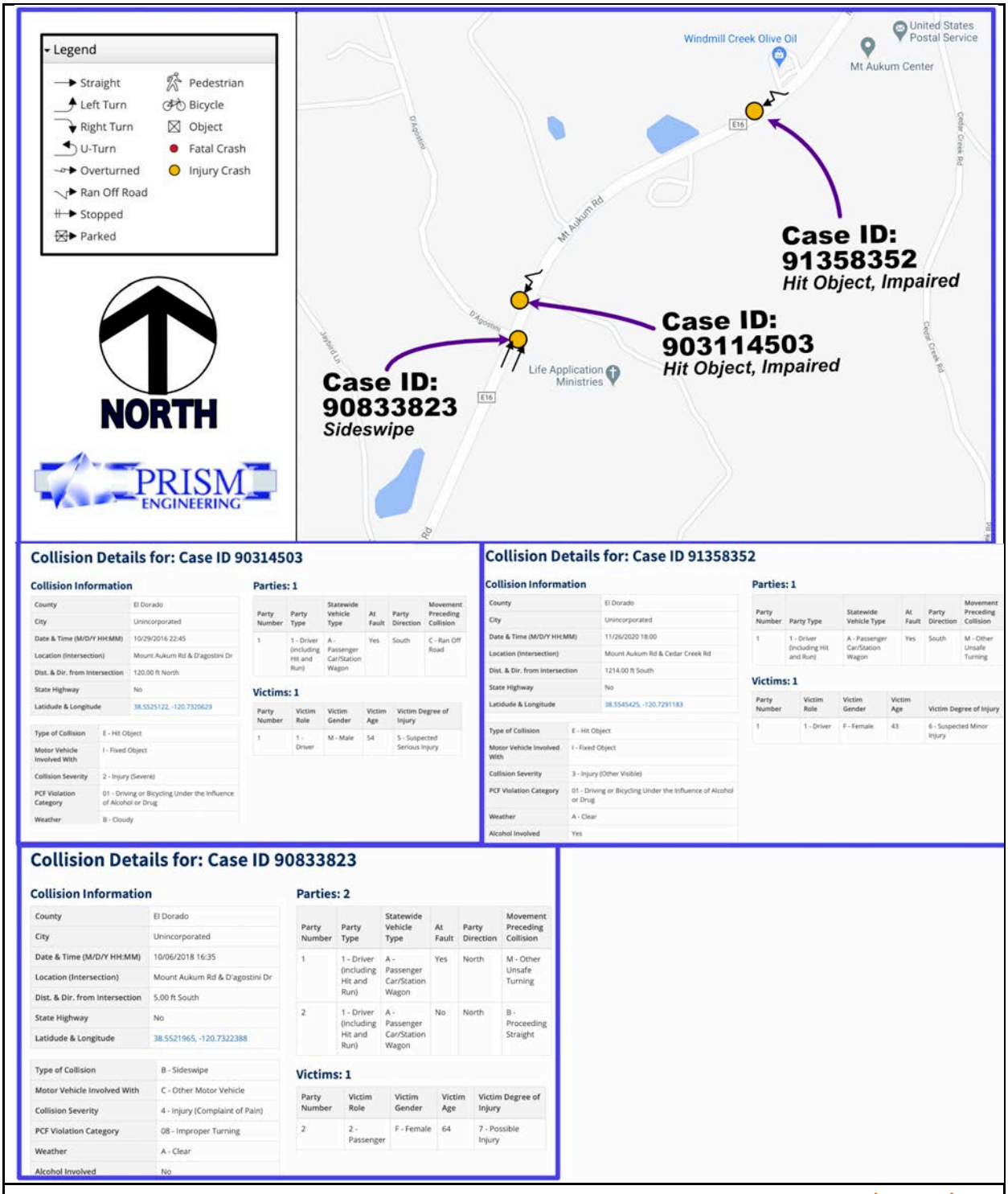


FIGURE 3. ACCIDENT LOCATION MAP - JAN 1,2016 - DEC 31,2020 (5 YRS)

ACCIDENT ANALYSIS

PRISM Engineering referenced the *County of El Dorado Transportation Division, Annual Accident Location Study 2017, APRIL 12, 2018*, in developing the accident summary information for the study area roadways. This document showed that there were three accidents identified in the study on Mt. Aukum Road, but about 5 miles to the north of D'Agostini Road (see excerpt below). The accident codes[4] shown to document the type of accident.

Site No.	Street	Mile Post	Dist.	Dir.	Cross Street	Injury	Fatal	Code
	MT AUKUM RD	5.91	250	WEST	FAIRPLAY RD	1	0	13
	MT AUKUM RD	5.93	140	SOUTH	FAIRPLAY RD	0	0	5
	MT AUKUM RD	6.00	190	NORTH	FAIRPLAY RD	1	0	3

Intersection accident rates are expressed as Accidents per Million Vehicles Entering (Acc/MEV) the intersection. Since the daily volume on Mt. Aukum Road is 3,920 cars per day, and 2,174 ADT on Fairplay Road, the total combined daily volume entering the intersection of Mt. Aukum Road and Fairplay Road is 6,094 ADT. Over a five-year period, the total volume entering the intersection would be 5 x 365 x 6094 = 11,121,550 vehicles, and there were three accidents during the same time period. Using the Acc/MEV equation, this accident rate for Mt. Aukum Road in the Somerset area near Fairplay Road is calculated as:

3 accidents/11.12 M vehicles = 0.27

This 0.27 accident rate is far less than the 1.0 value set forth in the El Dorado County accident rate thresholds for an intersection.

In the Mt. Aukum community area near the D'Agostini Road intersection, the Mt. Aukum Road ADT is 3,920 cars per day. D'Agostini Road is estimated to be as high as 1,000 ADT based on the number of homes in the area that may use the D'Agostini / Mt. Aukum intersection (50-100 homes). Over a five-year period, the total estimated volume entering the intersection would be 5 x 365 x (3,920+1,000) = 8,979,000 vehicles, and there were three accidents during the same time period. Using the Acc/MEV equation, this accident rate for Mt. Aukum Road in the Mt. Aukum area is calculated as:

3 accidents/8.98 M vehicles = 0.33

This 0.33 accident rate is also far less than the 1.0 value set forth in the El Dorado County accident rate thresholds for an intersection.

The accidents summarized in this section, overall do not meet the minimum thresholds to be a "Location Requiring Further Investigation," also because there:

- Must be a site with 3 or more accidents in a single year *(Not the case)*
- Two or more accidents, one being fatal in a single year *(Not the case at any single location)*
- Sites with two or more in a single year, two or more with motorcycles within 0.25 mile section *(Not the case)*

4 The following code numbers have been used to classify the various major types of accidents:

1 = Headon	2 = Sideswipe	3 = Rearend
4 = Broadside	5 = Hit Object	6 = Overturned
7 = Pedestrian Involved	8 = Bicycle Involved	9 = Animal Involved
10 = Parked Vehicle Involved	11 = Snow Removal Equip. Involved	12 = Other
13 = Motorcycle Involved	14 = School Bus Involved	

- Sites with two or more in a single year, two or more with bicycles within 0.25 mile section *(Not the case)*
- Sites with two or more in a single year, two or more with pedestrians within 0.25 mile section *(Not the case)*
- Sections of homogeneous roadway with five (5) or more accidents of a similar type occurring within a quarter-mile section during a single year *(Not the case)*.

Based on these findings, no recommendations are made to mitigate based on traffic accident history.

OSTR Item #2: Proximity of proposed site driveway(s) to other driveways or intersections

The project site has direct access to D'Agostini Road, a narrow paved residential access road, 20 feet in width, with no centerline or edge line striping. There is a four-way stop controlled intersection at Bertone Drive, as shown in Figure 4. The width of the road throughoute is 20 feet. The nearest adjacent driveway to the project driveway is 50 feet to the east on the opposite side of the road (4940 D'Agostini Road), and another home's driveway is 360 feet to the west (4916 D'Agostini Road). Figure 4 shows D'Agostini Road in two locations, one at Bertone Drive intersection, and the other photo is immediately adjacent to the subject project property (located to the right in the photo). D'Agostini Road is 20 feet in width at both locations. The driveway and gated entry of the property can be seen in Figure 4, looking to the west.

20 foot wide D'Agostini Road at Bertone Drive intersection, a four-way stop, looking west

20 foot wide D'Agostini Road along frontage of project site, looking west

FIGURE 4. D'AGOSTINI ROAD, A PAVED 20' WIDE ROAD

Because this is a residential street with very low traffic volumes, there are no situations where project property will have a driveway that is in conflict with any other driveway in the vicinity of the project site. This OSTR item is not an issue with the proposed project location and setting.

OSTR Item #3A: Adequacy of vehicle parking: anticipated demand, zoning code req.

The project site is very large (46.53 acres total) and has grape agriculture uses currently active on the site. A dedicated parking area with six (6) parking spaces is shown on the site plan, and located at the end of the driveway and adjacent to the cultivation farming area. Since there are only four (4) full-time employees, the project site has ample space to accommodate additional vehicles above those needed for employees. There will be no customers coming to the site, as it is primarily a farm operation, with a combination crop. Occasionally, up to three times a year for a couple of weeks at a time, there will be need for additional parking when temporary employees are staying, or for occasional visitors, etc., and this can be accommodated on the site, even on the wider portions of the driveway turn-around area as shown in Figure 2.

OSTR Item #3B: Estimated Trip Generation and Trip Distribution

El Dorado County DOT previously requested that PRISM Engineering conduct trip generation surveys for similar cannabis farming uses since there were no DOT established trip generation rates available for cannabis cultivation farming. PRISM Engineering under the direction of County DOT collected data pertaining to similar uses for a period of seven days, so that a basis could be formed to develop a specific trip generation. Data was collected at two similar cannabis cultivation sites in northern California, and a summary of this data is contained in the Appendix of this report[5].

County DOT reviewed this survey data, and in conjunction with review of several other sources of similar data, subsequently developed the specific trip generation rate to be used in this study. This composite trip generation rate is very similar in bottom-line results to the surveys conducted (22.3 trips vs 27.7 trips), but is based on a comparison to the Institute of Transportation Engineers (ITE) "110 Light Industrial" trip generation rate, which has been modified for use in assessing cannabis farm sites in El Dorado County, and is based on the number of square feet of the specific permanent structure/building on the site.

The project site total building square footage used in our calculation of trip generation was 980 square feet, as shown in Table 2A below. The trip rate for the number of employees at harvest time of the project is also given in Table 2A (3 trips/emp), and this results in 30 daily trips with 10 employees, which is also below the Policy TC-Xe threshold of 100 daily trips.

The result in the last column of Table 2A is that the daily trip generation of the project is calculated to be below 100 trips per day (4.9 trips per day for the 980 square footage metric, or 30 trips per day based on the worst case seasonal harvest time employee count of 10 employees). Either way, a formal traffic impact study requirement is ***not*** triggered based on the threshold of 100 daily trips.

[5] Result of survey: 27.7 daily trips per 2 acres of cannabis cultivation canopy. See Appendix for details.

Table 2A. Trip Generation Summary of Project, KSF* vs Employees

ITE Trip Generation Manual Trip Generation Period (110 Light Industrial)	ITE Trip Generation Rate per KSF GFA	KSF of Facility	Trips	Threshold Policy TC-Xe	Conclusion
daily	**4.96**	**0.98**	**4.9**	100	*4.9 < 100, traffic study not needed*
a.m. peak hour	0.70	0.98	0.7	10	
p.m. peak hour	0.63	0.98	0.6	10	
ITE Trip Generation Manual Trip Generation Period	**ITE Trip Generation Rate per EMPLOYEE**	**Number of EMPLOYEES**	**Trips**	**Threshold Policy TC-Xe**	**Conclusion**
daily	3	10	30	100	30 < 100

*Source: El Dorado County DOT and PRISM Engineering. *KSF=1,000 square feet*

Detailed Project Operations Description

The regular project traffic anticipated is up to 4 cars from employees arriving each day. The temporary employees will be on the site as shown in Table 2B below, for a total of 4 regular employees, and 6 temporary employees during seasonal harvest (maximum total of 10 employees).

Table 2B. Employee Activity for Project

	REGULAR EMPLOYEE				TEMP
ACTIVITY	**1**	**2**	**3**	**4**	**6**
Cannabis Production	X	X	X	X	
Cannabis Storage	X	X	X	X	
Administrative	X	X	X	X	
Sales	X				
Distribution	X				
Processing	X	X	X	X	
Cultivation/Seasonal Harvest	X	X	X	X	XXXXXX
Cultivation Maintenance	X	X	X	X	
TOTALS	3 Employees				

Source: Project Applicant, and PRISM Engineering.

Occasionally there will be small delivery trucks, but not on a regular daily basis. There will be no customers to the farm site, as it will not be open to the public. There may be occasional inspections from the Fire Department, or from the local Sheriff (rare), but all other traffic will be the limited employee commute related traffic and occasional errands/deliveries or picking up of product, but not on a regular daily basis.

The weekday average peak hour traffic volume on Mt. Aukum Road is only 88 vehicles per hour in the pm peak hour (see traffic count in Appendix). The project is anticipated to add up to 4 vehicles in a single direction inbound in the am or outbound pm peak hour. Any traffic impact to this existing LOS A condition

is considered negligible and insignificant since the local street volumes are very low and operating as uncongested traffic.

OSTR Item #4: Adequacy of the project site design: truck circulation, loading demand on-site, when the anticipated number of deliveries and service calls may exceed 10 per day

The OSTR guideline thresholds for deliveries and service calls is that the project must not exceed 10 per day, or the site has to be evaluated for adequacy of truck circulation. Since the project will not have daily deliveries and service calls even on a daily basis, this 10 trip per day threshold cannot be met. The project site is adequate to satisfy all future truck circulation and loading demands, as all such occasional activity will take place entirely on the large site, and any delivery trucks will be of small size (panel trucks, etc.). There is a hammerhead parking area at the end of the driveway enabling simple turn-around of vehicles including large emergency response fire trucks (32 feet in length), by making a simple three-point turn-around manuever (see Figure 2).

OSTR Item #5: Adequacy of the project site design to provide at least a 25 foot minimum required throat depth (MRTD) at project driveways, include calculation of the MRTD

There is an existing gate to the entrance to the property located on the north side of D'Agostini Road, with an address of 4941 on the gatge fencing to the east of the driveway. The driveway throat length is 36 feet long, exceeding the 25 foot County minimum, and the 30 foot minimum threshold set forth by the Fire Marshall (see letter from Pioneer Fire Protection District (PFPD) Fire Marshall contained in Appendix). The project site driveway has adequate throat depth storage for even large emergency response vehicles. The width of the existing driveway is 22 feet, and exceeds the 20 foot minimum set forth by the PFPD.

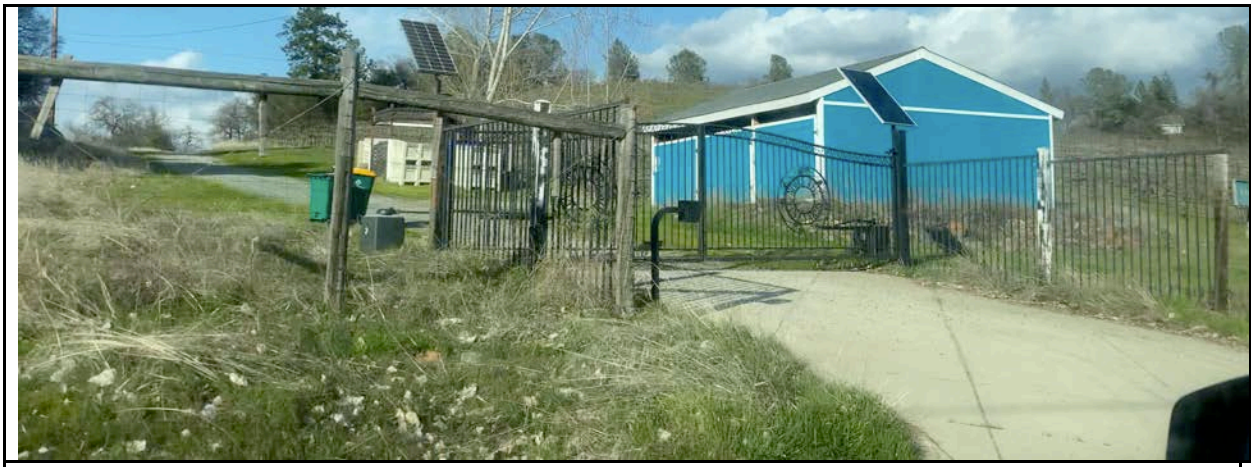


FIGURE 5. PROJECT ENTRANCE DRIVEWAY, DRIVEWAY THROAT DISTANCE

OSTR Item #6: Adequacy of the project site design to convey all vehicle types

The proposed project site driveway is able to convey construction equipment as needed during the initial construction phase of building the structures on the site. There will be a hammerhead parking lot / turn around area at the end of the driveway into the project site. A large 32 foot fire engine truck can navigate a complete turn-around using the proposed driveway and parking area. This same fire engine can also be in the throat of the gated driveway without blocking traffic on D'Agostini Road (throat length is 36 feet). The Pioneer Fire Protection District (PFPD) has reviewed and approved the initial review of the D'Agostini Road Improvement Grading Project. The Appendix contains the contents of this letter of approval for the project site and driveway to accommodate emergency fire response. All of the driveway, gate throat length, driveway width, and vertical clearances meet or exceed the thresholds set forth in the PFPD approval letter, dated March 11, 2021, from Kara Garrett, Fire Marshall.

OSTR Item #7: Adequacy of sight distance on-site

A detailed sight distance analysis was conducted by Grant Johnson, TE at the intersection of Mt. Aukum Road and D'Agostini Road. This intersection represents the location where the project might have an impact to sight distance safety, if the sight distance situation were to be found deficient.

As part of the sight distance evaluation, a video recording of the driver's actual sight distance was made to document the real-world condition of how far a driver can see in front of them. It is assumed in sight distance evaluation that the relevant distance is the distance that travels a straight line from one driver's eye to the other driver's eye. This ensures that the stopping sight distance is relevant to how each driver sees the other driver in a real world condition. If there are any trees or bushes obscuring this direct line of sight, then this would be a potential sight distance deficiency if the distance available is less than the approved thresholds as outlined in the Caltrans criteria. Figure 6 shows the Caltrans stopping sight distance table.

The speed limit on Mt. Aukum Road is generally unposted in the area, assumed to be prima facie at 55 mph, but just to the north of D'Agostini Road there is a 45 mph speed zone through the Mount Aukum community along Mout Aukum Road.

The safe stopping sight distance criteria listed in the Caltrans Design Manual are based on certain assumptions in human driving behavior relating to "perception" time, and "reaction" time, along with a deceleration time once the driver's foot is on the brake and pressing. The design standards of the American Association of State Highway and Transportation Officials (AASHTO) allow 1.5 seconds for perception time and 1.0 second for reaction time[6], a total of 2.5 seconds before the vehicle even begins to slow down. The Highway Design Manual's *Table 201.1, Sight Distance Standards*, is based on the 2.5 second AASHTO formula.

A 55 mph speed requires a stopping sight distance of 500 feet as per the Caltrans standards shown in Table 201.1, Sight distance Standards (based on AASHTO formula.).

[6] Joseph E. Badger, Human Factors: Perception and Reaction, at 1-2

Table 201.1
Sight Distance Standards

Design Speed[1] (mph)	Stopping[2] (ft)	Passing (ft)
10	50	---
15	100	---
20	125	800
25	150	950
30	200	1,100
35	250	1,300
40	300	1,500
45	360	1,650
50	430	1,800
55	500	1,950
60	580	2,100
65	660	2,300
70	750	2,500
75	840	2,600
80	930	2,700

(1) See Topic 101 for selection of design speed.
(2) For sustained downgrades, refer to advisory standard in Index 201.3

CHAPTER 200
GEOMETRIC DESIGN AND STRUCTURE STANDARDS

Topic 201 - Sight Distance

Index 201.1 - General

Sight distance is the continuous length of highwa ahead, visible to the highway user. Four types sight distance are considered herein: passin stopping, decision, and corner. Passing sig distance is used where use of an opposing lane c provide passing opportunities (see Index 201.2 Stopping sight distance is the minimum sig distance for a given design speed to be provided multilane highways and on 2-lane roads wh passing sight distance is not economical obtainable. Stopping sight distance also is to provided for all users, including motorists a bicyclists, at all elements of interchanges a intersections at grade, including private ro connections (see Topic 504, Index 405.1, & Figu 405.7). Decision sight distance is used at maj decision points (see Indexes 201.7 and 504.2 Corner sight distance is used at intersections (s Index 405.1, Figure 405.7, and Figure 504.3J).

FIGURE 6. CALTRANS STOPPING SIGHT DISTANCE STANDARDS

Figure 7 shows driver's line of sight, eye-to-eye point of view for evaluating the sight distance in our analysis.

Northbound Direction of Mt. Aukum Road.

PRISM Engineering found that there is over 950 feet of available sight distance at the driver's eye level for traveling in a car going northbound on Mt. Aukum Road, to the drivers' eye of a vehicle stopped at the D'Agostini Road stop sign (as shown by the straight line view depicted by the yellow arrow in the photo below). This is more than adequate stopping sight distance, since the minimum required is 500 feet for 55 mph. Sight distance is not an issue for the NB direction of Mt. Aukum traffic approaching the D'Agostini Road intersection.

Southbound Direction of Mt. Aukum Road.

PRISM Engineering found that there is over 590 feet of available sight distance at the driver's eye level for a car going southbound on Mt. Aukum Road, to the drivers' eye in a vehicle stopped at the D'Agostini Road stop sign ahead. This is more than adequate stopping sight distance, since the minimum required is 500 feet for 55 mph which is the unposted prima facie speed limit here. The photo was taken from a section of Mt. Aukum Road where there is a cresting of the road so the elevation is flat at around 2,100 feet aboive sea level. However, this picture is taken just after an "End 45 MPH" speed limit sign for SB traffic just 650 feet before. Sight distance in any case is not an issue for the SB direction of traffic on Mt. Aukum approaching the D'Agostini Road intersection.

FIGURE 7. SIGHT DISTANCE, MT AUKUM RD SOUTHBOUND AND NORTHBOUND

There are no sight distance issues on Mt Aukum Road at this location at or near D'Agostini Road.

An additional sight distance evaluation was made for the driveway of the project site along D'Agostini Road which is near Bertone Road (located about 2000 feet to the west of Bertone Road). This street is a residential street serving the residential homes in the area. Traffic volumes were are observed to be very low, typical of a rural low density neighborhood street. Figure 8 shows this driveway which is gated and has a 36 foot throat which is large enough to store a large truck, or two vehicles. The width of the driveway is 22 feet, more than adequate for storage of vehicles even in both directions.

D'Agostini Road at Project Driveway, looking north

D'Agostini Road Approaching Project Driveway, looking west, has over 500 feet of Sight Distance

FIGURE 8. SIGHT DISTANCE SURVEY FOR D'AGOSTINI ROAD AT PROJECT SITE

There is adequate sight distance in all directions at this drivway, with vertical and horizontal curves while driving east there is 275 feet of stopping sight distance available from the driver's perspective to the project driveway. This is more than adequate for a 35 mph speed. Driving in the westbound direction there is over 500 feet of stopping sight distance available approaching the project driveway, exceeding

the standard Caltrans site distance threshold. There is no speed limit posted on this curving and hilly road, but in my opinion, 25 mph to 35 mile miles per hour is a safe range of speed, typical for what a driver would do in this rural neighborhood.

OSTR Item #8:
Queuing analysis of "drive-through" facilities"

This project will not have drive-through facilities, and is a low-traffic impact farm use. The site is gated and will not be open to the public.

Appendix

Pioneer Fire Protection District (PFPD) Approval Letter

PIONEER FIRE PROTECTION DISTRICT
FIRE • RESCUE • EMS
7061 Mt. Aukum Road/P.O. Box 128
Somerset, California95684
Phone (530) 620-4444 • Fax (530) 620-4317
www.pioneerfire.org

3/11/2021

4941 D'Agostini Dr.
Somerset, CA 95684

Re: D'Agostini Road Improvement Grading Project

Dear Jim Mault,

The Pioneer Fire Protection District (PFPD) has reviewed and approves the initial review of the above-referenced grading project and submits the following comments regarding the ability to provide this site with fire and emergency medical services consistent with the El Dorado County General Plan, State Fire Safe Regulations, as adopted by El Dorado County and the California Fire Code as amended locally. The Pioneer Fire Protection District reserves the right to update the following comments to comply with all current Codes, Standards, Local Ordinances, and Laws with respect to the official documented time of project application and/or building application to the County. Any omissions and/or errors in respect to this letter, as it relates to the aforementioned codes, regulations and plans, shall not be valid, and does not constitute a waiver to the responsible party of the project from complying as required with all Codes, Standards, Local Ordinances, and Laws.

The Fire Chief is authorized to modify any of the provisions of this standard upon application in writing by the owner, a lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of this standard, provided that the spirit of the standard shall be complied with and public safety is secured. The particulars of such modification and the decision of the Fire Chief shall be entered upon the records of the Pioneer Fire Protection District and a signed copy shall be furnished to the applicant.

Contact Fire Marshal Kara Garrett at the Pioneer Fire Protection District with any questions at 530-620-4445.

Sincerely,

Kara Garrett
Fire Marshal, Fire and Life Safety Director
Pioneer Fire Protection District
kgarrett@pioneerfire.org
Office: (530) 620-4445

PIONEER FIRE PROTECTION DISTRICT
FIRE • RESCUE • EMS

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1. **Address**

Address numbers. All new and existing buildings shall place and maintain approved numbers or address identification on the buildings so as to be plainly visible and legible from the street or read fronting the property. Approved numbers or address identification shall be placed prior to occupancy or all new buildings. Said numbers shall contrast with their background and shall be visible at all hours of the day and night by way of internal or external illumination. Numbers shall be a minimum of 4 inches high with a minimum stroke width of .5 inch. External source illumination shall have an intensity of not less than 5.0 foot-candles.

2. **Building under construction Addressing System**

Approved numbers or addresses shall be placed at each fire access road entry into and on each building within construction sites. Numbers shall be visible from at least 100 feet.

3. **Driveways**

Driveways for access to one- and two-family dwellings shall conform to the following criteria as applicable:

1. Driveways serving one parcel with no more than five structures shall be a minimum of twelve (12) feet in width. The Fire Chief may require up to twenty (20) foot wide driveway when more than five structures exist.
2. Roadways serving more than one parcel, but less than fire parcels, shall be a minimum twenty (20) feet in width. Roadways serving five parcels or more shall be no less than 24 feet in width.
3. Vertical clearance shall be a minimum of fifteen (15) feet.
4. When the driveway exceeds 150 feet in length, provide a turnout at the midpoint. For driveways not exceeding 400 feet in length, the turnout may be omitted if full sight distance is maintained. If the driveway exceeds 800 feet in length, a turnaround shall be provided not greater than 50 feet from the structure.
5. When a driveway exceeds 300 feet in length, a turnaround shall be provided no greater than 50 feet from structure.
6. The driveway must be provided with an all-weather surface capable of supporting a 75,000 lb. vehicle loading. When the road grade exceeds ten (10) percent, the road shall be surfaced with asphalt or concrete.

4. **Roadway and Driveway Width**

Roadway width shall mean driving surface to face of curb or flow line or rolled gutter. All roadways and access roads shall be complete before any building construction. Roadways serving four or less parcels shall be no less than 20 feet in width. Roadways serving five parcels or more shall meet El Dorado County Standards but shall be no less than 24 feet in width. Driveways serving one parcel but no more than 5 structures shall be a minimum of 12 feet in width. Vertical clearance shall be 15 feet for the width of the road. For the purpose of this section, roadway width shall mean driving surface to face of curb or flow line of rolled gutter. Driveways exceeding 150 feet in length, but less than 800 feet in length, shall

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provide a turnout near the midpoint of the driveway. If driveway exceeds 800 feet, turnouts shall be no more than 400 feet apart. A turnaround shall be provided at all building sites on driveways over 300 feet in length and shall be within 50 feet of the building. All roadways and access roads shall be completed before any building construction.

5. **Driveway Bridges**

Bridges designed for major ingress/egress roads serving subdivisions or used as part of a fire apparatus access road shall be constructed and designed to meet standard, AASHTO HB-17. Bridges shall be no narrower than the driving portion of the road serving each end. The bridge or culvert crossing shall be designed for a live load of a minimum of 75,000 pounds gross vehicle weight. Vehicle load limits shall be posted at both entrances to bridges and culvert crossings.

6. **Driveway Grades**

In order to accommodate driveway grades in excess of sixteen (16) percent, the driveway shall be designed to have a finished surface of grooved concrete or rough asphalt to hold a 45,000 lb. traction load. The concrete grooves shall be ¼ inch wide by ¼ inch deep and ¾ inch on center. The road design shall be certified by a registered engineer and approved by the Fire Chief/Fire Marshal.
Emergency Fire access roads and response routes 12% or more shall be approved by the Fire Chief or Fire Marshal.

7. **Driveway Radius**

The inside turning radius for an access road shall be 30 feet or greater. The outside turning radius for an access road shall be 50 feet or greater.

8. **Driveway Surface**

Driveway surfaces shall be paved or similar all weather hard packed approved surface, capable of supporting a 75,000 lb load.

9. **Driveway Turnarounds**

Turnarounds are required on driveways and dead-end roads as specified. Cul-de-sacs radius shall be 42 feet of driving surface, measured from face of curb or flow line of rolled curb. If a hammerhead/T is used, the top of the (T) shall be a minimum of 80 feet in length.

10. **Dry and Dead Vegetation Abatement**

Open areas around residential homes shall be maintained in a fire safe condition. The homeowner shall be responsible to remove dead and dry vegetation at least 100 feet or to the lot line from all non-fire resistive structures as per CFC, Sections 304.1.1; 304.1.2 and California Public Resource Code 4291. This includes all homes and outbuildings

11. **Gates/Access Control Devices**

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A. Installation Requirement

Entrance roads (at the gate) shall have a minimum unobstructed width of fifteen (15) feet each lane if divided, or twenty (20) feet total width if not divided. An unobstructed vertical clearance shall not be less than fifteen (15) feet. Gates over a driveway shall have a minimum unobstructed width of fourteen (14) feet. The gate shall be a minimum of two (2) feet wider than the road/driveway surface. An unobstructed vertical clearance shall not be less than fifteen (15) feet.

Gates shall be inset off the roadway as to avoid stacking and to provide an area of refuge while the gate is operated and opened. This inset shall be a minimum of thirty (30) feet from the adjacent roadway or driveway edge. The key pad shall be placed within ten (10) feet of the gate. If the key pad is placed more than ten (10) feet from the gate, then the gate inset shall be increased respectively to accommodate the additional footage.

All automatic gates shall be equipped with a "Knox" emergency access override system that consists of a low security key activated switch located in accordance with Fire District requirements. All automatic gates shall also be equipped with both 3M Opticom Control device. The device shall be placed in a location allowing operation from 75 feet away. Exception: Single family R-3 Linear receiver device (approved by the Fire District) to allow remote activation by emergency vehicles: Shall be programmed to operate with the Fire Districts current transmitters. Contact local AHJ for transmitter frequencies. Exception: Single family R-3 Automatic gates shall be
equipped with a mechanical release. Automatic gate loop systems located on the inside portion of the access roadway shall permit vehicular traffic to open the gate from the inside by driving over the loop. This process shall not take any special knowledge, actions or codes to open the gate to exit the area. The loop system shall also keep the gate open as long as vehicular traffic is passing through it. All automatic gates shall be designed to automatically open and remain in a fully opened position during power failures.

All gates creating a dead-end road in excess of one hundred fifty (150) feet in length shall be provided with approved provisions for the turning around of fire apparatus. The gradient for the fire apparatus access road shall not exceed the maximum approved by the Fire Department. The intent is to provide a level landing area on either side of the gate to allow emergency apparatus to be parked in a safe manner when it is necessary to exit the vehicle for manual gate activation. All automatic gates must reach the fully open position within a total time not to exceed one second for each foot total width. The receiving devices shall be installed so the signal from the transmitter will open the gate approximately 75 feet from the gate location. Exception: Single family R-3 Prohibited Devices: All required vehicle access openings shall provide both ingress and egress. Direction limiting devices, such as fixed tire spikes, are prohibited. No device may be used which will delay the ingress or egress of emergency responders. The total number of vehicle access control gates or systems, through which emergency equipment must pass to reach any address, shall not exceed one.

12. Manual Gates

Manual gates shall have a KNOX padlock installed for emergency access.

13. Gated Entrances – Residential Lot

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Gate entrance on driveway to individual lots shall provide a clear open width at least two feet wider than the width of the driveway (normally a minimum width of 14 feet). Property owner should contact the Fire Prevention Division to determine the best option of providing Fire District access. The owner shall provide a code or key to access through the gate (key box). Electronically opened access gates shall be provided with a Model #3502 electronic override switch manufactured by the KNOX Company. Said switch shall interface with the key pad at the entry gate to provide fire apparatus access to the site. An acceptance test of the Knox access system shall be witnessed by the fire district prior to final approval of the project.

14. Gate Plans

Plans for the installation of automatic gates on fire apparatus access roadways shall be submitted to the Pioneer Fire Protection District for approval prior to installation. The number and type of plans (paper or digital) shall be submitted per the direction of the Pioneer Fire Protection District (one full set).

15. Gates Testing and Acceptance

Gates and access control equipment shall be inspected and tested by the Pioneer Fire Protection District prior to being placed into service.

APPENDIX TRAFFIC COUNTS

EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

Count Summary Beginning: August 24, 2019

Count Station:	1200078	Counter ID:	66
City/Town:	Somerset	Mile Post:	**8.80**
Road Name:	**Mt Aukum Road**	Location:	**300 Ft. S. of Bucks Bar Rd.**
Lanes:	2	Direction:	NORTHBOUND

Date	25	26	27	28	29	30	24	Weekly	Wk Day
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
100	14	5	3	4	6	7	6	6	5
200	4	2	2	2	2	5	2	3	3
300	3	3	4	2	2	0	2	2	2
400	1	4	6	7	6	4	4	5	5
500	5	19	21	24	19	21	7	17	21
600	12	49	59	47	46	48	11	39	50
700	27	120	122	117	114	94	34	90	113
800	44	150	152	150	164	134	49	120	150
900	83	170	168	183	169	112	102	141	160
1000	111	130	132	117	128	119	122	123	125
1100	151	121	144	140	147	119	121	135	134
1200	126	118	123	114	117	143	149	127	123
1300	132	143	130	123	124	174	149	139	139
1400	131	120	115	105	132	141	148	127	123
1500	138	147	143	115	145	149	125	137	140
1600	135	152	148	168	174	144	144	152	157
1700	126	124	156	150	159	147	131	142	147
1800	113	102	142	111	131	139	141	126	125
1900	91	66	69	82	84	88	99	83	78
2000	87	56	50	61	63	77	83	68	61
2100	50	38	42	41	45	60	79	51	45
2200	20	30	14	25	25	25	58	28	24
2300	15	14	9	12	11	20	35	17	13
2400	10	8	10	13	12	17	13	12	12
Totals	1629	1891	1964	1913	2025	1987	1814	1889	1956
AM Peak Hr	11:00	9:00	9:00	9:00	9:00	12:00	12:00	9:00	9:00
AM Count	151	170	168	183	169	143	149	141	160
PM Peak Hr	3:00	4:00	5:00	4:00	4:00	1:00	1:00	4:00	4:00
PM Count	138	152	156	168	174	174	149	152	157

TOTAL ADT: 3,921

APPENDIX: TRIP GENERATION SURVEYS

For Similar sized Cannabis Cultivation Projects (2 acre growing sites).

A weeklong traffic count was taken at driveway locations for two cannabis cultivation locations starting on June 19, 2020 and ending June 25, a full 7 day, 24 hour, hourly count summary at both locations. The summary of these two locations is shown below. The daily average from the survey was 27.7 trips per 2 acres of canopy site.

Location	# of 2880 SF Green houses	# of Acres of Canopy	Daily Trips Total M	T	W	T	F	S	S	Daily Trips **WEEKDAY** Average	Daily Trips **WEEKEND** Average	Daily Trips **WEEKLY** Average
Farm #1: Esparto	6	2	10	67	24	22	24	10	6	29.4	8.0	23.3
Farm #2: Dunnigan	6	2	28	28	30	16	28	15	12	26.0	13.5	22.4
Totals	**12**	**4**	**38**	**95**	**54**	**38**	**52**	**25**	**18**	**55.4**	**21.5**	**45.7**
Daily Trips per Greenhouse										**4.6**	**1.8**	**3.8**
Daily Trips per 2 ac of canopy (maxed out limit)										**27.7**	**10.8**	**22.9**

For ITE Trip Rates comparison purposes to a 2 ac canopy site:

Daily Trips per ***2 ac of Light Industrial*** (ITE 110) @ 51.8 daily trips/ac	**103.6**
Daily Trips per ***2 ac of Manufacturing*** (ITE 140) @ 38.9 daily trips/ac	**77.8**

SUMMARY:

Proposed Project will have 1 greenhouse in first two years, then gradually to 6 greenhouses, each being the typical 2,880 SF in size.

Based on this, the project will have 4.6 daily trips on a weekday, and 1.8 on a weekend in the 1st two years, and gradually build up to 27.7 per day with full buildout.

This new trip generation rate for ***cannabis farming is approximately 27% of the Light Industrial*** *ITE daily trip rate, and* ***36% of the ITE Manufacturing*** *daily rate.*

Appendix C

VMT Memorandum

VMT MEMORANDUM

Outdoor THC Cannabis Cultivation

4941 D'Agostini Road Somerset, CA 95634

Located In El Dorado County

Prepared for:

4941 D'Agostini Road Somerset, CA 95634

April 23, 2021

This VMT Memorandum
Authored by:
Grant P. Johnson, TE

PRISM ENGINEERING

Traffic Engineering & Transportation Planning

This Memorandum has been prepared and certified by Grant P. Johnson, TE, Principal. Lic #1453

Description of Project

The project seeks licenses for 87,120 sq.ft of outdoor full-term cultivation THC cannabis, and delivery only distribution. The project is located at 4941 D'agostini Dr. in Somerset, CA 95684, and has Parcel ID: 046-710-17-100. The Lot area is 46.53 Acres and is an existing agricultural operation growing grapes on the southernmost portion of the property. The property has an entrance and exit on D'Agostini Drive. The property has an existing residence, an existing well, and a security gate. The operation will have 4 full time and 5 to 6 seasonal temporary employees. Since the parcel has an existing agricultural operation (vineyard/grapes), the addition of commercial cannabis will create a de minimis amount of new traffic on D'Agostini Drive.

The trip generation of the project was developed in the On Site Transportation Review (OSTR) prepared for El Dorado County DOT dated April 23, 2021. In that report the following trip generation calculations shown in Table 1 were documented for both square footage as well as number of employees.

Table 1. Trip Generation Summary of Project, KSF* or Employees

ITE Trip Generation Manual Trip Generation Period (110 Light Industrial)	ITE Trip Generation Rate per KSF GFA	KSF of Facility	Trips	Threshold Policy TC-Xe	Conclusion
daily	**4.96**	**0.98**	**4.9**	100	*4.9 < 100, traffic study not needed*
a.m. peak hour	0.70	0.98	0.7	10	
p.m. peak hour	0.63	0.98	0.6	10	
ITE Trip Generation Manual Trip Generation Period	**ITE Trip Generation Rate per EMPLOYEE**	**Number of EMPLOYEES**	**Trips**	**Threshold Policy TC-Xe**	**Conclusion**
daily	3	10	30	100	30 < 100

*Source: El Dorado County DOT and PRISM Engineering. *KSF=1,000 square feet*

It can be seen from Table 1 that the project will generate a maximum of 30 daily trips based on using the employee metric in the calculation, and 4.9 daily trips based on KSF of the facility. Since these total daily trips are less than the 100 daily trips threshold set forth in the County's Policy TC-Xe, which if exceeded would trigger the need for a full traffic study instead of OSTR.

VMT Significance Determination

The California Office of Planning and Research (OPR) Technical Advisory provides this direction concerning the evaluation of impacts for Vehicle Miles Traveled (VMT) for a project:

> *Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.*
>
> *Per OPR's Technical Advisory, this determination is based on the following:*
>
> *CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).). Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.*

This Memorandum details our findings of VMT transportation impacts based on trip generation of the project being estimated to be 30 trips per day (for 10 employees, the maximum total during seasonal harvest). This is based on a project description and site plan, as well as said / stated business operations (by applicant) for the cannabis farm cultivation project, and as detailed in the OSTR dated April 23, 2021. Our findings conclude that the project will generate "110 or fewer trips" per day, and in fact only will generate 30 or less trips per day.

Conclusion

The project does not have a significant impact on vehicle miles traveled or transportation impact.

Appendix D

Pest Management Plan

Pest Management Plan
April 4, 2021
Single Source Solutions Inc.

Table of Contents

1.0 INTRODUCTION

The State of California has required all applicants for cannabis cultivation licensing to submit a pest management plan as part of their cultivation plan. The following plan fulfills pest management planning requirements, as presented in the California Code of Regulations for Cannabis Cultivation (Cal Code Regs. tit. 3 § 8106, a.3, b.2)

> *"A pest management plan that 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; and*
> *(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."* (Cal Code Regs. tit. 3 § 8106)

This plan was prepared for Single Source Solutions Innovations and serves as a required pest management planning document for CalCannabis and El Dorado County cultivation licensing. This plan is for a 87,120 ft^2 outdoor cultivation site containing beds and fabric pots containing a potting media/native mineral soil conglomerate.

2.0 OVERVIEW

This pest management plan is an integrated ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of management techniques. This integrated pest management (IPM) plan contains five primary components listed below. These identify protocols for individual pest, noxious weeds, and plant disease management. The practices herein are designed to pro-actively respond to the threat of pests and disease in the agricultural system.

The IPM plan has five primary components:

1) Monitoring
2) Physical Control*
3) Environmental Control*
4) Biological Control
5) Chemical Control

** Physical and environmental controls are combined and referred to as "cultural controls."*

This report summarizes the management tactics within these five components which Single Source Solutions has identified as part of their farm IPM protocol. Each section contains a description of the activity and definition of any important terms, followed by a list of protocols in that category that will be used Single Source Solutions

2.1 Pests & Diseases of Concern

Below is a comprehensive list of pests and diseases of concern that the following IPM plan addresses.

Pests and Diseases of Concern
Large Mammals
Deer
Livestock
Rodents (mice, rats, moles, voles, gopher)
Mites and Insects
Broad mites - Polyphagotarsonemus latus
Cucumber Beetle
Fungus Gnat (Diptera)
Hemp Borer
Leaf hoppers
Root Aphid
Root Feeding Nematodes
Russet Mites - Aculops spp.
Sow Bug / Pill Bug (Isopoda)
Spittlebugs (Homoptera)
Symphylum (soil arthropod)
Termite (Isoptera)
Thrips (Heliothrips haemorrhoidalis, Frankliniella occidentalis, Thrips tabaci)
Two-spotted spider mites, Tetranychus urticae, (and other Tetranychidae)
Whiteflies (Trialeurodes vaporariorum, Bemisia tabaci, B. argentifolii)
Disease
Botyritis / "Grey Mold" (fungal disease)
Fusarium (fungal disease)
Phoma "Brown Leaf Spot"/ "Stem Canker" (fungal disease)
Phytophthora (Root and crown rots, fungal disease)
Powdery Mildew (fungal disease)
Pseudomonas syringae (bacterial disease)
Pythium (Damping off)
Rhizoctonia Root Rot (fungal disease)
Sclerotonia "Hemp Canker" / "White Mold" (Fungal stem disease)
Septoria "Leaf Spot" (fungal leaf disease)
Stemphylium "Grey Leaf Spot" / "Leaf Blight"(fungal disease)

3.0 Monitoring

There are two principal areas that require monitoring:

- Pests
- pH and Electrical Conductivity (EC)

3.1 Monitoring for Pests

Pest monitoring protocols are stated below. A sample pest monitoring sheet is provided in Appendix A.

- "**Scouting**" is defined as: "Walking around each growing area once a week and recording pest and pathology observations in a pest monitoring sheet."

- "**Hot spot**" is defined as: "A sub-section of the larger growing area where pests are either first observed, or where pest numbers are observed to be increasing to threatening levels."

Pest Monitoring Protocols

Pest Monitoring
Weekly scouting of growing areas for pests and pathology.
Records pest / pathology on monitoring sheets during scouting.
Will maintain a seasonal record of pest monitoring sheets.
Use data from pest monitoring sheets to make early pest management decisions.
Random sampling of leaves for microscope monitoring.
Will monitor for broad mites, spider mites, and russet mites using a microscope.
Will use sticky cards to monitor for aphids, thrips, fungus gnats, and whiteflies.
For early detection and intervention of pests, "hot spots" will be flagged in the field.

3.2 Monitoring pH & Electrical Conductivity (EC)

Regular field and lab testing will be used to determine nutrient availability. Protocols listed below.

pH& EC monitoring protocols

Monitoring pH & Electrical Conductivity (EC)
Soil samples will be submitted to a agricultural testing laboratory for nutrient testing at least once per production cycle.

EC and pH will be determined by a saturated paste test in the field.
pH will be checked on irrigation water and recorded.
All synthetic mixes and biological teas will have the pH monitored before being applied to the crop.
Shall maintain an annual record of soil test results.
Will monitor pH weekly or monthly, or as needed.
Will monitor EC weekly or monthly, or as needed.
All pH and EC meters will be cleaned between usage and calibration maintained and checked on a consistent basis.
pH and EC will be recorded using a callibrated meter on the farm.
Will keep a seasonal record of pH and EC measurements.
To confirm adequate uptake of nutrients a plant tissue test will be done during vegetative stage by a certified agricultural testing lab.

4.0 Physical Control

Physical controls are grouped into four categories:

- Exclusion
- Mulching
- Cover crop
- Companion plants

4.1 Exclusion

Exclusion means any tactic that works to keep pests out of your garden. These practices are grouped by their approach:

- Quarantine
- Sanitation
- Pruning
- Weeding
- Removal of plant residue
- Screens and air filters

Exclusion Protocols

Physical Control
Exclusion
Clones and new plant material will be quarantined for at least two weeks.
Personnel will be required to inspect clothing before entering growing areas.
All personnel must clean hands after (or use disposable gloves while,) handling diseased or infested plant material.
All tools and equipment will be sanitized between grow sites.
All tools and equipment will be sanitized after handling diseased or infested plant material.
To avoid spreading contamination healthy plants will be worked on before sick or diseased plants.
Will not handle any non-infected plants after handling diseased or infested plants.
Plants will be pruned to improve air circulation.
Yellowing and injured plant leaves will be pruned.
Pruned plant material will be removed from the growing area to a designated waste area or facility by following the cannabis waste management plan described in the California Code of Regulations for Cannabis Cultivation (Cal Code Regs. tit. 3 § 8108)
Will maintain weeds around plants and beds.
Will have a 10-30' noxious weed-free zone surrounding growing areas.
Strategically will target and remove weed-plant host species (ex. nightshades and morning-glories) because they can harbor russet mites and other pests.
All crop residues will be removed after harvest.
All compost piles and plant residues will be kept 30' or more from growing areas.
Trap (minus rodenticides)
Install deer fencing

4.2 Mulching

The State Water Resources Control Board requires that all mulch be weed-free. Mulching protocols listed below.

Mulching Protocols

Mulching
Will use a compost mulch.
Will use a straw or hay mulch.
Will use hulls or barks as mulch.
Will use a plastic mulch.
Mulch will be maintained and replaced as needed.

4.3 Cover Cropping

Cover crop protocols stated below.

Cover Cropping Protocols

Cover Cropping
A winter cover crop will be planted to maintain soil health during non-production months.
A spring cover crop will be planted once temperatures are warm enough and maintained for soil health during non-production months.
Legumes (nitrogen-fixers) will be part of the cover crop to help provide nitrogen back in the soil.
Will use a mixture of grains and legumes in cover crop mix.
Will use cover crops to break up soil compaction or heavy clay soils.
Will use cover crops to scavenge phosphorous.
Companion plants will be added in the cover crop mix.

4.4 Companion Planting

Companion planting protocols listed below.

Companion Planting Protocols

Companion Planting
Companion plants will be planted around the growing parameter.
Will use a cover crop with companion plants.
Will plant companion plants species that attract pollinators.
Will incorporate leguminous (nitrogen-fixing) companion plants.
Will plant companion plant species to attract beneficial predators.
Companion plants will be used to repel pests.

5.0 Environmental Control

Environmental controls make changes to the plant environment and fall into the following three categories:

- Nutrient management
- Irrigation
- Humidity and temperature

5.1 Nutrient Management

Nitrogen Management Plans will be recorded monthly and submitted annually per the State Water Board Regulations (State Water Resources Control Board, 2017.) SWRCB requirements are summarized below:

- ➢ Provide site description(s).
- ➢ List the sources of nitrogen used (bulk materials, dry fertilizers, and liquid fertilizers).
- ➢ Calculate monthly nitrogen use per canopy acre (dissolved in irrigation water, originating in soil amendments, and applied fertilizers).
- ➢ Describe nitrogen storage, use, and disposal practices; and procedures to limit excessive fertilizer application.

Regular field and lab nutrient management protocols stated below.

Nutrient Management Protocols

Nutrient Management
Soil samples will be submitted to a certified agricultural testing laboratory for nutrient testing at least once per production cycle.
To confirm adequate uptake of nutrients a plant tissue test will be done during vegetative stage by an agricultural testing lab.
Will use lab nutrient results to inform pre-production amendment decisions.
Will use lab nutrient results to inform mid-cycle amendment decisions.
Keep and maintain a annual record of soil test results.
Will monitor pH weekly or monthly.
Will monitor EC weekly or monthly.
Will use pH and EC to inform fertilization decisions.
Keep and maintain a seasonal record of pH and EC measurements.
Exact fertilizer need is calculated based on lab nutrient results.
Will use organic (non-synthetic) bulk amendments.
To better determine the timing and location of fertilizer applications, nutrient analysis will be done.
Will actively amend or manage the soil to improve soil nutrient holding capacity.
Will maintain a record of all fertilizer inputs used.
Will maintain an annual record of nitrogen fertilizer use.

5.2 Irrigation Management

The State Water Resources Control Board requires that you:

- ➢ Record daily water amounts used for irrigation.
  - These will be calculated using a measuring device, or by calculating the irrigation system rates and duration of time watered.

Moisture monitoring should follow all irrigation activities, as well as any precipitation events. Monitoring should determine the depth and uniformity of wetness and track the soil as it dries

to an appropriate point. Listed below are irrigation management and moisture monitoring protocols.

Irrigation Management Protocols

Irrigation Management
Will monitor soil moisture content daily or as needed.
Soil probes will be used to monitor soil moisture.
Irrigation decisions will be made based on soil moisture content and climate.
Will maintain a written / physical irrigation schedule and update as needed.
No irrigating on, immediately before, or after a rainfall event to conserve water usage.
Will be responsive to plant biological factors by watering more when the plant is young.
Will actively amend or manage the soil to improve soil water retention and drainage.
Will use drip irrigation as a water conservation practice.
Irrigation monitoring device(s) will be installed to monitor daily water use.

5.3 Humidity & Temperature Management

Humidity and Temperature management protocols listed below.

- '**Forecasting**' is defined as "management that predicts the arrival of pests or pathogens, or an increase in their severity."

Humidity & Temperature Management Protocols

Humidity & Temperature Management
Will plant outdoors while temp's are below 72°F to prevent Fusarium and Phoma.

6.0 Biological Control

Biocontrol practices intentionally increase the populations of predators to combat pests and diseases.

For the purposes of this document:

- '**Predators**' are defined as insects, nematodes, fungi, or bacteria.

6.1 Beneficial Insects

Beneficial insects will be used throughout the growing cycle per protocols stated below.

Beneficial Insects Protocols

Beneficial Insects
Will use beneficial insects on crops.
Will release beneficial insects on nursery crops.
Will use preventative early-season releases.
Will utilize and maintain a season-long preventative release schedule.
Will refrain from preventative pesticide spraying.
Will use beneficial insects as a first response to pest detection.
Monitor for beneficial insects as part of a regular pest scouting program.
Plant companion plants to attract beneficial insects.
Will refrain from spraying any pesticide product for at least a week prior to beginning beneficial insect releases.

6.2 Beneficial Microbes

Beneficial microbes will be used throughout the season per protocols stated below.

Beneficial Microbes Protocols

Beneficial Microbes
Will inoculate growing media with mycorrhizae (Glomus sp.).
Will inoculate growing media with Bacillus sp.
Will inoculate growing media with Trichoderma harzianum.
Use nematodes (Steinernema sp.) preventatively as a cutting/clone dunk, soil drench, or spray.
Use microbial sprays to prevent pests (Beauveria bassiana, Isaria fumosorosea, Bacillus thuringiensis).
Use microbial sprays to prevent fungal or bacterial diseases (Bacillus subtilis, Reynoutria sachalinensis, Bacillus amyloliquefaciens, Gliocladium virens, Trichoderma harzianum).
Use beneficial microbe products (bio-fungicides) as a first response to pathogen detection.
Use beneficial microbe products (bio-pesticides or bio-fungicides) to address pest or pathogen problems before attempting to use a traditional pesticide product (i.e. horticultural oils, neem, insecticidal soaps, sulfur, etc.).

6.3 Compost Tea

There are two types of compost tea applications: a tea extract for soil drenching, and an aerated tea for foliar spraying. Compost teas will be used based on the protocols stated below.

6.4 Other Fertilizers

Other fertilizers approved for Cannabis use will used to supplement Compost Teas. Any foliar applied material will be tested for heavy metals, pesticides and other contaminants that render the cannabis unsaleable.

Compost Tea Protocols

Compost Tea
Spray compost tea weekly during season.
Will soil drench compost tea weekly during season.
Spray compost tea bi-weekly during season.
Soil drench compost tea bi-weekly in season.
Maintain separate compost tea / biological spraying equipment (tanks, pumps, etc.).

7.0 Chemical Control

Chemical controls are products classified as pesticides or fungicides. Products used will follow all guidelines from the California Department of Pesticide Regulation (CA-DPR) document "Legal Pest Management Practices for Cannabis Growers in California" (CA-DPR, 9 October 2017). The DPR document lists 36 active ingredients that are acceptable for use on cannabis, in addition the product must be listed for use on "Flowers & Flowering Plants" (i.e. ornamental plants, many nursery plants, cut flowers, etc.).

7.1 Pesticide Management

For the purposes of this document:

- '**Economic thresholds**' ("**ETs**" and "**action thresholds**") are identified as pest or disease population levels at which the cost of applying pesticides is less than the value of the crop loss they prevent.

Pesticide protocols stated below.

Pesticide Management Protocols

Management Tactics
Will apply chemical controls first on a "hot spot" basis (limited area).
Will develop and use economic thresholds for managing and making chemical control decisions.
Will maintain separate spraying equipment for non-biological chemical pesticide products.
Will first use beneficial microbe products (bio-pesticides or bio-fungicides) to address pest or pathogen problems before attempting to use a traditional pesticide product (i.e. horticultural oils, neem, insecticidal soaps, sulfur, etc.).
Will only spray pesticide products when wind speed is under 10 mph.
All employees who will be applying pesticides will have protective gear available.
All labels and safety data sheets for products used will be made available to employees.

7.2 State and County Requirements

The CA-DPR and other regulatory agencies including the Environmental Protection Agency (EPA) have mandated certain practices that reduce the risks inherent with pesticide use. These practices are listed below:

Legally Required Protocols for Chemical Control

County, State and EPA Requirements
Will adhere to the CA-DPR and CAC guidelines of approved chemical pesticide products.
Will adhere to the labeled instructions on all pesticide products.
Will store all pesticide products together in a secure location that meets storage guidelines.
Will contain any chemical leaks and immediately clean up any spills.
Will apply the minimum amount of product necessary to control the target pest.
Will prevent offsite drift.
Will not apply pesticides when pollinators are present.
Will not allow drift to reach flowering plants attractive to pollinators.
Will not spray directly onto surface water, or allow pesticides to drift to surface water by spraying only when wind is blowing away from surface water bodies.
Will not apply pesticides when they may reach surface water or ground water (for example, before a rain event).
Only use properly labeled pesticides. If no label is available consult the CA-DPR.
Will maintain a record of all products used (including biopesticides and biofungicides); the areas that were treated, and the volume of product used.
Will submit pesticide use records to the state monthly (CalAgPermits).

7.3 Intended Use Pesticide Products

The following products were identified by the producer as those that will most likely be used. The producer understands that pesticide use must be reported to the state monthly, and that all products must meet the standards identified by the CA-DPR.

The Pesticide list will be modified based on the recommendation of the El Dorado County Agriculture Dept.

Pesticides

Grandevo, Venerate, Aza Sol, Azaguard, BioCeres WP, Botanigard, Dr Zymes Eliminator, Green Cleaner, Tough Love, Plant Therapy, M Pede, Nuke Em, Physan 20, Procidic2, Pyganic, Suffoil-X Trifecta Crop Control

Fungicides

Regalia, Suffoil-X, Trilogy, Trifecta Crop Control, Actinovate, Bio Works Cease, Dr Zymes Eliminator, Green Cure, MilStop

Appendix A – Monitoring Documents

pH & EC (TDS) Measurements

Date	Time	Initials	pH	EC/TDS unit: _____

IPM Monitoring Sheet

Date	Site Name	Time	Crop	Growth Stage

Weather / field observations:

Growing Section	1	2	3	4	5	6	7	8	9	10	Total
Pests											
Aphids											
Larva											
Adults											
Fungus Gnats											
Root Aphid											
Thrips											
Larva											
Adults											
Whiteflies											
Larva											
Adults											

Notes:

Growing Section	1	2	3	4	5	6	7	8	9	10	Total
Pests for the Microscope											
Broad Mite											
Russet Mite											
Spider Mites											

Notes:

Growing Section	1	2	3	4	5	6	7	8	9	10	Total
Beneficial Insects											
Rove Beetle											
Predator Mite: _____											
Predator Mite: _____											
Other: _____											

Notes:

Appendix E

Odor Report

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

DRAFT

TECHNICAL MEMORANDUM

To: Michael Pinette
Single Source Solution, Inc.

Date: August 14, 2023

From: Ray Kapahi RK
Tel: 916-687-8352
Tel: 916-687-8352
E-Mail: ray.kapahi@gmail.com

Subject: Revised Analysis of Odor at the Proposed Cannabis Cultivation Located at 4941 D'Agostini Drive in Somerset (El Dorado County), California

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INTRODUCTION AND SUMMARY

Environmental Permitting Specialists (EPS) completed an analysis of odors at the proposed cannabis cultivation site located at 4941 D'Agostini Drive, Somerset on July 21, 2021. That analysis was based on an outdoor cannabis cultivationwith a maximum area of 87,120 square feet. The analysis indicated that odors at the property lines would range from 1 dilution to threshold (DT) to 14.97 DT. Since the maximum allowable odor intensity under Eldorado County Ordinance 5110 (5)(D) is 7 DT, the proposed project would not comply with the County's odor limits from cannabis cultivation.

Since the 2021 analysis, the project has been revised from outdoor cultivation to cultivation using hoop house and a smaller area of outdoor cultivation. The current project would use eight hoophouses and an outdoor area approximately 100 feet x 240 feet. Each hoop house would be 75 feet x 30 feet and would be equipped with a carbon filtration system that would reduce odor intensity to below 7 DT. Information on the carbon filter is attached. The revised site map showing the location of hoophouses and the outdoor cultivation areais shown in Figure 1.

As with the 2021 analysis, EPS used an air dispersion model, 1 year (2019) of hourly wind and temperature data at Somerset and on-site measurements of odor intensity at other locations to conduct this analysis as described in the July 21, 2021 Draft Technical Memorandum to M. Rodney Miller.

The results of the current analysis indicate that maximum odor intensity along the property lines would range from below 6.2 DT to 2.81 DT. The highest odor intensity occurs along the Southwest portion of the property where the separation between the outdoor cultivation area and the property lines range is approximately 190 feet.

Since the calculated odor intensity is below El Dorado County's limit of 7 DT, the project would comply with El Dorado County's Ordinance 5110(5)(D).

This Technical Memorandum presents the methodology, data and assumptions used in this analysis. Thesearedescribed in detail below.

SCOPE AND METHODOLOGY OF ODOR ANALYSIS

The overall methodology used in this analysis is to use an atmospheric dispersion model to predict the dilution of odors as they migrate away from the outdoor cultivation area. By calculating the relative concentration of odors adjacent to the cultivation area and at the property line(s), we can determine the dilution ratio defined as odor concentration at the cultivation area divided by concentration at the property line(s).

For example, if the maximum concentration at the cultivation area is 5,000 micrograms per cubic meter (ug/m3) and the relative concentration at the property line 2,000 ug/m3, the dilution ratio would equal:

$$\text{Dilution Ratio} = \frac{5{,}000 \text{ ug/m3}}{2{,}000 \text{ ug/m3}} = 2.5$$

In other words, the odors would be dilution by a factor of 2.5 as they migrate from the cultivation area towards the property line.

The dilution factor is used along with measurements at other outdoor cannabis cultivation sites to predict odor intensity at the D'Agostini property lines. This methodology was reviewedby the staff at El Dorado County Air Quality Management District (AQMD) to confirm that this approach would be acceptable. The District agreed with this approach as noted in their August 28, 2020 letter to Aaron Mount at El Dorado County Planning.

Modeling Methodology

As in the 2021 odor analysis, we used the EPA and AQMD recommended AERMOD dispersion model (Version 22112) along with one year (2019) of hourly wind data for Somerset. The data (known as MM5) is derived from weather satellites to calculation winds and other parameters

for all locations in the continental US. The data used was prepared by Lakes Environmental (Waterloo, Canada)[1].

The cultivation site was modeled as a single ground based area source. Concentrations were calculated using a 10 meter grid using an emission rate of 1.00 x 10^{-4} grams/sec-square meter. See Figure 2.

The model results are concentrations in terms of micrograms per cubic meter at each grid location averaged over 1-hour. These concentrations are meaningful only in a relative sense to help establish the dilution pattern. It is recognized that the averaging time for odors is a few minutes, not 1 hour. Typically, peak concentrations over a few minutes are many times greater than those over 1 hour. However, the ratio of concentrations and the dilution factor will remain the same whether averaged over a few minutes or 1 hour averaging tine.

Finally, we note that the maximum predicted concentration varies with both the distance and the direction from the cultivation site. Generally, the concentration decreases with distance from the cultivation site. Figures 4 and 5 illustrate the spatial distribution of 1-hour relative concentration. These figures show that the highest 1-hour relative concentration (based on 8,760 hours that were modeled) occur East of the property.

Baseline Odor Used in the Analysis

We used odor measurements taken at a Yolo County outdoor cannabis site. This outdoor site covers 0.75 acres and is located at 22945 County Road 23, Esparto. At the time the measurements were taken, the plants were 2 weeks away from harvesting. Odor measurements were taken September 22, 2020 that indicated odor intensity of 15 DT. However, we noted that there were brief periods when odor intensity was above 15 but were not fully captures by the Nasal Ranger. We estimated the odor intensity to be closer to 20 DT and this is the value used in the current analysis. A complete documentation of the September 22nd odor survey is attached.

CALCULATION OF ODOR INTENSITY AND RESULTS

The calculation of odor intensity at the property lines is as follows:

$$\text{Odor Intensity at Property Line} = \frac{\text{Baseline Odor Intensity (DT)}}{\text{Dilution Factor}}$$

For example, the odor intensity at the Southwestern property line (See Figure 6) would equal:

$$\frac{20 \text{ DT}}{3.24} = 6.17 \text{ DT}$$

[1] Lakes Environmental. Waterloo, Canada. Information on the development of local wind data based on the MM5 for Somerset can be found at: https://www.weblakes.com/services/met_data.html#aermetmm5

The results for the closest property lines are summarized below and shown in Figure 7.

Location	Distance to Property Line		Maximum Conc.	Conc. At Property Line	Lowest Dilution Ratio	Fenceline DT
	(ft)	(m)				
North	< 1000	< 300	58,407	> 9738.9	< 6.00	< 3.33
Eastern Property Line	500	152.4	56,441	7,939	7.11	2.81
SW Property Line	190	57.9	64,944	20,043	3.24	6.17
Western Property Line	310	94.5	32,391	10,037	3.23	6.20
Baseline DT	20					

Note: The Northern property line lies outside themodeling grid. The relative odor concentration was estimated based on data at the Northern edge of the modeling grid.

Once a permit has been issued and cannabis cultivation proceeds, EPS staff will be available to conduct odor monitoring at your property to confirm that odors do not exceed the County limit of 7 DT.

Appendix F

Air Quality Technical Memo

Earth Groovy Products LLC 530-503-9078 Office 530-748-9822 earthgroovy.com

Technical Memo Air Quality
Commercial Cannabis Cultivation
CUP-Application of
Single Source Solutions Inc.
4941 D'agostini Dr. Somerset, CA
APN# 046-710-17-100
Owners John Muraco Jr., Joe Wiseman, and Michael Pinette
April 26th, 2021

Summary and Background

The estimated emissions for this project are well below El Dorado County thresholds of significance.

The applicants seek licenses for two acres of commercial cannabis cultivation in the form of 87,120 sq. ft. outdoor full-term cultivation. The project includes the development of security features, fire safety features, modular office, eight modified shipping containers for harvest storage and processing, and solar power. Phase Two of the project will have 1.28 acres of hoop houses installed on the east side of the cultivation area.

The cannabis activity is located in the middle of a 46.53 acre parcel. Its located in a valley with a 2+ acre clearing within a heavily forested area. The closest neighbor residence is approximately 745' away from the cultivation area.

The project will be powered by a solar system with a backup generator specified below.

Commercial cannabis has the most stringent contamination testing requirements of any consumable product in California. Most of agriculture does not have such astringent contamination requirements for edible crops. Cannabis products are tested for heavy metals and pesticides. The standard for arsenic, for example, is .7 parts per million. The labs that perform the testing for the cannabis industry have evaluated the cause of contamination failure for the industry. They have concluded that the source of failure is not from plant absorption but from dust and foliar feeding with contaminated water and fertilizer. Baseline soils in much of El Dorado County contain arsenic and other heavy metals. Hence, it is imperative for growers to establish strict dust mitigation measures to prevent the contamination of their product from heavy metal-laden soils and their dust.

1. Fugitive Dust: Dust mitigation is critical to the success of a commercial cannabis cultivation operation in El Dorado County. Soil preparation will be done while soil is still

damp for outdoor operations. If the soil dries out then it will be moistened prior to work with the soil beginning. During the off-season soils will be held through cover crops. Access driveways will be surfaced with concrete, asphalt and/or compacted gravel.

Site preparation for modular office will involve the minimal movement of dirt. Any pre-construction site preparation will involve the moistening of soil if it is dried out.

2. Construction Emission: Any road improvement, road maintenance or site preparation will include moistening of dirt or gravel prior to the start of an activity. Construction activity will be performed with equipment that complies with the California Air Resources Board off-road diesel equipment rule or other applicable rules. The improvement of the access road has its own air quality plan (Permit #337081).

3. Back up Generator: The backup generator will be comparable to a 7000 Watt Lifan Model #ESI7000iER-EFI with a 389 cc gasoline engine. The horsepower of the engine is below the level required for permitting by the El Dorado County Air Quality Management District.

Appendix G

Biological Resources Assessment

APN: 046-710-017-100

4941 D'Agostini Drive

Updated Biological Resources Assessment

Prepared for:
Michael Pinette, John Muraco, and Joe Wiseman (Applicants)
338 Olivadi Way
Sacramento, CA 95834

Prepared by:
Greg Matuzak, Principal Biologist
Greg Matuzak Environmental Consulting LLC
P.O. Box 2016
Nevada City, CA 95959
Email: gmatuzak@gmail.com

September 2023

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LIST OF APPENDICES

Report Summary

The Biological Resources Assessment Report includes the biological results of the background research, biological resources field surveys, data analysis, and impact assessment for the Project area. The key findings of this report include the following:

- No California Native Plant Society (CNPS) List 1, 2, 3, or 4 plant species or special-status wildlife species have been documented and mapped within the Project area based on background research and the results of the biological resources surveys conducted as part of the development of this report. Therefore, it is unlikely any special-status plant or wildlife species occur within or directly adjacent to the Project disturbance areas within the Project area. However, a pre-construction special-status plant species survey focused on the Project disturbance areas is included within the mitigation section.
- The Project area does not contain any oak trees or oak woodlands that will be removed or impacted by the proposed Project. The proposed Project area lies adjacent to oak trees and oak woodlands, but the current Site Plan and Habitat Maps for the Project includes complete avoidance of such protected oak resources and therefore, an Oak Resources Technical Report is not required for the proposed Project per the current Site Plan.
- The areas immediately adjacent to the Project area contains potential nesting habitat for raptors and other protected bird species. Though no active nesting was identified during December 2020 site surveys, pre-construction surveys are recommended to confirm the lack of nesting raptors and other protected bird species immediately prior to Project development if vegetation removal and project commencement will occur between March 1st and August 31st.
- No fill or dredge material will be placed in a "waters of the U.S.", including wetlands, or "waters of the State of California" from the implementation of the proposed Project. Therefore, Clean Water Act permits and compensatory mitigation will not be required.
- No CDFW Streambed Alteration Agreement will be required for the proposed Project given the lack of stream and riparian habitat within and adjacent to the Project area.
- The seasonal drainage/stream is located outside of the State Water Board's 100-foot setback requirement for intermittent and seasonal streams.
- The Project area does not contain any watercourses or other aquatic resources such as ponds or wetlands. Site surveys confirmed the lack of federal and State of California aquatic resources mapped within the proposed Project disturbance area. However, a seasonal drainage runs within the northern section of the subject parcel a minimum of 285 feet from the Project area at its closest location to the proposed Project disturbance area, which is the northeast corner of the vineyard/Project area where there is a gate. It contains rocky, unvegetated substrate with upland vegetation along its banks. Best Management Practices and other mitigation measures are included to demonstrate that the actual 300-foot El Dorado County Ordinance 5110 Article 4 (Section 130.41.200.5.C) setback will be substantially achieved for the purpose of their required setback.

1 INTRODUCTION

At the request of the project applicant Michael Pinette, Mr. Greg Matuzak was retained to prepare an Updated Biological Resources Assessment Report ("Biological Report") for the ADP Cultivation Project ("Project") located in Somerset, El Dorado County, California (see Appendix A). The Biological Report includes an evaluation of sensitive biological resources within the Project area, including sensitive biological resources under the jurisdiction of the California Department of Fish and Wildlife ("CDFW"), United States Fish and Wildlife Service ("USFWS"), United States Army Corps of Engineers ("Corps"), and the El Dorado County Planning Department. Preparation of the Biological Report included background research, field biological resources surveys, and reporting as detailed herein. Additionally, this Report includes additional analysis as requested by the El Dorado County Planning Department and based on a review of the initial Biological Report (dated January 2021) by the County's biological resources consultant, HELIX Environmental Planning.

Mr. Greg Matuzak, Principal and owner of Greg Matuzak Environmental Consulting LLC is a wetlands ecologist and wildlife biologist with 22+ years of experience conducting aquatic resources delineations and biological resources assessments in Northern California. Mr. Matuzak is 40-hour Wetland Delineation Certified (Wetland Training Institute) and has conducted aquatic resources delineations for 100's of linear miles of projects and 1000s of acres of site development projects. Additionally, Mr. Matuzak has conducted special-status biological resources surveys and developed biological resources assessments for dozens of projects in Nevada, El Dorado, and Placer Counties. Mr. Matuzak has lived and worked in Nevada County for over 14 years. Mr. Matuzak was responsible for the field data collection and assessment developed as part of the development of this Biological Report. Mr. Matuzak is on the Nevada and Placer County Planning Departments' lists of Qualified Biological Resources Consultants and is a Qualified Biologist per the CDFW's definition.

1.1 Project Location

The proposed Project is located on D'agostini Drive in Somerset, El Dorado County, California (APN 046-710-017-100). The subject parcel is located approximately 8.5 miles southwest of Somerset and approximately 19.0 miles south of Placerville off Mt. Aukum Road. The subject parcel is 46.53 acres. See Appendix A for Vicinity and Project Location Figures and see Appendix B for a Site Plan.

1.2 Project Understanding

The Project involves construction of an approximately 87,120 SF of cannabis cultivation area, which will include a single large cultivation area to be developed in a single phase within a developed vineyard. In addition, an existing access road from the residence within the subject parcel will connect to the proposed cultivation area. See attached Site Plans for the proposed Project features that have been included as part of this Biological Report.

1.3 Biological Resources Assessment Purpose

The purpose of the Biological Report is to identify the location and extent of sensitive biological resources within the Project Area, including special-status plant and wildlife species. Additionally, this Biological Report includes an impact assessment to such sensitive biological resources based on the Project Understanding outlined in Section 1.2 above. Section 6 includes avoidance, minimization, and mitigation measures to ensure that the Project Area disturbance, based on the Project Understanding, would not have a significant impact on such sensitive biological resources. This Biological Report also satisfies the El Dorado County Community Development Services Planning and Building Department Commercial Cannabis Permitting Office (CCPO) requirements for the approval of the Project and its potential to impact sensitive biological resources outlined in the California Environmental Quality Act (CEQA) Checklist.

Furthermore, based on the Project understanding, no oak trees are proposed to be removed or impacted and no riparian habitat, streams, waterways, or water crossings will be impacted as part of the implementation of the proposed Project within the subject parcel. Therefore, additional studies and reporting to evaluate such resources are not required as part of the CCPO approval process. This Biological Report meets the requirements of the CCPO as part of CEQA compliance for the Project and overall Project permit approval.

2 REGULATORY OVERVIEW

2.1 Federal Regulations

2.1.1 Section 404 of the Clean Water Act

The U.S. Army Corps of Engineers ("Corps") and the Environmental Protection Agency ("EPA") regulate the discharge of dredge or fill material into "waters of the U.S." under Section 404 of the Clean Water Act. "Waters of the U.S." include wetlands and lakes, rivers, streams, and their tributaries. Wetlands are defined for regulatory purposes as areas "…inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated solid conditions" as specified in 33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3.

Generally, wetlands include swamps, marshes, bogs, and similar areas. Lakes, rivers, and streams are defined as "other waters of the U.S." Jurisdictional limits of these features are typically noted by the Ordinary High Water Mark ("OHWM"). The OHWM is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as mark a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 CFR 328 and 33 CFR 329).

Isolated ponds or seasonal depressions had been previously regulated as waters of the U.S. However, in *Solid Waste Agency of Northwestern Cook County* (SWANCC) *v. USACE et al.* (January 8, 2001), the U.S. Supreme Court ruled that certain "isolated" wetlands (e.g., non-navigable, isolated, and intrastate) do not fall under the jurisdiction of the CWA and are no longer under the jurisdiction of the Corps. Some circuit courts (e.g., *U.S. v. Deaton*, 2003; *U.S. Rapanos*, 2003; *Northern California River Watch v. City of Healdsburg*, 2006), though, have ruled that SWANCC does not prevent CWA jurisdiction if a "significant nexus" such as a hydrologic connection exists, whether it be man-made (e.g., roadside ditch) or natural tributary to navigable waters, or direct seepage from the wetland to the navigable water, a surface or underground hydraulic connection, an ecological connection (e.g., the same bird, mammal, and fish populations are supported by both the wetland and the navigable water), and changes to chemical concentrations in the navigable water is present due to water from the wetland.

Areas considered to be non-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 water bodies such as swimming pools, and water-filled depressions with no outlet for drainage (33 CFR, Part 328).

The *Clean Water Rule* is a 2015 regulation published by the EPA and Corps to clarify water resources management in the United States under a provision of the CWA. The regulation defined the scope of federal water protection in a more consistent manner, particularly over streams and wetlands, which have a significant hydrological and ecological connection to traditional navigable waters, interstate waters, and territorial seas. It is also referred to as

the *Waters of the United States* rule, which defines all bodies of water that fall under U.S. federal jurisdiction. The rule has been contested in litigation and in 2017 the Trump administration announced its intent to review and rescind or revise the rule. Following a Supreme Court ruling on January 22, 2018 that lifted a nationwide stay on the rule, the Trump administration formally suspended the rule until February 6, 2020, thereby giving the EPA time to issue a draft proposal of replacement water regulatory requirements.

On October 22, 2019, the EPA and the Corps published a final rule to repeal the 2015 Clean Water Rule: Definition of "Waters of the United States" ("2015 Rule"), which amended portions of the Code of Federal Regulations (CFR), and to restore the regulatory text that existed prior to the 2015 Rule. The final rule will become effective on December 23, 2019. The EPA and the Corps will implement the pre-2015 Rule regulations informed by applicable agency guidance documents and consistent with Supreme Court decisions and longstanding agency practice.

However, on April 21, 2020, the EPA and the Corps published the Navigable Waters Protection Rule to define "Waters of the United States" in the *Federal Register*. For the first time, the agencies have streamlined the definition so that it includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before. Congress, in the CWA, explicitly directed the Agencies to protect "navigable waters." The Navigable Waters Protection Rule regulates traditional navigable waters and the core tributary systems that provide perennial or intermittent flow into them.

Under the final rule, four clear categories of waters are federally regulated:

- The territorial seas and traditional navigable waters,
- Perennial and intermittent tributaries to those waters,
- Certain lakes, ponds, and impoundments, and
- Wetlands adjacent to jurisdictional waters

Therefore, as of June 22, 2020, the final rule details 12 categories of exclusions, features that are not "waters of the United States," such as features that only contain water in direct response to rainfall (e.g., ephemeral features); groundwater; many ditches; prior converted cropland; and waste treatment systems. The final rule clarifies key elements related to the scope of federal CWA jurisdiction, including:

- Providing clarity and consistency by removing the proposed separate categories for jurisdictional ditches and impoundments.
- Refining the proposed definition of "typical year," which provides important regional and temporal flexibility and ensures jurisdiction is being accurately determined in times that are not too wet and not too dry.
- Defining "adjacent wetlands" as wetlands that are meaningfully connected to other jurisdictional waters, for example, by directly abutting or having regular surface water communication with jurisdictional waters.

The Navigable Waters Protection Rule is the second step in a two-step process to review and revise the definition of "waters of the United States" consistent with the February 2017 Presidential Executive Order entitled "Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States.'" This final rule became effective on June 22, 2020 and will replaces the Step One Rule published in October, 2019 as outlined above.

2.1.2 Section 401 of the Clean Water Act

Section 401 of the CWA requires an applicant, for any federal permit which may result in a discharge into waters of the U.S., to obtain a certification from the state that the discharge will comply with provisions of the CWA. The nine regions of the State Water Quality Control Board administer this program. Any condition of water quality certification would be incorporated into the Corps permit. California has a policy of no-net-loss of wetlands and typically requires mitigation for impacts to wetlands before it will issue a water quality certification. This Project is located under the jurisdiction of Region 5, the Central Valley Regional Water Quality Control Board ("RWQCB").

2.1.3 Endangered Species Act of 1973

For the Project area, consultation with the USFWS would be necessary if a proposed action may affect a federally listed species or occupied habitat. This consultation would proceed under Section 7 of the Endangered Species Act (ESA) if a federal action is part of the proposed action or through Section 10 of the ESA if no such nexus were available (USFWS, 1973).

2.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BAGEPA) (16 USC Section 668) protects bald and golden eagles and their nests from direct "take" (i.e. harm or harassment as described above). BAGEPA prohibits the take or commerce of any part of the bald or golden eagles (USFWS, 1940). The USFWS administers the Act and reviews actions that may affect species protected under the Act.

2.2 State Regulations

2.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) has jurisdiction over plant and wildlife species listed as threatened or endangered under section 2080 of the CDFW Code. The California Endangered Species Act (CESA) prohibits take of state-listed threatened and endangered species. The state Act differs from the federal Act in that it does not include habitat destruction in its definition of *take.* The CDFW defines *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CDFW may authorize *take* under the CESA through Section 2081 agreements. If the results of a biological survey indicate that a state-listed species would be affected by the project, the CDFW would issue an Agreement under

Section 2081 of the CDFW Code and would establish a Memorandum of Understanding for the protection of state-listed species. For species where an Agreement under Section 2081 is infeasible, an Incidental Take Permit (ITP) would be required prior to undertaking any project related activities that could directly or indirectly impact a CESA listed species.

2.2.2 Streambed Alteration Agreements: CDFG Code Section 1600 et seq.

CDFW has jurisdictional authority over substantial alterations to the bed or bank of rivers, streams, and lakes under Sections 1600–1616. CDFW has the authority to regulate all work under the jurisdiction of the State of California that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed.

Given there will be no disturbance within or directly adjacent to watercourses and associated riparian vegetation and therefore, a CDFW Streambed Alteration Agreement would not be required for the Project.

2.2.3 Porter-Cologne Water Quality Control Act & Section 1601 and Section 1607 of CDFG Code

These acts and codes pertain to projects with potential impacts to water quality or waterways. The Project area does not contain any aquatic features or habitats considered waters of the State as defined by the State Water Resources Board (State Board 2014).

2.2.4 State Water Resources Control Board Wetland Policy (April 2019)

On April 2, 2019, the State Water Resources Control Board (State Water Board) adopted rules to protect wetlands and other environmentally sensitive waterways throughout the state. More than 90 percent of California's historic wetlands have been lost to development and other human activity. Wetlands are a critical natural resource that protect and improve water quality, provide habitat for fish and wildlife, and buffer developed areas from flooding and sea-level rise. The newly adopted rules provide a common, statewide definition of what constitutes a wetland. They also provide consistency in the way the State Water Board and nine regional water boards regulate activities to protect wetlands and other waterways, such as rivers and streams, and bays and estuaries. The State of California waters of the state are, by definition, broader than "waters of the United States" covered by federal regulation. The newly adopted rules do not change that and will ensure that waters of the state will continue to be protected even if protections for federal waters are narrowed by administrative actions or the courts.

The new definition clarifies what is considered a wetland – and what is not – for the entire state, provides a common framework for monitoring and reporting the quality of California's remaining wetlands, helps ensure no overall net loss, and promote an increase, in the quantity, quality, and sustainability of waters of the state, including wetlands, improves transparency and consistency across the State Water Board and the nine Regional Water Quality Control Boards in how discharges of dredged or fill material in sensitive waterways are monitored and regulated,

and avoids duplicative work and streamline requirements to cover all waters of the state, so both state and federal environmental concerns are addressed at once.

2.2.5 California Department of Fish and Game Code Sections 3503, 3503.5, and 3800: Nesting Migratory Bird and Raptors

Sections 3503, 3503.5, and 3800 of the CDFG Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that project-related disturbance within active nesting territories be reduced or eliminated during critical phases of the nesting cycle (approximately March 1 – August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g. killing or abandonment of eggs or young), or the loss of habitat upon which birds are dependent, is considered "taking", and is potentially punishable by fines and/or imprisonment (LCC 2013).

2.2.6 California Special Species of Concern, Fully Protected, and Special Status Species

California designates Species of Special Concern (SSC) as species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational or educational values. These species do not have the same legal protection as listed species but may be added to official lists in the future (CDFW 2014).

In the 1960's California created a designation to provide additional protection to rare species. This designation remains today and is referred to as "Fully Protected" species, and those listed "may not be taken or possessed at any time" (CDFW 2014). There are no species designated as a Fully Protected species known to occur within or adjacent to the Project area.

California special status species are identified by the California Natural Diversity Database (CNDDB) and includes those species considered to be of greatest conservation need by the CDFW.

2.2.7 California Environmental Quality Act Guidelines Section 15380

California Environmental Quality Act (CEQA) Guidelines section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specific criteria. This section was included in the guidelines to deal primarily with situations in which a public agency is reviewing a project that may have a significant effect on, for example a "candidate species" that has not yet been listed by the USFWS or CDFW. CEQA, therefore, enables an agency to protect a species from significant project impacts until the respective government agencies have had an opportunity to list the species as protected, if warranted (CNRA 2012).

Plants appearing on the California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) are considered to meet CEQA's Section 15380 criteria. Ranks include: 1A) plants presumed extirpated in California and either rare or extinct elsewhere, 1B) plant rare, threatened, or endangered in California and elsewhere, 2A) plants presumed extirpated in California, but more

common elsewhere, and 2B) plants rare, threatened, or endangered in California, but more common elsewhere. Impacts to these species would therefore be considered "significant" requiring mitigation.

2.2.8 State Oak Woodland Regulations

State laws that regulate protection of oak woodlands include Professional Forester's Law (PFL) and CEQA according to Public Resources Code Section 21083.4. Oak woodlands are defined as areas having 10% oak canopy cover or greater. "Oaks" are defined in Public Resources Code Section 21083.4 as a native tree species in the genus *Quercus*, that is 5 inches diameter at breast height (DBH) or greater. The Oak Woodlands Conservation Act (SB 1334) provides funding for the conservation and protection of oak woodlands in California. Oak trees and oak woodland habitats are protected under both the State and the Nevada County landmark groves and landmark oak tree regulations as discussed below.

2.3 Local Regulations

2.3.1 El Dorado County Oak Resources Conservation Ordinance

Permits for removal of Oak Resources are required for any non-exempt action requiring discretionary development entitlements or approvals from the County, or ministerial actions requiring a building or grading permit issued by the County. *An Oak Resources Technical Report prepared by a certified arborist, qualified wildlife biologist or a Registered Professional Forester is required prior to issuing a permit to remove any Oak Resources.*

Required care, inspection and documentation of replacement plantings (including replacement of any dead trees) shall be performed by all permittees for a seven (7) year period from the date of the planting. The County shall provide an annual reporting to the Board of Supervisors on the number of oak removal permits issued and estimated inches/acres approved for removal during the reporting year. The County shall provide a biennial report to the Planning Commission and Board of Supervisors of the in-lieu fees collected and recommend fee adjustments as appropriate.

Exemptions to oak mitigation requirements include but are not limited to: existing single-family parcel of one acre or less; fire safe activities to protect existing structures; utility line maintenance; emergency operations; County road projects; affordable housing projects; some agricultural activities; removal of dead, dying or diseased trees; some exemptions for personal use (e.g., firewood) limited to no more than eight trees per parcel per year; tree removal under a Timber Harvest Plan. Exemptions from mitigation do not apply to Heritage Trees, individual valley oak trees, and valley oak woodlands (unless these trees are dead, dying, or diseased).

The ORMP requires mitigation for permitted oak tree removal under the ORMP including: on-site retention; replacement planting on-site and off-site; and in-lieu fees that will be used to acquire land and/or conservation easements to conserve oak woodlands, and to plant and maintain native oak trees. (Under the prior General Plan Policy tree canopy retention was the only

mitigation option available.) All mitigation requires additional permits depending upon the mitigation option chosen.

To encourage on-site retention of oak woodlands, the ORMP requires increasing mitigation ratios based on the amount of oak woodland removed: Removing 50 percent or less requires a 1-to-1 ratio of mitigation, removing up to 75 percent requires a 1.5-to-1 ratio of mitigation, and removing up to 100 percent requires a 2-to-1 ratio of mitigation. Mitigation of oak woodlands would consist of one of the options described above: on-site retention; replacement planting on-site and off-site; and/or in-lieu fees.

A security deposit is required for all discretionary projects proposing on-site oak tree/oak woodland retention and/or replacement planting as mitigation. No grading or other on-site work shall be permitted until the security deposit is posted. The in-lieu fee for removal of *oak woodlands* is calculated based on total cost per acre which is currently set at $8,285. The in-lieu fee for removal of *individual oak trees* is calculated on a total cost per inch which is currently set at $153 for a non-Heritage Tree and $459 per inch for a Heritage Tree at a 3-to-1 ratio. The per-inch fee shall be multiplied by the total number of trunk diameter inches removed. The in-lieu fees collected will be deposited in the County's Oak Woodland Conservation Fund. That fund will be used to acquire land and/or conservation easements to conserve oak woodlands, provide for native oak tree planting, and for ongoing conservation area monitoring and management activities.

2.3.2 El Dorado County Ordinance 5110 Article 4 (Section 130.41.200.5.C)

Ordinance No. 5110 covers outdoor and mixed-light cultivation of commercial cannabis within El Dorado County and includes the following regarding stream setbacks:

> *C. Setbacks.* Outdoor or mixed-light cultivation of commercial cannabis shall be setback a minimum of 800 feet from the property line of the site or public right-of-way and shall be located at least 300 feet from the upland extent of the riparian vegetation of any watercourse.

2.3.3 El Dorado County General Plan Conservation and Open Space Element

CONSERVATION AND PROTECTION OF WATER RESOURCES

GOAL 7.3: WATER QUALITY AND QUANTITY

Conserve, enhance, and manage water resources and protect their quality from degradation.

OBJECTIVE 7.3.1: WATER RESOURCE PROTECTION

Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.

Policy 7.3.1.1 Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.

Policy 7.3.1.2 Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements as well as incentives for the conservation and wise use of water.

Policy 7.3.1.3 The County shall develop the criteria and draft an ordinance to allow and encourage the use of domestic gray water for landscape irrigation purposes. (See Title 22 of the State Water Code and the Graywater Regulations of the Uniform Plumbing Code).

OBJECTIVE 7.3.2: WATER QUALITY

Maintenance of and, where possible, improvement of the quality of underground and surface water.

Policy 7.3.2.1 Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.

Policy 7.3.2.2 Projects requiring a grading permit shall have an erosion control program approved, where necessary.

Policy 7.3.2.3 Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).

Policy 7.3.2.4 The County should evaluate feasible alternatives to the use of salt for ice control on County roads.

Policy 7.3.2.5 As a means to improve the water quality affecting the County's recreational waters, enhanced and increased detailed analytical water quality studies and monitoring should be implemented to identify and reduce point and non-point pollutants and contaminants. Where such studies or monitoring reports have identified sources of pollution, the County shall propose means to prevent, control, or treat identified pollutants and contaminants.

OBJECTIVE 7.3.3: WETLANDS

Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

Policy 7.3.3.1 For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual

Policy 7.3.3.2 intentionally blank

Policy 7.3.3.3 The County shall develop a database of important surface water features, including lake, river, stream, pond, and wetland resources.

Policy 7.3.3.4 The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas. Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project. Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned lands that utilize "best management practices (BMPs)" as recommended by the County Agricultural Commission and adopted by the Board of Supervisors. Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue. For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.

Policy 7.3.3.5 Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.

CONSERVATION OF BIOLOGICAL RESOURCES

GOAL 7.4: WILDLIFE AND VEGETATION RESOURCES

Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

OBJECTIVE 7.4.1: PINE HILL RARE PLANT SPECIES

The County shall protect Pine Hill rare plant species and their habitats consistent with Federal and State laws.

Policy 7.4.1.1 The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 130.71 and the USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan (USFWS 2002).

Policy 7.4.1.2 Private land for Pine Hill rare plant preserve sites will be purchased only from willing sellers.

Policy 7.4.1.3 Limit land uses within established Pine Hill rare plant preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.

Policy 7.4.1.4 The Pine Hill Preserves, as approved by the County Board of Supervisors, shall be designated Ecological Preserve (-EP) overlay on the General Plan land use map.

Policy 7.4.1.5 intentionally blank (Resolution 128-2017, October 24, 2017)

Policy 7.4.1.6 intentionally blank (Resolution 128-2017, October 24, 2017)

Policy 7.4.1.7 intentionally blank (Resolution 128-2017, October 24, 2017)

OBJECTIVE 7.4.2: IDENTIFY AND PROTECT RESOURCES

Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.

Policy 7.4.2.1 The County will coordinate wildlife and vegetation protection programs with appropriate Federal and State agencies.

Policy 7.4.2.2 The County shall continue to support the Noxious Weed Management Group in its efforts to reduce and eliminate noxious weed infestations to protect native habitats and to reduce fire hazards.

Policy 7.4.2.3 Consistent with Policy 9.1.3.1 of the Parks and Recreation Element, low impact uses such as trails and linear parks may be provided within river and stream buffers if all applicable mitigation measures are incorporated into the design.

Policy 7.4.2.4 Protect and preserve wildlife habitat corridors within public parks and natural resource protection areas to allow for wildlife use. Recreational uses within these areas shall be limited to those activities that do not require grading or vegetation removal.

Policy 7.4.2.5 Setbacks from all rivers, streams, and lakes shall be included in the Zoning Ordinance for all ministerial and discretionary development projects.

Policy 7.4.2.6 intentionally blank (Resolution 128-2017, October 24, 2017)

Policy 7.4.2.7 intentionally blank (Resolution 128-2017, October 24, 2017)

Policy 7.4.2.8 Conserve contiguous blocks of important habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the County through a Biological Resource Mitigation Program (Program).

The Program will result in the conservation of: 1. Habitats that support special status species; 2. Aquatic environments including streams, rivers, and lakes; 3. Wetland and riparian habitat; 4. Important habitat for migratory deer herds; and 5. Large expanses of native vegetation.

A. Habitat Protection Strategy. The Program establishes mitigation ratios to offset impacts to special-status species habitat and special-status vegetation communities within the County.

Special-status species include plants and animals in the following categories: • Species listed or proposed for listing as Threatened or Endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); • Species considered as candidates for listing as Threatened or Endangered under ESA or CESA; • Wildlife species identified by California Department of Fish and Wildlife (CDFW) as Species of Special Concern; • Wildlife species identified by US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) as Species of Concern; • Plants listed as Endangered or Rare under the California Native Plant Protection Act; • Animals fully protected under the California Fish and Game Code; • Plants that have a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants rare, threatened, or endangered in California and elsewhere), 2A (plants presumed extirpated in California, but more common elsewhere), or 2B (plants rare, threatened, or endangered in California, but more common elsewhere). The CNPS CRPRs are used by both CDFW and USFWS in their consideration of formal species protection under ESA or CESA. With the exception of oak woodlands, which would be mitigated in accordance with the ORMP (see General Plan Policy 7.4.4.4), and Pine Hill rare plant species and their habitat, which would be mitigated in accordance with County Code Chapter 130.71 (see General Plan Policy 7.4.1.1), mitigation of impacts to vegetation communities will be implemented in accordance with the table below. Preservation and creation of the following vegetation communities will ensure that the current range and distribution of special-status species within the County are maintained.

B. Wildlife Movement for future 4- and 6- and 8-lane roadway construction projects. Consideration of wildlife movement will be given by the County on all future 4-, 6, and 8-lane roadway construction and widening projects. Impacts on public safety and wildlife movement for projects that include new roads of 4 or more lanes or the widening of roads to 4 or more lanes will be evaluated during the development review process (see Section C below). The analysis of wildlife movement impacts will take into account the conditions of the project site and surrounding property to determine whether wildlife under crossings are warranted and, if so, the type, size, and locations that would best mitigate a project's impacts on wildlife movement and associated public safety.

C. Biological Resources Assessment. A site-specific biological resources technical report will be required to determine the presence of special-status biological resources that may be affected by a proposed discretionary project. Vegetation communities and special-status plants shall be mapped and assessed in accordance with the CDFG 2009 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities and subsequent updates, and the List of Vegetation Alliances and Associations (CDFG 2010) and subsequent updates. Any surveys conducted to evaluate potential presence of special status wildlife species shall conform to practices recommended by CDFW and/or USFWS at the time of the surveys.

The report will include an assessment of direct, indirect and cumulative impacts to biological resources, including vegetation communities, plant and wildlife species and wildlife movement.

The report shall include recommendations for: • pre-construction surveys and avoidance/protection measures for nesting birds; • pre-construction surveys and avoidance/protection measures for roosting bats; • avoidance and minimization measures to reduce impacts related to entrapment, entanglement, injury, or poisoning of wildlife; and • avoidance and minimization measures to reduce indirect impacts to wildlife in open space adjacent to a project site. The results of the biological resources technical report shall be used as the basis for establishing mitigation requirements in conformance with this policy and the Oak Resources Management Plan (ORMP, see General Plan Policy 7.4.4.4).

D. Habitat Protection. Mitigation for impacts to vegetation communities defined above in Section A will occur within the County on a minimum contiguous habitat block of 5 acres. Wetlands mitigation may occur within mitigation banks and/or outside the County if within the watershed of impact. Mitigation sites will be prioritized based on the following criteria: • Location within PCAs and IBCs • Location within other important ecological areas, as defined in the Updated INRMP Initial Inventory and Mapping (June 2010); • Woodland, forest and shrub communities with diverse age structure; • Woodland and forest communities with large trees and dense canopies; • Opportunities for active land management to be used to enhance or restore natural ecosystem processes; • Presence of or potential to support special-status species; • Connectivity with adjacent protected lands; • Parcels that achieve multiple agency and community benefits; • Parcels that are located generally to the west of the Eldorado National Forest; and • Parcels that would preserve natural wildlife movement corridors such as crossings under major roadways (e.g., U.S. Highway 50 and across canyons).

E. Mitigation Assistance. The County will establish and maintain a database of willing sellers of land for mitigation of biological resource impacts within the County. The County will manage the database as a voluntary program wherein landowners must opt-in to be included in the database by contacting the County. The database will include the following information: • Property owner name • Assessor's Parcel Number • Parcel acreage • General vegetation communities as mapped in the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) database • Location within PCA, IBC, or important ecological area, as defined in the Updated INRMP Initial Inventory and Mapping (June 2010).

F. Mitigation Monitoring. Prior to final approval of an individual development project, applicants shall submit to the County a Mitigation Monitoring Plan that provides for periodic monitoring of preserved lands to assess effectiveness of the measures implemented to protect special-status and native species. The Mitigation Monitoring Plan shall demonstrate that funding is secured to implement the monitoring strategy in perpetuity.

3 METHODOLOGY

In order to evaluate the Project area for the presence of any sensitive biological resources, baseline information from databases and reporting for similar projects in the Sierra Nevada foothills and El Dorado County was collected and reviewed prior to conducting reconnaissance-level field biological surveys. The database searches, background research, and habitat level field surveys characterized the baseline conditions of the Project area. Based on the baseline conditions of the Project area, an assessment was implemented to determine if any special-status plant or wildlife species use the Project area at any time during their life cycle. The baseline conditions also identified the presence of any sensitive habitat or communities, including "waters of the U.S.," including wetlands, that have been identified and mapped within the Project area.

3.1 Sensitive Biological Resources Background Review

The following information was used to identify potential sensitive biological resources, including the presence of special-status plant and wildlife species, within the Project area region that could be found to use the Project area:

- California Department of Fish and Wildlife's California Natural Diversity Database records search of 3-mile buffer around the Project area (CDFW, 2020 and updated 9 Quad list in September 2023);
- The California Native Plant Society's Online Inventory of Rare and Endangered Plants of California for the Project area and El Dorado County (CNPS, 2020 updated 9 Quad list in September 2023);
- The U.S. Fish and Wildlife Service Information, Planning, and Consultation System (IPaC) for endangered, threatened, and proposed listed species for the Project area (USFWS, 2020);
- National Wetland Inventory map of the Project area (NWI, 2020);
- United States Department of Agriculture (USDA) Soils Mapper of the Project area (USDA, 2020);
- Natural Resources Conservation Service (NRCS) Hydric Soils List for El Dorado County (NRCS, 2020); and
- El Dorado County Land Use and Development Code, Ordinances, and General Plan.

3.2 Reconnaissance Level Biological Resources Field Surveys

Reconnaissance-level biological resources field surveys were conducted on foot for the entirety of the Project area by Greg Matuzak, Principal Biologist and owner of Greg Matuzak Environmental Consulting LLC. Field surveys were conducted on December 31st, 2020. Follow up reconnaissance-level biological resources field surveys were not required or conducted by Greg Matuzak given the initial site visit and field surveys were conducted within an area that does

not contain suitable habitat for potential special-status plant species. Only five (5) special-status plant species have been previously documented within the Aukum Quad where the Project is located and only a single species is CNPS listed as a higher ranking than the watchlist ranking of 4 (see attached CNPS list). Additionally, no special-status plant species had been previously identified and mapped within 3 miles of the Project area per CNDDB. The purpose of the surveys completed in December 2020 was to identify habitat and vegetation types and to determine the potential for any special-status plant and wildlife species identified in the desktop analysis and background research to occur within the Project area. Additionally, the surveys were focused on the presence/absence of special-status plant species to identify their occurrence within the proposed disturbance areas within the Project area.

For a review of the Project area and its relation to the existing not watercourse (seasonal drainage/stream) located to the north and northeast of the subject parcel, a review of the National Wetland Inventory federal aquatic resources database was reviewed (see results within the appendices to this report) and review the most recent Google Earth imagery covering the Project area to estimate the distance of the watercourse from the northern/northeastern edge of the proposed disturbance from the southern edge of the watercourse. Site surveys confirmed the lack of federal and State of California aquatic resources mapped within the Project area and the site survey included a review of the watercourse in question to the north/northeast of the Project area within the subject parcel.

3.3 Project Area Characterization

All vascular plant species identified at the time of the surveys were recorded using keys and descriptions in *The Jepson Manual* (Baldwin et al., 2012). Additionally, vegetation types have been classified by wildlife habitats/vegetation types using the California Department of Fish and Game's (CDFG) *A Guide to Wildlife Habitats* (Mayer and Laudenslayer, 1988). A list of plant and wildlife species identified within the Project area as part of the development of this Biological Report is located in Appendix E.

4 ENVIRONMENTAL SETTING

4.1 Environmental Setting

The Project area is located in El Dorado County, CA in the northern-central Sierra Nevada foothills. The Sierra Nevada foothills lie between the western edge of the Sierra Nevada and the eastern border of the Central Valley. The foothills form a belt 10 to 30 miles wide that ranges from 500 to 5,000 feet in elevation in a series of northwest to north-northwest aligned ridges that decline in elevation from northeast to southwest. Many rapidly flowing rivers and streams run westerly in deeply incised canyons with bedrock channels to the Central Valley and eventually to the Pacific Ocean. Alluvial fans, floodplains, and terraces are not extensive; and all but the largest streams are generally dry during the summer. Dominant vegetation communities include grasslands, oak woodlands, and chaparral.

Vegetation communities within the Project area are typical of the lower Sierra Nevada foothills. The terrain within the Project area is typical of the lower Sierra Nevada foothills that normally vary between flat ridges and valleys to gently and moderately sloping hillsides. The Project area elevation ranges from approximately 1,750 to 2,015 feet above mean sea level (MSL) with the high elevation being located at the southern entrance into the subject parcel off of D'Agostini Drive and the low elevation located within the northern section of the subject parcel where a small seasonal drainage crosses the subject parcel.

Natural hydrological sources for the Project area include precipitation and surface run-off from adjacent lands. Mean annual rainfall in the area is 39 inches (NRCS, 2020). During rain events over the previous month prior to the field surveys, no surface water was identified within the Project area. The subject parcel contains a single blue line feature, which can best be described as a seasonal drainage/stream located within the northern section of the subject parcel, which is mapped on the USGS and NWI and NHD maps covering the subject parcel. The blue line feature is located a minimum of 285 feet to the north and northeast of the proposed Project disturbance areas within the subject parcel. The closest named streams to the subject parcel include Scott Creek to the south and Spanish Creek to the north with both being located greater than 0.5 miles from the subject parcel. No aquatic features or habitats within the subject parcel are located within or directly adjacent to the Project area.

4.2 Project Area Soil Types

The USDA Soil Survey Mapper (USDA, 2020) identifies several soil types within the Project area. USDA soil mapping for the Project area is included in Appendix C and indicates that the proposed Project area (where disturbance is proposed) contains the following soil type: Musick very rocky sandy loam, 15 to 50 percent slopes. Soils in the Musick series consist of very deep, well drained soils formed in colluvium over residuum from intrusive igneous rocks. Musick soils are on foothills and mountains. This soil series is not derived from parent material that is gabbrodiorite or serpentine.

4.3 Project Area Vegetation Communities

The attached El Dorado County GIS habitat layer identifies the subject parcel as containing areas that are Developed and areas that are mapped as Oak Woodlands (see Appendix B). However, though a majority of the subject parcel is covered in woodlands, it is clear from the photos attached in Appendix F that the subject parcel is dominated by ponderosa pine woodlands and not oak woodland.

Vegetation community types within the Project area are described below.

Annual Grassland

Within the annual grasslands within the subject parcel, the following species are dominant: slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), softchess (*Bromus hordeaceus*), medusahead (*Taeniatherum caput-medusae*) and yellow-star thistle (*Centaurea solstitialis*). Most native grasslands in El Dorado County have been replaced by non-native invasive plants and the majority of the annual grassland habitat identified within the subject parcel is dominated by non-native annual grassland species and many are considered invasive. There is minimal annual grassland within the subject parcel; however, it is located within and adjacent to the Project area given the open and disturbed nature of the areas where previous disturbance and development have occurred within the subject parcel.

Cultivated/Planted Vineyards

Two areas planted with vineyards include a large vineyard directly to the northeast of the southern entrance into the subject parcel (southern vineyard) and the large vineyard where the proposed Project will be located (northern vineyard).

Ponderosa Pine

Ponderosa Pine is a co-dominant habitat type within the subject parcel along with annual grasslands and cultivated/planted vineyards as described above. Ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), and interior live oak trees (*Quercus wislizeni*) are the dominant species within this habitat type. Additionally, some scattered smaller California oak trees (*Quercus kelloggii*) were identified within the subject parcel and directly adjacent to the existing residence and cultivation area.

No native oak trees will be removed as part of the development of the proposed Project. The cultivation area, accessory areas, parking, and access road to the cultivation area are all located within open, disturbed areas dominated by non-native annual grassland species, ponderosa and incense cedar trees, and cultivated/planted vineyards; therefore, native oak trees will be avoided and no such oak trees are proposed to be removed.

5 RESULTS

Special-status species were considered for the Project area based on a current review of the CNDDB and database information provided by the United States Fish and Wildlife Service and California Native Plant Society as well as the reconnaissance-level biological resources surveys.

5.1 Special-Status Species

Based on the results of the database searches, two (2) special-status wildlife and fish species were identified as previously occurring within 3 miles of the Project area. No special-status plant species have been previously identified within 3 miles of the Project area. A description of the special-status species previously known to occur within 3 miles of the Project area (CNDDB, 2020) are discussed below (see Appendix G for a CNDDB 3-mile buffer figure and a list of the species identified in a 9 Quad CNDDB and CNPS search, CNDDB and CNPS 2023).

Only five (5) special-status plant species have been previously documented within the Aukum Quad where the Project is located and only a single species is CNPS listed as a higher ranking than the watchlist ranking of 4 (see attached CNPS list). Additionally, no special-status plant species had been previously identified and mapped within 3 miles of the Project area per CNDDB. The Project disturbance areas are located within Musick soils and this soil series is not derived from parent material that is gabbrodiorite or serpentine. Therefore, the only CNPS plant previously identified within the Aukum Quad that is not listed as a watchlist species is the Red Hills soaproot (*Chlorogalum grandiflorum*) and the species is ranked by CNPS as a 1B.2. However, the species has not been identified within 3 miles of the Project area and the Project area does not contain suitable habitat for this species. Furthermore, the additional CNPS List 4 species previously identified within the Aukum Quad where the Project is located are found within habitats that do not occur within the proposed Project disturbance areas.

No special-status plant species were identified within the Project area during reconnaissance-level surveys nor were any special-status wildlife species identified within the Project area. The CNDDB results for the Aukum Quad where the proposed Project is located includes aquatic species and owl and raptor species that require very specific habitats such as old growth forests for nesting or large meadows adjacent to nesting areas for foraging and these habitats do not occur within the Project area. In addition, no USFWS Designated Critical Habitat (DCH) has been mapped by USFWS for any federally listed species within the vicinity of the Project area. The following two species are the only special-status species previously mapped within 3 miles of the Project area per a review of CNDDB GIS data.

Central Valley Drainage Hardhead/Squawfish Stream – CDFW Sensitive Community

This CDFW mapped sensitive habitat community is not located within or adjacent to the Project area or subject parcel. Additionally, hardhead and squawfish are not located within the Project area given the lack of stream habitat within or adjacent to the Project area. CDFW has mapped this sensitive habitat community to the north and northwest of the subject parcel within

the Middle Fork of the Cosumnes River. Therefore, this sensitive stream habitat and sensitive species would not be impacted by the development of the proposed Project.

Great Gray Owl (*Strix nebulosa*) – Listed as Endangered under CESA

Permanent resident in the Sierra Nevada. Permanent resident in the Sierra from 4,500 – 7,500 feet MSL. Associated with old-growth coniferous forests bordering large meadow systems. Nesting typically occurs in broken top snags of dead trees, usually 24-inch dbh or greater for nesting. Does not build nests. May use old hawk or eagle nests. Forages in meadows. Generally, nests are in close proximity to meadows, but not always. This species is known from the western Sierra Nevada in the ponderosa pine zone.

This species has been previously documented within 3 miles to the east of the subject parcel. The subject parcel does not provide suitable nesting opportunities given the species prefers larger, old growth forested habitat for nesting and large meadows for foraging, neither of which occur within the subject parcel. Therefore, the proposed Project would have no impact on the species.

Nesting raptors and other migratory bird species - Protected under CA State DFG Code Sections 3503, 3503.5, and 3800

There is a low to moderate potential for nesting raptors and other nesting migratory bird species to occur within and directly adjacent to the Project area. The Project area contains suitable nesting habitat for bird species, such as tree nesting species (Cooper's hawk and other common raptors) and ground nesting species like the spotted towhee (*Pipilo maculatus*) and dark-eyed junco (*Junco hyemalis*). Additional species that are known to nest in shrub and tree habitat have the potential to nest adjacent to the Project area. The nesting season for raptors and other protected nesting birds within the Project area occurs between March 1st and August 31st.

6 CONCLUSIONS AND RECOMMENDATIONS:

These conclusions and recommendations are based on the findings of this Biological Report and the impact assessment based on the Project Understanding outlined in Section 1.2 above. The impact assessment and recommendations below are based on the proposed Project components that would require disturbance within the Project area. These project components area included in the Site Plan attached in Appendix B.

Under CEQA, the following conclusions of this Biological Report for potential impacts not requiring mitigation include the following:

- There are no pond, wetland, stream, or other aquatic habitat features within the proposed Project disturbance areas; therefore, the proposed Project would not be subject to permitting requirements under the Clean Water Act.
- There are no stream or riparian zone habitat features within 285 feet of the Project area; therefore, the proposed Project would not be subject to permitting requirements by CDFW (Streambed Alteration Agreement not required) and it will be located outside of the State Water Board's 100-foot setback requirement for intermittent and seasonal streams.
- However, the subject parcel does contain a seasonal drainage/stream that runs within the northern/northeastern section of the subject parcel and the southern edge of the watercourse is located a minimum of 285 feet from the closest location to the proposed Project disturbance area, which is the northeast corner of the vineyard/Project area where there is a gate. Therefore, the applicant will implement the Best Management Practices and other mitigation measures included below as part of a waiver request under Ordinance 5110 to demonstrate that the actual 300-foot El Dorado County setback will be substantially achieved for the purpose of their required setback.
- Wildlife movement corridors typically are associated with ridgelines and valleys, rivers, and creeks supporting riparian vegetation. The proposed Project area does provide good cover for movement and foraging for many species; however, more typical movement corridors are available adjacent to the Project area within and adjacent to the subject parcel. Proposed Project development would temporarily impede wildlife use of the Project area; however, these Project related effects would be localized and would not substantially affect wildlife movements. No wildlife nursery sites are in the proposed Project area. The impact would be less than significant. No mitigation is required.
- Proposed Project area development would not conflict with any known local policies or ordinances and would be consistent with provisions of the El Dorado County General Plan Conservation and Open Space Element. The proposed Project is not within an important biological corridor or priority conservation area as identified in the general plan. No impact would occur.
- No draft or adopted habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans exist. No impact would occur.

For sensitive biological resources that have the potential to be impacted by the implementation of the proposed Project, avoidance, minimization, and mitigation measures are proposed to ensure that such disturbance does not cause a significant impact on any sensitive biological resources within the Project area.

Proposed Avoidance, Minimization, and Mitigation Measures

6.1 Potential Impacts to Special-Status Species

Special-status plant surveys were conducted within the Project area during December 2020, which does not coincide with the typical blooming period of the special-status plant species that would normally have the potential to occur within the subject parcel and greater Project area (see the attached 9 Quad and Aukum Quad CNPS search identifying CNPS ranked species previously identified within the Aukem Quad where the Project is located and the blooming period for those species which runs from February through August). However, no special-status plant species have been previously identified within 3 miles of the Project area and no special-status plants were documented within the Project area during the site visit and surveys conducted as part of the development of this Biological Report.

Only five (5) special-status plant species have been previously documented within the Aukum Quad where the Project is located and only a single species is CNPS listed as a higher ranking than the watchlist ranking of 4 (see attached CNPS list). The Project disturbance areas are located within Musick soils and this soil series is not derived from parent material that is gabbrodiorite or serpentine. Therefore, the only CNPS plant previously identified within the Aukum Quad that is not listed as a watchlist species (CNPS Rank 4) is the Red Hills soaproot (*Chlorogalum grandiflorum*) and the species is ranked by CNPS as a 1B.2. However, the species has not been identified within 3 miles of the Project area and the Project area does not contain suitable habitat for this species given the lack of required soil types for this species.

Therefore, there is a very low likelihood that the Project area would contain a protected special-status plant species listed by CNPS and per CEQA requirements based on the results of the background research and database searches, the December 2020 surveys conducted within the Project area, and the heavy disturbance along the access road and vineyard where the proposed Project disturbance will be located. Additionally, the Project area does not contain suitable habitat for special-status wildlife species and therefore, the Project would have no impact on special-status wildlife species previously identified within 3 miles of the subject parcel or any other such species.

However, to ensure that no special-status plant species previously identified within the attached 9 Quad search or within the Aukum Quad where the Project is located, prior to the implementation of future ground disturbing activities within the Project disturbance areas, an additional special-status plant survey will be required to document the presence or absence of each of the special-status plant species with potential to occur within the Project area, even though the potential presence of such plant species is considered very low.

If any special-status plant species is documented within or directly adjacent to areas proposed for disturbance within the Project area that are CNPS list 1A, 1B, 2A, or 2B per CEQA Guidelines Section 15380, or are listed under the ESA and/or CESA, protection of such plants would include complete avoidance, transplantation, and/or on- or offsite restoration of the special-status plant species that could be impacted by such site disturbance.

Disturbance related impacts to CNPS list 3 and list 4 species ***would not*** be considered a "significant" impact requiring additional mitigation under CEQA Guidelines Section 15380. Therefore, the proposed Project would have a **less than significant** impact on special-status plant species with the implementation of the **mitigation measures** outlined above for special-status plants.

6.2 Potential Impacts to Nesting Raptors and other Protected Bird Species

Given the Project area contains some medium sized trees and many of those trees contain suitable habitat for nesting raptors and other protected bird species, removal of such trees should be done outside the breeding season, if possible, to avoid potential impacts to such protected nesting bird species. The breeding season for raptors and MBTA protected bird species in the vicinity of the Project area is generally from March 1 to August 31. Vegetation clearing or tree removal outside of the breeding season for such bird species would not require the implementation of any avoidance, minimization, or mitigation measures. However, construction or development activities during the breeding season could disturb or remove occupied nests of raptors and would require the implementation of a pre-construction survey within 250 feet of the any disturbance area within the Project area for nesting raptors and other protected bird species within 14 days prior to disturbance.

Avoidance: Vegetation clearing or tree removal outside of the breeding season for such bird species and/or avoidance of such potential nesting habitat would not require the implementation of any avoidance, minimization, or mitigation measures.

Mitigation: Construction or disturbance activities during the breeding season could disturb or remove occupied nests of raptors and/or protected bird species and would require the implementation of a pre-construction survey within and adjacent to any proposed disturbance area within the Project area for nesting raptors and other protected bird species within 14 days prior to disturbance. The nesting survey radius around the proposed disturbance would be identified prior to the implementation of the protected bird nesting surveys by a CDFW qualified biologist and would be based on the habitat type, habitat quality, and type of disturbance proposed within or adjacent to nesting habitat.

If any nesting raptors or protected birds are identified during such pre-construction surveys, trees or shrubs or grasslands with active nests should be not be removed or disturbed and a no-disturbance buffer should be established around the nesting site to avoid disturbance or destruction of the nest site until after the breeding season or after a qualified wildlife biologist

determines that the young have fledged. The extent of these buffers would be determined by a CDFW qualified wildlife biologist and would depend on the special-status species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed by a qualified wildlife biologist to make an appropriate decision on buffer distances based on the species and level of disturbance proposed in the vicinity of an active nest.

Therefore, the proposed Project would have a **less than significant** impact on nesting raptors and other protected bird species with the implementation of the **mitigation measures** outlined above.

6.3 El Dorado County Oak Resources Conservation Ordinance

The Project applicant will comply with the El Dorado County Oak Resources Conservation Ordinance. No oak trees will be removed as per the current Site Plan for the proposed Project. However, if any changes occur to the Site Plan that would require the removal or work within the dripline of any protected oak resources, the following would be required to be implemented prior to the removal of or any impacts to oak trees and oak resources:

- Permits for removal of Oak Resources are required for any non-exempt action requiring discretionary development entitlements or approvals from the County such as an ADP cannabis cultivation permit. *An Oak Resources Technical Report prepared by a certified arborist, qualified wildlife biologist or a Registered Professional Forester is required prior to issuing a permit to remove any Oak Resources.*
- The ORMP requires mitigation for permitted oak tree removal under the ORMP including: on-site retention; replacement planting on-site and off-site; and in-lieu fees that will be used to acquire land and/or conservation easements to conserve oak woodlands, and to plant and maintain native oak trees. (Under the prior General Plan Policy tree canopy retention was the only mitigation option available.) All mitigation requires additional permits depending upon the mitigation option chosen.
- To encourage on-site retention of oak woodlands, the ORMP requires increasing mitigation ratios based on the amount of oak woodland removed: Removing 50 percent or less requires a 1-to-1 ratio of mitigation, removing up to 75 percent requires a 1.5-to-1 ratio of mitigation, and removing up to 100 percent requires a 2-to-1 ratio of mitigation. Mitigation of oak woodlands would consist of one of the options described above: on-site retention; replacement planting on-site and off-site; and/or in-lieu fees.
- A security deposit is required for all discretionary projects proposing on-site oak tree/oak woodland retention and/or replacement planting as mitigation. No grading or other on-site work shall be permitted until the security deposit is posted.
- The in-lieu fee for removal of *oak woodlands* is calculated based on total cost per acre which is currently set at $8,285. The in-lieu fee for removal of *individual oak trees* is calculated on a total cost per inch which is currently set at $153 for a non-Heritage Tree

and $459 per inch for a Heritage Tree at a 3-to-1 ratio. The per-inch fee shall be multiplied by the total number of trunk diameter inches removed. The in-lieu fees collected will be deposited in the County's Oak Woodland Conservation Fund. That fund will be used to acquire land and/or conservation easements to conserve oak woodlands, provide for native oak tree planting, and for ongoing conservation area monitoring and management activities.

Therefore, the proposed Project would have a **less than significant** impact on protected oak resources with the implementation of the **mitigation measures** outlined above, if such resources may be impacted by the proposed Project.

6.4 El Dorado County Ordinance 5110 Ordinance: Stream Setback Requirements

El Dorado County Ordinance 5110 Article 4 (Section 130.41.200.5.C) covers outdoor and mixed-light cultivation of commercial cannabis within El Dorado County and includes the following regarding stream setbacks:

- *Setbacks.* Outdoor or mixed-light cultivation of commercial cannabis shall be setback a minimum of 800 feet from the property line of the site or public right-of-way and shall be located at least 300 feet from the upland extent of the riparian vegetation of any watercourse.

The Project area does not contain any watercourses or other aquatic resources such as ponds or wetlands. Site surveys confirmed the lack of federal and State of California aquatic resources mapped within the proposed Project disturbance area and therefore, the proposed Project would have no direct impact on any watercourses or other aquatic resources protected under local, state, or federal regulations. However, a seasonal drainage runs within the northern section of the subject parcel a minimum of 285 feet from the Project area at its closest location to the proposed Project disturbance area, which is the northeast corner of the vineyard/Project area where there is a gate. The seasonal drainage runs at the bottom of two steep slopes (to the north and south) and does not contain riparian vegetation or other wetland indicators. It contains rocky, unvegetated substrate with upland vegetation along its banks and therefore, the 285-foot estimate is from the southern top of back of the seasonal watercourse given there is no riparian vegetation along the edges of the seasonal drainage/stream.

Therefore, the applicant is requesting a waiver to construct and operate the proposed Project within the 300-foot required Ordinance 5110 setback for streams. Given the distance the seasonal drainage is located from the proposed Project disturbance area and given the dense vegetation between the southern edge of the seasonal drainage from the northern and northeastern edge of the Project area, construction and operational sedimentation caused by erosion would be highly unlikely to occur as part of the proposed Project. However, to ensure that any potential erosion that may occur during construction and operation of the Project will not pollute the seasonal drainage/stream with sedimentation or runoff, the following measures shall be included during construction and immediately after construction is completed to ensure that the proposed Project does not indirectly impact the seasonal drainage/stream:

- Limit construction to periods of extended dry weather and/or the dry summer season to the extent feasible;
- Establish the area around the seasonal drainage/stream as an Environmentally Sensitive Area (ESA) where those areas will not be impacted by construction unless otherwise included in regulatory permits for such impacts;
- No fill or dredge material will enter or be removed from the seasonal drainage/stream during construction unless otherwise included in regulatory permits for such impacts;
- Use appropriate machinery and equipment to limit disturbance in those areas;
- Placement of straw and/or other soil erosion control devices between the seasonal drainage/stream and the areas where vegetation removal will occur to limit potential runoff and sedimentation into the stream channel;
- No dewatering of the seasonal drainage/stream will occur as part of the proposed construction unless otherwise included in regulatory permits for such actions; and
- Implement Best Management Practices during and immediately following construction.

To further protect the seasonal drainage/stream and its setback areas, as well as water quality and downstream water resources, the contractor shall implement standard Best Management Practices during and immediately after construction. These measures should include, but are not limited to:

- Minimize the number and size of work areas for equipment and spoil storage sites in the vicinity of the seasonal drainage/stream. Place staging areas and other work areas outside of the 300-foot setback within the Project area.

- The contractor shall exercise reasonable precaution to protect the seasonal drainage/stream as well as adjacent setback areas from pollution with fuels, oils, and other harmful materials. Construction byproducts and pollutants such as oil, cement, and wash water shall be prevented from discharging into or near these resources and shall be collected for removal off the site. All construction debris and associated materials and litter shall be removed from the work site immediately upon completion.

- No equipment for vehicle maintenance or refueling shall occur within the 300-foot stream setback areas. The contractor shall immediately contain and clean up any petroleum or other chemical spills with absorbent materials such as sawdust or kitty litter. For other hazardous materials, follow the cleanup instruction on the label.

Therefore, the proposed Project would have a **less than significant** impact on the seasonal drainage/stream and it's 300-foot setback area with the implementation of the **mitigation measures** outlined above, if such resources may be impacted by the proposed Project. The Best Management Practices and other mitigation measures included

above demonstrate that the actual 300-foot El Dorado County setback will be substantially achieved for the purpose of their required setback.

7 REFERENCES

Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., and Wilken, D.H. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press.

Burt, William Henry. 1980. A Field Guide to the Mammals of North America north of Mexico. New York, New York: Houghton Mifflin Company, 1980.

Calflora. Information on California Plant for Education, Research and Conservation. [web application]. 2020.

California Department of Fish and Game (CDFG). 2004. Fish and Game Code Sections 1600-1616.

California Department of Fish and Wildlife (CDFW). 2020. Lake and Streambed Alteration Program.

California Department of Fish and Wildlife (CDFW). 2020. California Wildlife Habitat Relationships (CWHR).

California Department of Fish and Game (CDFG). 1987. Five-Year Status Report: California Black Rail. Non-Game Bird and Mammal Section, Wildlife Management Division, Department of Fish and Game. California.

California Department of Fish and Game (CDFG). 2011. Special - 898 Taxa. California Natural Diversity Database, The Natural Resources Agency, Biogeographic Branch, Department of Fish and Game. California.

California Department of Fish and Wildlife (CDFW). 2020. RareFind Verion 3: Search of 3-mile buffer around Project Area. California Natural Diversity Database (CNDDB), California Department of Fish and Wildlife. Sacramento, California.

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB) 9 Quad Search and Aukum Quad Search, California Department of Fish and Wildlife. Sacramento, California.

California Department of Fish and Wildlife (CDFW). 2020. Threatened and Endangered Species. California Department of Fish and Wildlife. Sacramento, California.

CaliforniaHerps.com (CaliforniaHerps). 2020. A Guide to Amphibians and Reptiles in California. CaliforniaHerps.com. California.

California Native Plant Society (CNPS). 2000. A Manual of California Vegetation. [web based version]. California Native Plant Society. Information Center for the Environment, University of California Davis.

California Native Plant Society (CNPS). 2020. Online Inventory of Rare, Threatened, and Endangered Plants of California, V9-02. California Native Plant Society. California.

California Native Plant Society (CNPS). 2023. Online Inventory of Rare, Threatened, and Endangered Plants of California for a 9 Quad Search and Aukum Quad Search. California Native Plant Society. California.

Cornell Law School. 2001. Solid Waste Agency of Northern Cook City. V. Army Corps Of Engineers (99-1178) 531 U.S. 159 (2001) 191 F.3d 845, reversed. Legal Information Institute.

Drake University. 2007. Rapanos v. United States: "Waters of the United States" Under the Clean Water Act (2003). Drake Journal of Agricultural Law, Volume 12, Number 3.

El Dorado County. 2017. El Dorado County Oak Resources Management Plan and Oak Resources Conservation Ordinance. Adopted October 24th, 2017.

El Dorado County. 2019. El Dorado County Ordinance No. 5110. Adopted September 10th, 2019.

El Dorado County. 2017. El Dorado County General Plan Conservation and Open Space Element. Amended October 2017.

Environmental Laboratory: US Army Corps of Engineers (Corps). 1987. Corps of Engineers Wetlands Delineation Manual.

Environmental Protection Agency (EPA). 1972. Summary of the Clean Water (CWA) Act- 33 U.S.C. §1251 et seq. (1972). EPA Laws and Regulations.

Evens, J., Page, G.W., Laymon, S.A. and R.W. Stallcup. 1991. Distribution, Relative Abundance and Status of the California Black Rail in Western North America. The Condor 93(4) 952 November 1991.

Jennings, M.R.; Hayes, M.P. Amphibian and Reptile Species of Special Concern in California. 1994. Inland Fisheries Division, California Department of Fish and Game. Rancho Cordova, California.

Jepson Herbarium, The. (Jespson eFlora). 2020. The Jepson Herbarium, University of California, Berkeley. Berkeley, California.

Legislative Counsel of California (LCC). 2004. Senate Bill 1334- Oak Woodlands Conservation Act. Official California Legislative Information. California.

Legislative Counsel of California (LCC). 2013. California Law: California fish and Game Code. Official California Legislative Information. California.

Mayer, K. E. and William F. Laudenslayer, Jr. 1988. A Guide to Wildlife Habitats of California. State of California, Resources Agency, Department of Fish and Game Sacramento, CA. 166 pp.

Natural Resources Conservation Service. 2020. Weather for City of Colfax, California.

Sawyer, J.O., Keeler-Wolf, T., Evans, J.M. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society.

Shuford, W. D., and T. Gardali, editors. 2008. California bird species of special concern: a ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Spautz, H., Nur, N., Stralberg, D. 2005. California Black Rail (*Laterallus jamaicensis coturniculus*): Distribution and Abundance in Relation to Habitat and Landscape Features in the San Francisco Bay Estuary. USDA Forest Service General Technical Report: PSW-GTR-191.

United States Department of Agriculture (USDA). 2020. National Resources Conservation District (NRCS) - Web Soil Survey.

United States Army Corps of Engineers (Corps). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). U. S. Army Corps of Engineers – Engineer Research and Development Center. May 2010.

United States Fish and Wildlife Service (USFWS). 1918. Migratory Bird Treaty Act of 1918. 1918.

United States Fish and Wildlife Service (USFWS). 1940. The Bald and Golden Eagle Protection Act.

United States Fish and Wildlife Service (USFWS). 1973. Endangered Species Act.

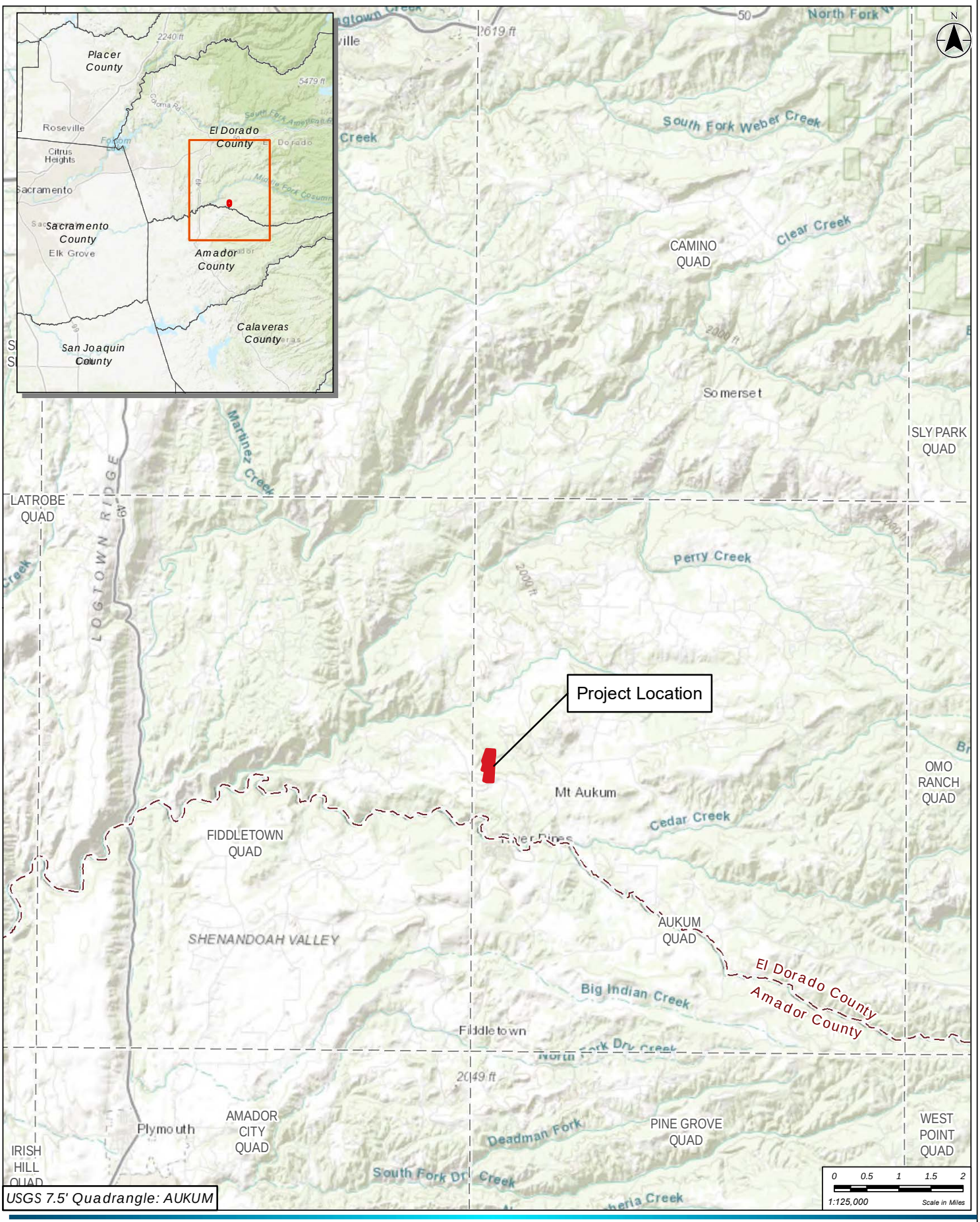
United States Fish and Wildlife Service (USFWS). 1996. Determination of Endangered Status for Four Plants and Threatened Status for One Plant From the Central Sierran Foothills of California. U.S. Fish & Wildlife Federal Register. October 18, 1996.

United States Fish and Wildlife Service (USFWS). 2020. Federal Endangered and Threatened Species Information for Planning and Consultation (IPaC) for the Project area and Nevada County. Sacramento Fish and Wildlife Service.

United States Fish and Wildlife Service (USFWS). 2020. National Wetland Inventory (NWI) and National Hydrography Database (NHD).

Appendix A

Project Overview Area Figures

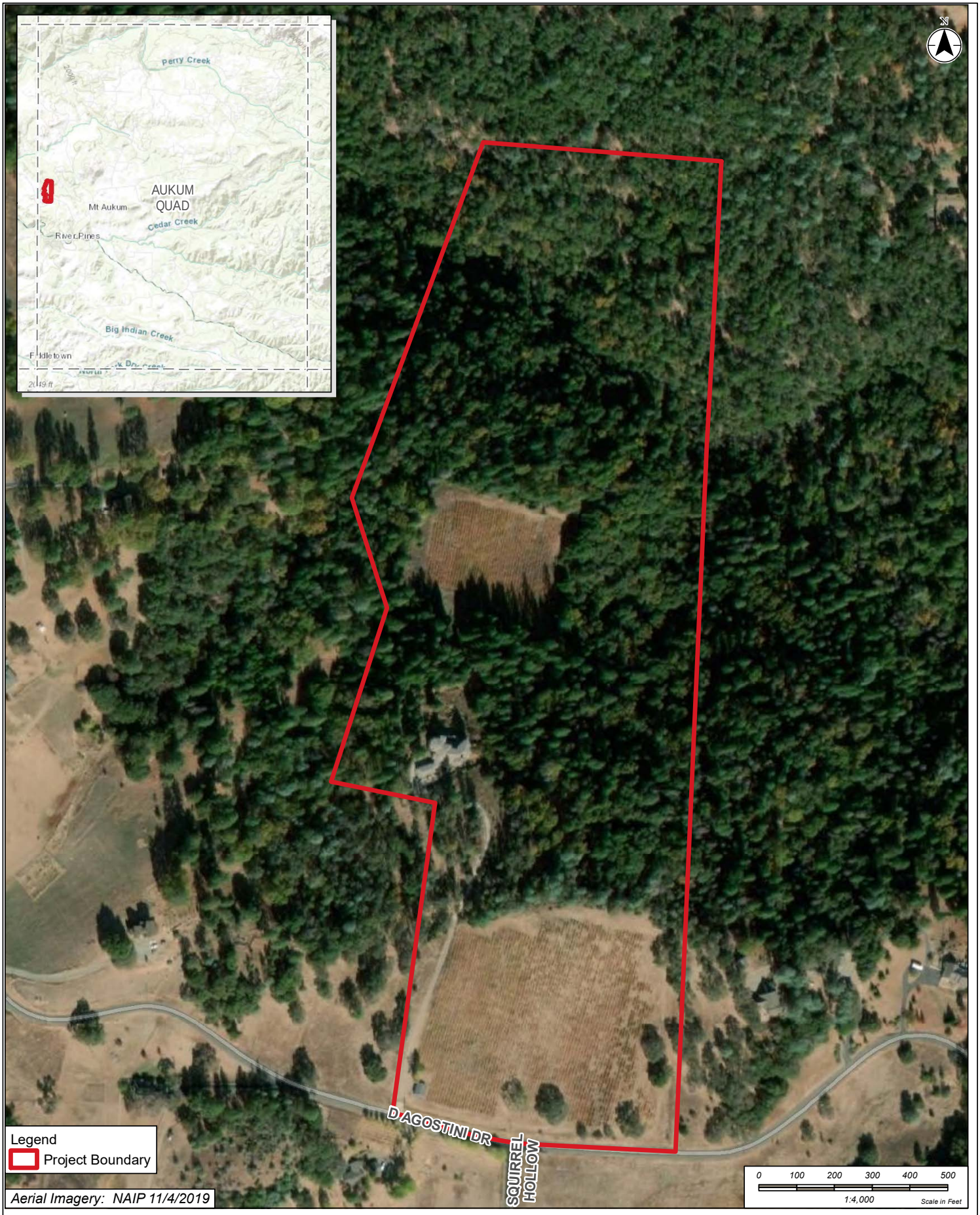


GREG MATUZAK
Environmental Consulting LLC
Nevada City, CA

Parcel No.: 046-710-017

Figure 1. Vicinity Map

Prepared: Melissa Nugent 12/16/2020 E:\2020_GIS_Matuzak\20201216_ElDorado_046-710-17-100\mxd\Fig1_Vicinity_ElDorado_046-710-17-100.mxd



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Parcel No.: 046-710-017

Figure 2. Project Location Map

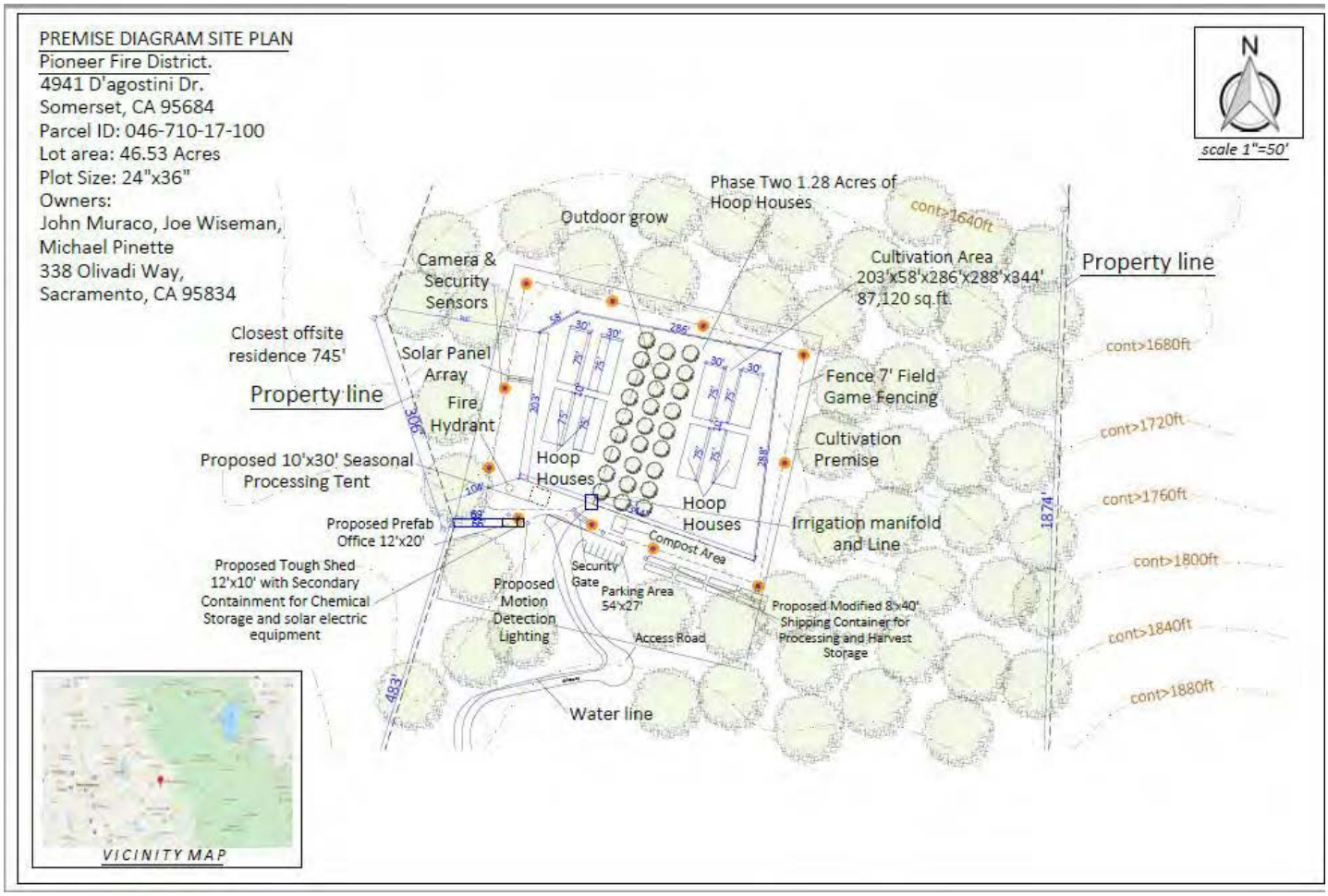
Prepared: Melissa Nugent 12/16/2020 E:\2020_GIS_Matuzak\20201216_ElDorado_046-710-17-100\mxd\Fig2_SiteMap_ElDorado_046-710-17-100.mxd

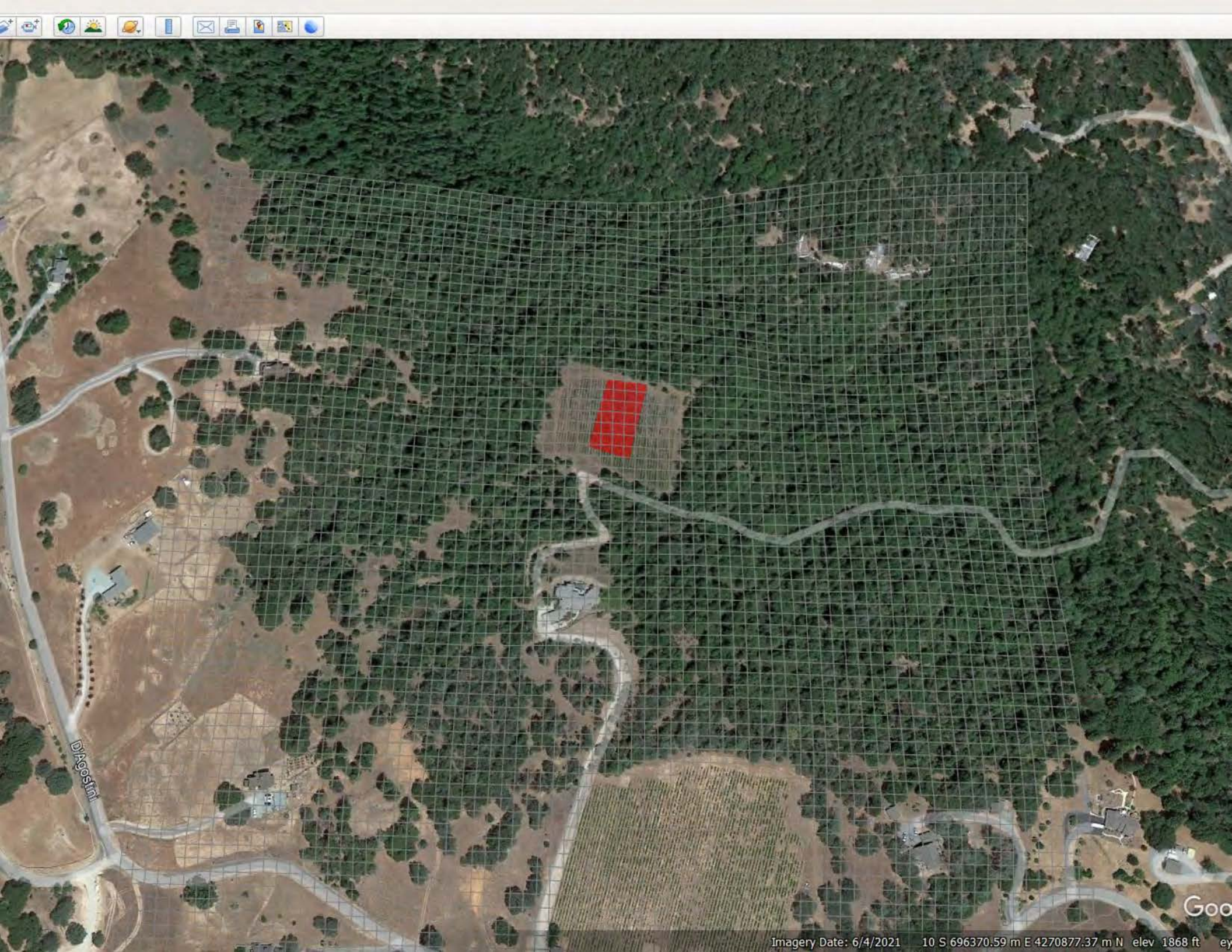
Appendix B

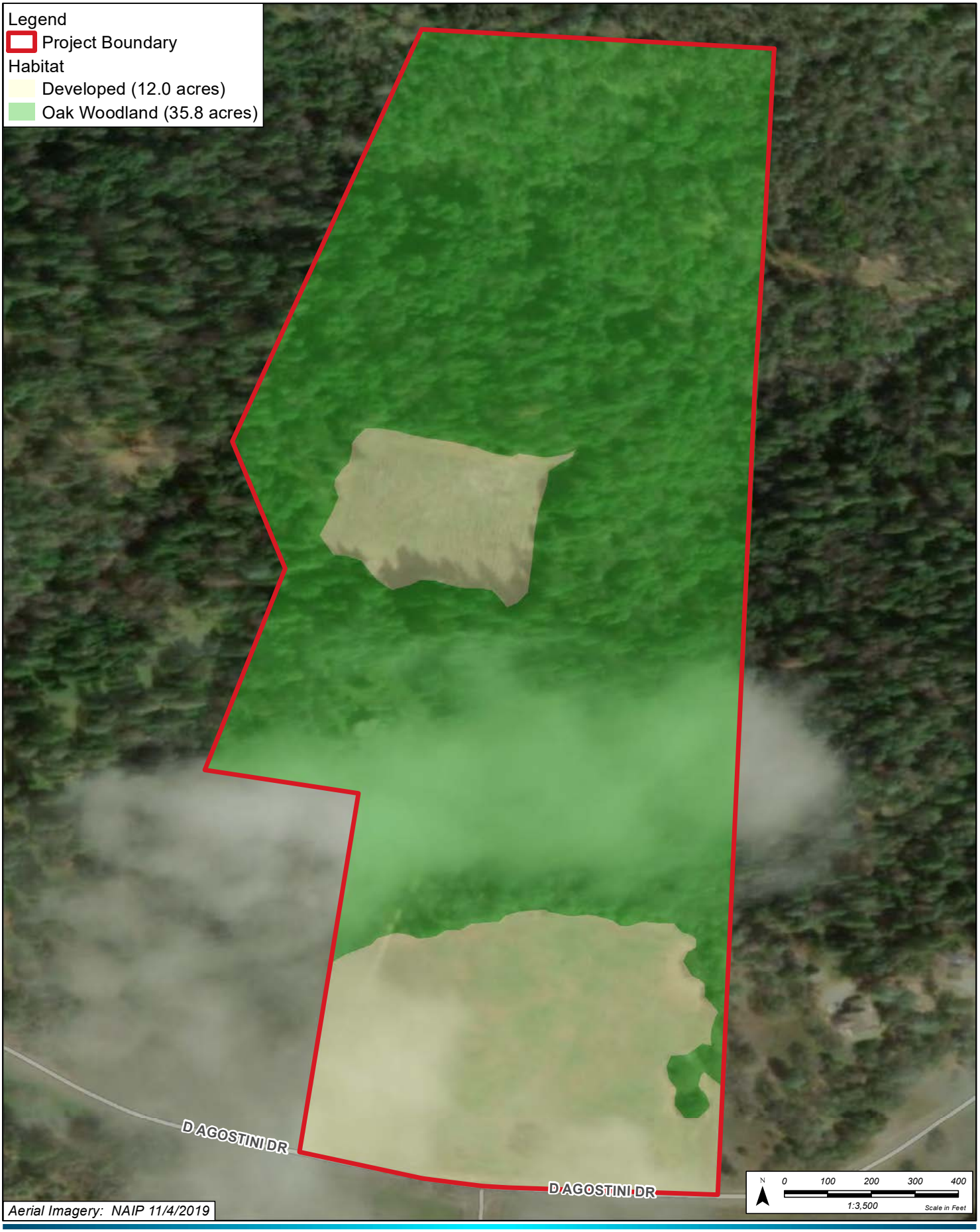
Project Site Plan and Habitat Maps

Cultivation Impact Map in Red

Site Map


PREMISE DIAGRAM SITE PLAN
Pioneer Fire District.
4941 D'agostini Dr.
Somerset, CA 95684
Parcel ID: 046-710-17-100
Lot area: 46.53 Acres
Plot Size: 24"x36"
Owners:
John Muraco, Joe Wiseman,
Michael Pinette
338 Olivadi Way,
Sacramento, CA 95834
N
scale 1"=50'
Phase Two 1.28 Acres of Hoop Houses
Outdoor grow
cont>1640ft
Camera & Security Sensors
Cultivation Area 203'x58'x286'x288'x344' 87,120 sq.ft.
Property line
Closest offsite residence 745'
Solar Panel Array
Property line
Fence 7' Field Game Fencing
cont>1680ft
Fire Hydrant
Cultivation Premise
cont>1720ft
Proposed 10'x30' Seasonal Processing Tent
Hoop Houses
Hoop Houses
cont>1760ft
Proposed Prefab Office 12'x20'
Irrigation manifold and Line
1874'
Compost Area
cont>1800ft
Proposed Tough Shed 12'x10' with Secondary Containment for Chemical Storage and solar electric equipment
Security Gate
Parking Area 54'x27'
Proposed Motion Detection Lighting
Access Road
Proposed Modified 8'x40' Shipping Container for Processing and Harvest Storage
cont>1840ft
cont>1880ft
483'
Water line
VICINITY MAP


D'Agostini
Imagery Date: 6/4/2021 10 S 696370.59 m E 4270877.37 m N elev 1868 ft



GREG MATUZAK
Environmental Consulting LLC
Nevada City, CA

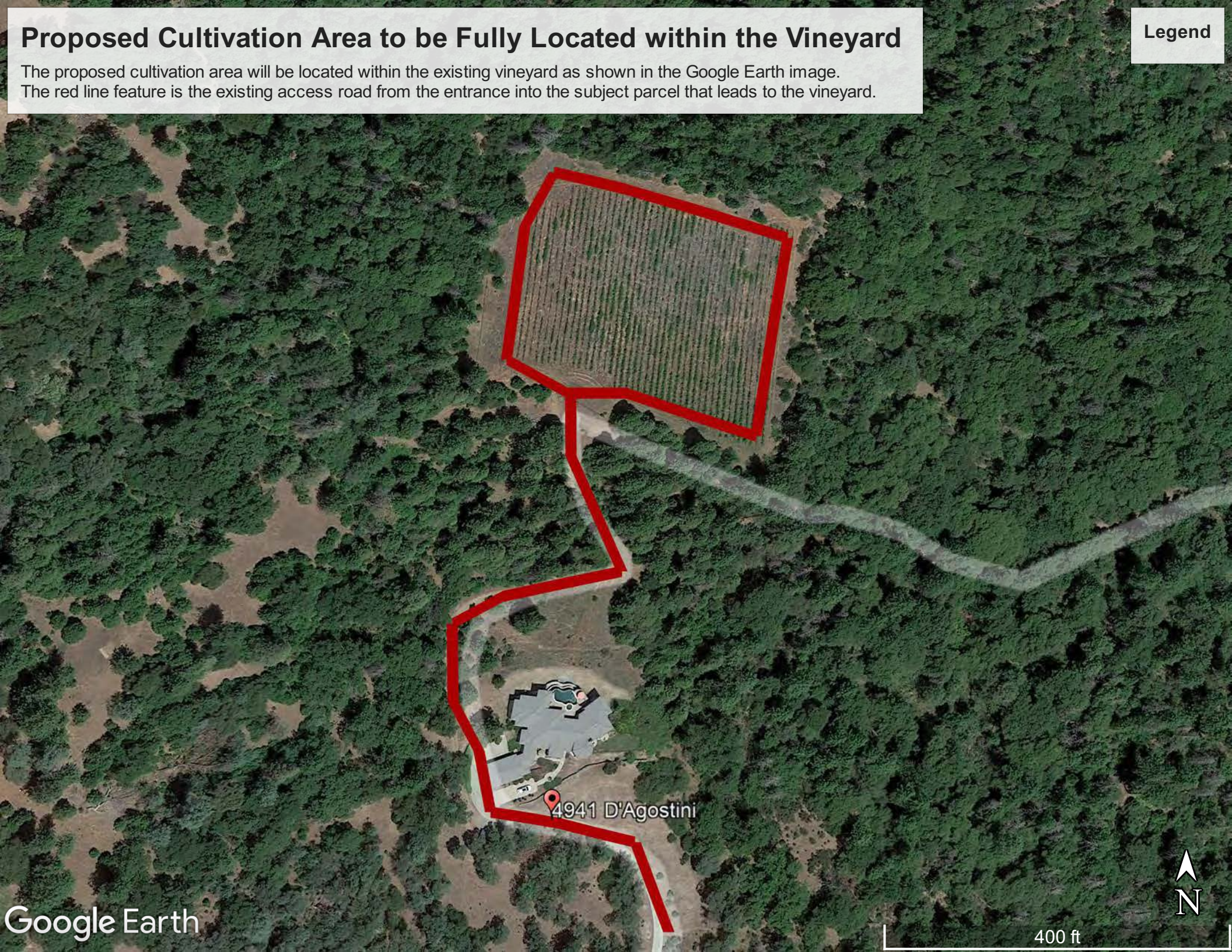
Parcel No.: 046-710-017

Figure. Habitat Map

Prepared: Melissa Nugent 7/31/2023 D:__GIS_Matuzak\20201216_ElDorado_046-710-17-100\mxd\Figx_Habitat3_ElDorado_046-710-17-100.mxd

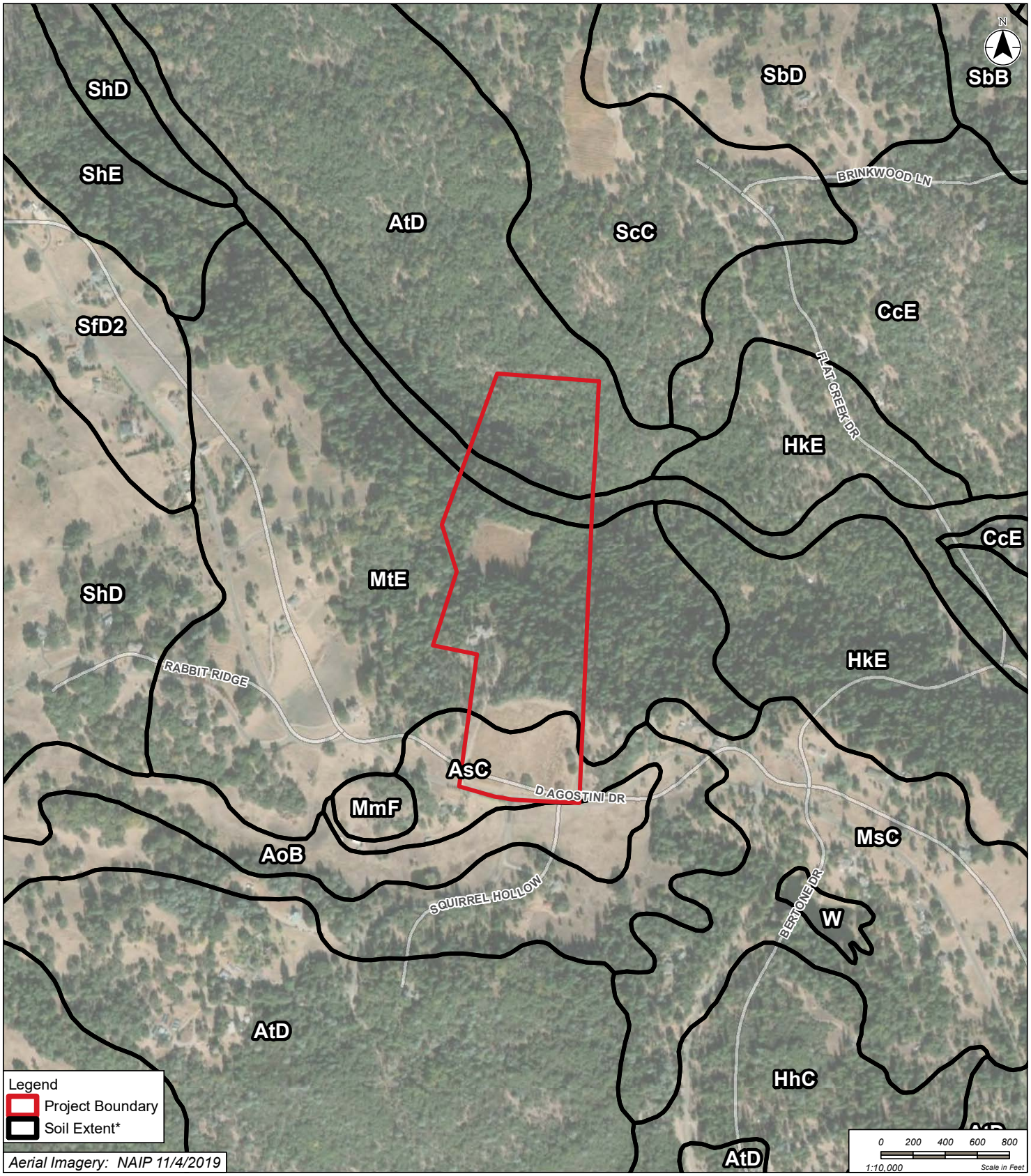
Proposed Cultivation Area to be Fully Located within the Vineyard

The proposed cultivation area will be located within the existing vineyard as shown in the Google Earth image.
The red line feature is the existing access road from the entrance into the subject parcel that leads to the vineyard.



Appendix C

USDA Soils Map



SOIL TYPE*

AdE - Ahwahnee very rocky coarse sandy loam, 30 to 50 percent slopes
AoB - Argonaut loam, seeped variant
AsC - Auberry rocky coarse sandy loam, 5 to 15 percent slopes
AtD - Auberry very rocky coarse sandy loam, 15 to 30 percent slopes
CcE - Chaix very rocky coarse sandy loam, 9 to 50 percent slopes
HhC - Holland rocky coarse sandy loam, 5 to 15 percent slopes
HkE - Holland very rocky coarse sandy loam, 15 to 50 percent slopes
MmF - Metamorphic rock land
MsC - Musick rocky sandy loam, 5 to 15 percent slopes
MtE - Musick very rocky sandy loam, 15 to 50 percent slopes
PrD - Placer diggings
SbB - Shaver coarse sandy loam, 5 to 9 percent slopes
SbD - Shaver coarse sandy loam, 15 to 30 percent slopes
ScC - Shaver rocky coarse sandy loam, 5 to 15 percent slopes
SdE - Shaver very rocky coarse sandy loam, 15 to 50 percent
SfD2 - Sierra sandy loam, 15 to 30 percent slopes, eroded
ShD - Sierra very rocky sandy loam, 15 to 30 percent slopes
ShE - Sierra very rocky sandy loam, 30 to 50 percent slopes
W - Water

* Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online. Accessed 03/06/2019

GREG MATUZAK
Environmental Consulting LLC
Nevada City, CA

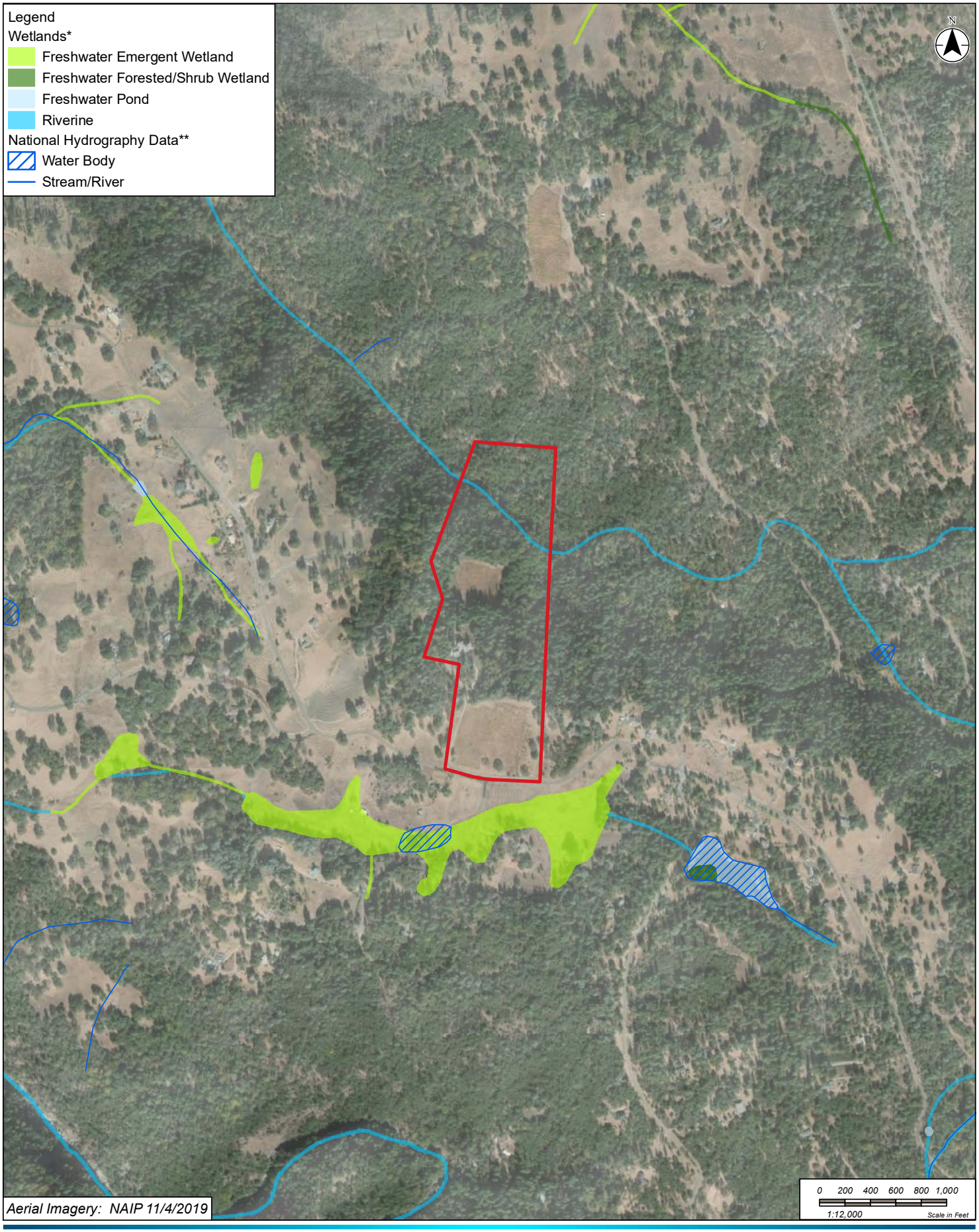
Parcel No.: 046-710-017

Figure 4. Soils Map

Prepared: Melissa Nugent 12/16/2020 E:\2020_GIS_Matuzak\20201216_ElDorado_046-710-17-100\mxd\Fig4_SoilsMap_ElDorado_046-710-17-100.mxd

Appendix D

National Wetland Inventory (NWI) Map



GREG MATUZAK
Environmental Consulting LLC
Nevada City, CA

Parcel No.: 046-710-017

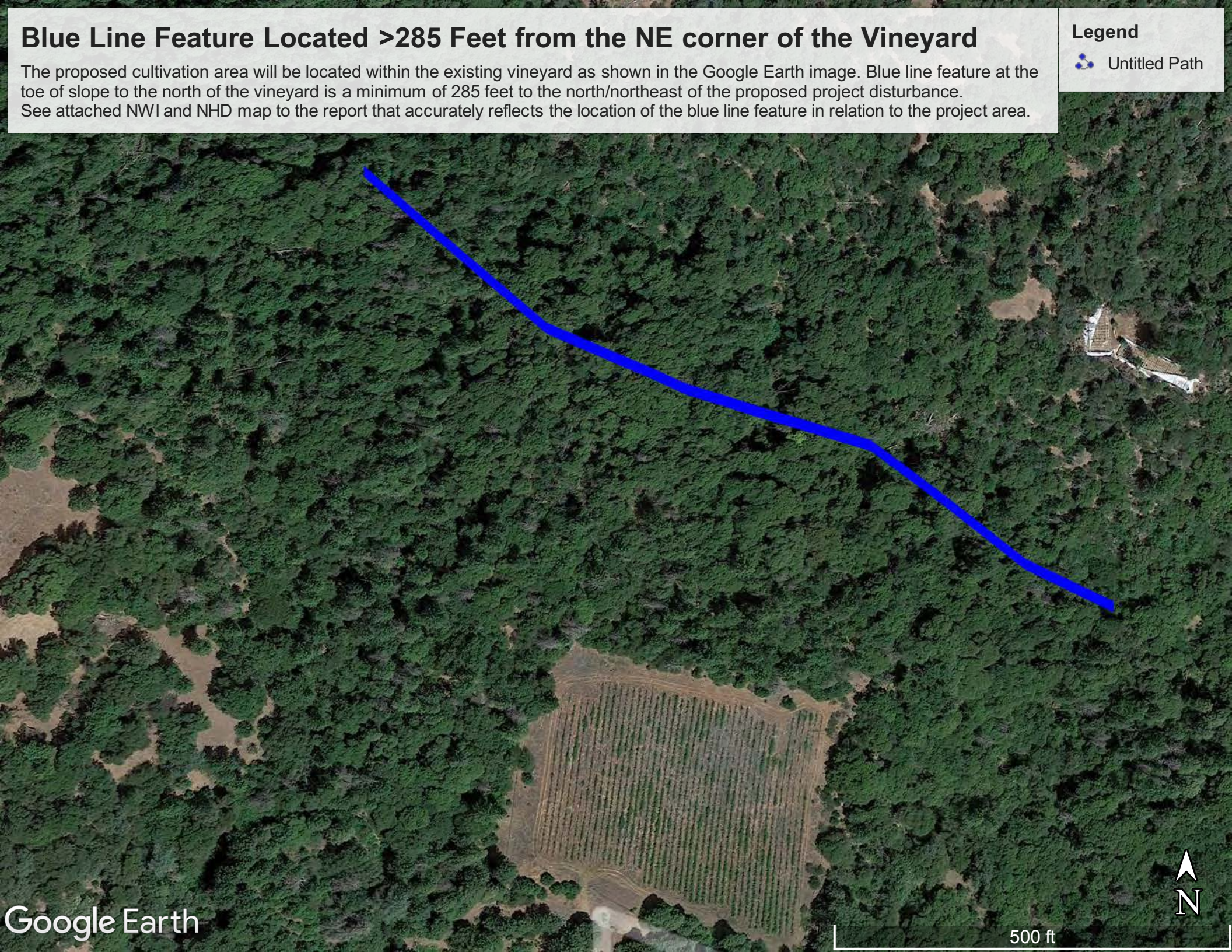
* Data downloaded from https://www.fws.gov/wetlands/Data/Data-Download.html 8/14/2020
** National Hydrography Dataset (NHD) downloaded from http://nhd.usgs.gov March, 2019

Prepared: Melissa Nugent 12/16/2020 E:\2020_GIS_Matuzak\20201216_ElDorado_046-710-17-100\mxd\Fig5_NWI-NHD_ElDorado_046-710-17-100.mxd

Figure 5. Wetlands and Water Features Map

Blue Line Feature Located >285 Feet from the NE corner of the Vineyard

The proposed cultivation area will be located within the existing vineyard as shown in the Google Earth image. Blue line feature at the toe of slope to the north of the vineyard is a minimum of 285 feet to the north/northeast of the proposed project disturbance.
See attached NWI and NHD map to the report that accurately reflects the location of the blue line feature in relation to the project area.



Appendix E

Plants and Wildlife Observed During Site Surveys

Plant and Wildlife Species Observed during the Subject Parcel

Site Surveys in December 2020

Common Name	*Scientific Name*	*Species Status*
Plants		
buttercup spp.	*Ranunculus* spp.	*Not FESA, CESA, or CNPS listed*
buckbrush	*Ceanothus cuneatus*	*Not FESA, CESA, or CNPS listed*
California black oak	*Quercus kelloggii*	*Not FESA, CESA, or CNPS listed*
California wild rose	*Rosa californica*	*Not FESA, CESA, or CNPS listed*
interior live oak	*Quercus wislizeni*	*Not FESA, CESA, or CNPS listed*
common mouse ear chickweed	*Cerastium fontanum*	*Not FESA, CESA, or CNPS listed*
common mullein	*Verbascum Thapsus*	*Not FESA, CESA, or CNPS listed*
common mustard	*Brassica rapa*	*Not FESA, CESA, or CNPS listed*
common periwinkle	*Vinca minor*	*Not FESA, CESA, or CNPS listed*
common sheep sorrel	*Rumex acestocella*	*Not FESA, CESA, or CNPS listed*
Cyptanth spp.	*Cryptantha spp.*	*Not FESA, CESA, or CNPS listed*
dandelion spp.	*Agoseris* spp.	*Not FESA, CESA, or CNPS listed*
deer brush	*Ceanothus Integerrimus*	*Not FESA, CESA, or CNPS listed*
English plantain	*Plantago lanceolate*	*Not FESA, CESA, or CNPS listed*
everlasting pea	*Lathyrus latifolius*	*Not FESA, CESA, or CNPS listed*

Common Name	*Scientific Name*	*Species Status*
filaree	*Erodium cicutarium*	*Not FESA, CESA, or CNPS listed*
honeysuckle spp.	*Lonicera* spp.	*Not FESA, CESA, or CNPS listed*
hyssop loosestrife	*Lythrum hyssopifolia*	*Not FESA, CESA, or CNPS listed*
incense cedar	*Calocedrus decurrens*	*Not FESA, CESA, or CNPS listed*
iris spp.	*Iris* spp.	*Not FESA, CESA, or CNPS listed*
poison oak	*Toxicodendron diversilobum*	*Not FESA, CESA, or CNPS listed*
ponderosa pine	*Pinus ponderosa*	*Not FESA, CESA, or CNPS listed*
ripgut brome	*Bromus diandrus*	*Not FESA, CESA, or CNPS listed*
St. John's wort; Klamath weed	*Hypericum perforatum*	*Not FESA, CESA, or CNPS listed*
shamrock clover	*Trifolium dubium*	*Not FESA, CESA, or CNPS listed*
soft chess	*Bromus hordeaceus*	*Not FESA, CESA, or CNPS listed*
stork's bill spp.	*Erodium* spp.	*Not FESA, CESA, or CNPS listed*
toyon	*Heteromeles arbutifolia*	*Not FESA, CESA, or CNPS listed*
white-leaved manzanita	*Arctostaphylos viscida* ssp. *viscida*	*Not FESA, CESA, or CNPS listed*
wild oats	*Avena fatua*	*Not FESA, CESA, or CNPS listed*
wild rye	*Elymus glaucus*	*Not FESA, CESA, or CNPS listed*
Yerba santa	*Eriodictyon californicum*	*Not FESA, CESA, or CNPS listed*

Common Name	*Scientific Name*	*Species Status*
yellow star thistle	*Centaurea solstitialis*	*Not FESA, CESA, or CNPS listed*
Birds		
American robin	*Turdus migratorius*	*Not CESA or FESA listed. Migratory (active nests protected)*
dark-eyed junco	*Junco hyemalis*	*Not CESA or FESA listed. Migratory (active nests protected)*
house finch	*Haemorhous mexicanus*	*Not CESA or FESA listed. Migratory (active nests protected)*
mourning dove	*Zenaida macroura*	*Not CESA or FESA listed. Migratory (active nests protected)*
northern flicker	*Colaptes auratus*	*Not CESA or FESA listed. Migratory (active nests protected)*
western scrub-jay	*Aphelocoma californica*	*Not CESA or FESA listed. Migratory (active nests protected)*

Appendix F

Photo Log

Photos of the Field Surveys of the Project Study Area

Photo 1: Looking at the entrance into the subject parcel. Gravel road enters into parcel off of D'Agostini Drive and passes through the gate in the photo on the paved road.

Photo 2: Southern section of the subject parcel with a vineyard and structure.

Photo 3: Entry into the paved section of the subject parcel, which is dominated by annual grassland species and pine and oak trees. Photo looking south.

Photo 4: Paved access road within the subject parcel.

Photo 5: Paved access road entering into the parking area of the existing residence.

Photo 6: Existing residence within the subject parcel. Photo looking northeast.

Photo 7: Beginning of unpaved access road down to the northern vineyard and the proposed cultivation area.

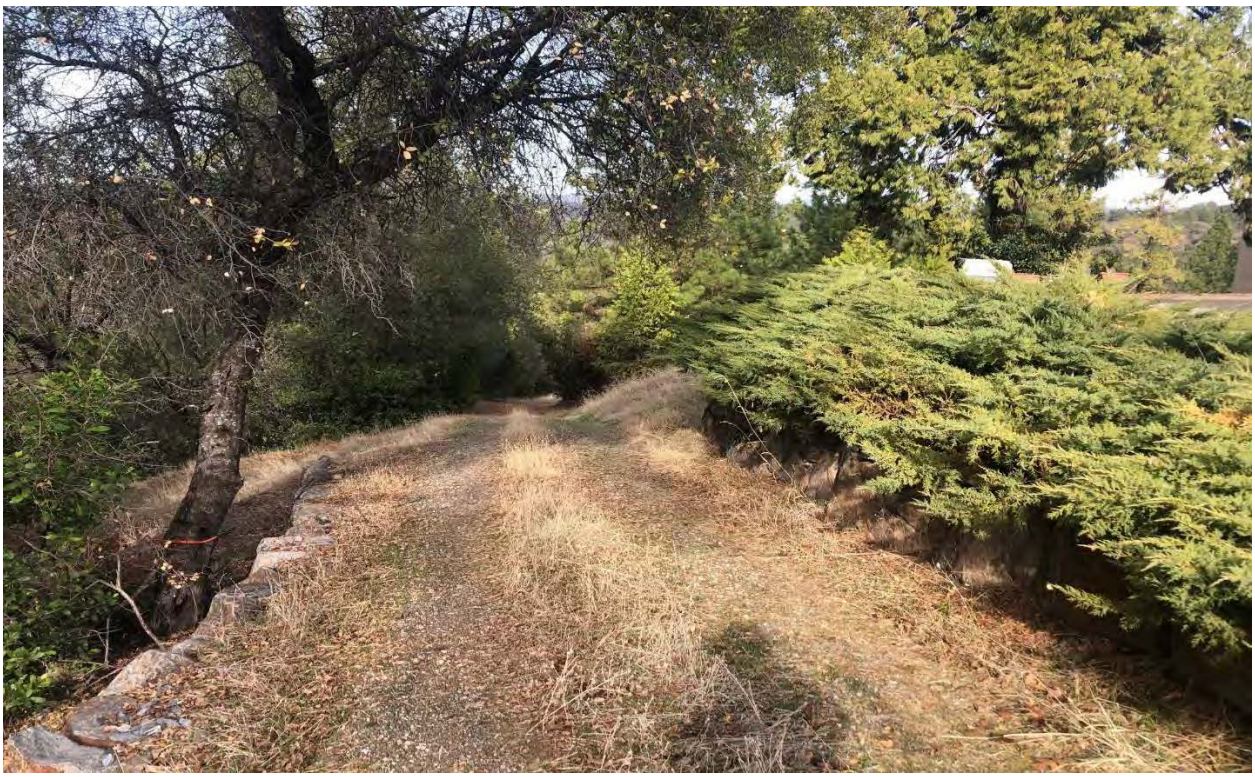


Photo 8: Beginning of unpaved access road down to the northern vineyard and the proposed cultivation area. Photo looking north.

Photo 9: Lower end of of unpaved access road down to the northern vineyard and the proposed cultivation area. Photo looking south towards residence.

Photo 10: End of the cultivation area access road with the existing vineyard where the proposed cultivation area will be located.

Photo 11: Northern vineyard and the proposed cultivation area.

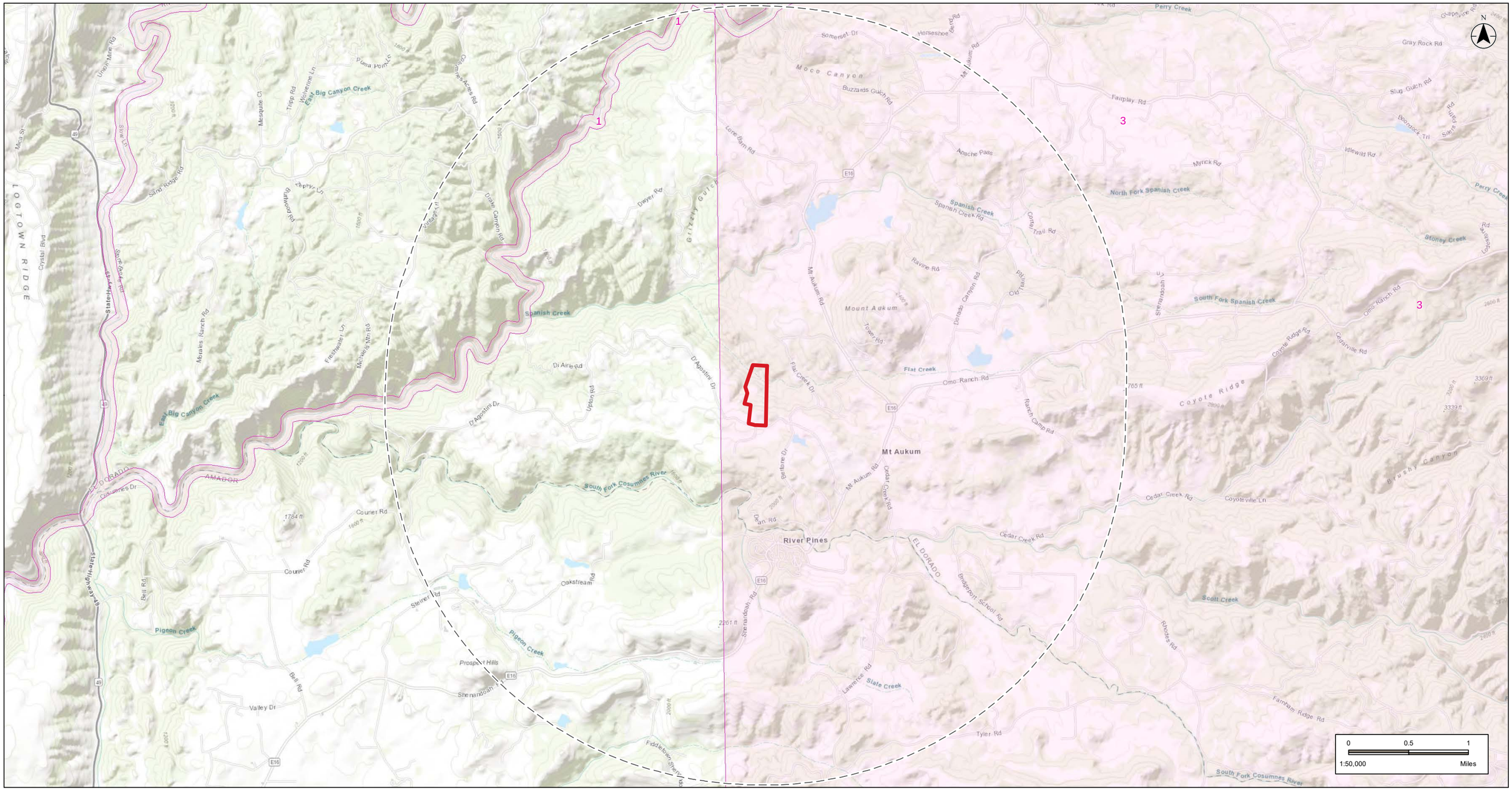
Photo 12: Entrance into the proposed cultivation area dominated by annual grassland species, including yellow star thistle and vineyards.

Photo 13: Proposed cultivation area within the northern vineyard and surrounding habitat dominated by ponderosa pine and incense cedar. Photo looking southwest.

Photo 14: Proposed cultivation area within the northern vineyard and surrounding habitat dominated by ponderosa pine and incense cedar.

Appendix G

CNDDB 3-Mile Buffer Figure



Legend

- Project Location
- 3 mile Buffer on Project
- CNDDB Plant Occurence*
- CNDDB Wildlife Occurence*
- Critical Plant Habitat** (none)
- Critical Wildlife Habitat** (none)

** California Natural Diversity Database (CNDDB) Data: Downloaded August 2020, from the California Department of Fish and Wildlife*
*** United States Fish and Wildlife Service (USFWS) Critical Habitat Data: Downloaded August 2020 from: https://ecos.fws.gov/ecp/report/table/critical-habitat.html*

CNDDB OCCURRENCES*

Plant Species
None

Wildlife Species
1. Central Valley Drainage Hardhead/Squawfish Stream
2. great gray owl

CRITICAL HABITAT OCCURRENCES**

Plant Habitat
None

Wildlife Habitat
None

GREG MATUZAK
Environmental Consulting LLC
Nevada City, CA

Parcel No.: 046-710-017

Figure 3. CNDDB and Critical Habitat Map

Prepared: Melissa Nugent 12/16/2020 E:\2020_GIS_Matuzak\20201216_ElDorado_046-710-17-100\mxd\Fig3_CNDDB_ElDorado_046-710-17-100.mxd

Appendix H

CNDDB Occurrence Report and Quad Searches and USFWS iPac Report

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: EOndx IS (29426 OR 79180 OR 79181 OR 79182)

Map Index Number: 78260
EO Index: 79180
Key Quad: Aukum (3812056)
Element Code: ABNSB12040
Occurrence Number: 78
Occurrence Last Updated: 2014-02-07

Scientific Name: *Strix nebulosa*
Common Name: great gray owl

Listing Status: **Federal:** None
*** SENSITIVE *** **State:** Endangered
CNDDB Element Ranks: **Global:** G5
State: S1

Rare Plant Rank:
Other Lists: CDF_S-Sensitive
IUCN_LC-Least Concern
USFS_S-Sensitive

General Habitat:

RESIDENT OF MIXED CONIFER OR RED FIR FOREST HABITAT, IN OR ON EDGE OF MEADOWS.

Micro Habitat:

REQUIRES LARGE DIAMETER SNAGS IN A FOREST WITH HIGH CANOPY CLOSURE, WHICH PROVIDE A COOL SUB-CANOPY MICROCLIMATE.

Last Date Observed: 2008-06-06
Occurrence Type: Natural/Native occurrence
Last Survey Date: 2008-06-06
Occurrence Rank: Excellent
Owner/Manager:
Trend: Unknown
Presence: Presumed Extant

Location:

SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:

PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

PINE & OAK SAVANNAH. RIPARIAN. PAST HISTORY OF FOREST MANAGEMENT. NEST TREE IS ON A BLACK OAK SNAG. OCCURRENCE SUPPRESSED DUE TO CONCERNS OF DISTURBANCE FROM AN INDIVIDUAL WHO BRINGS BIRDING GROUPS TO THE NEST SITES.

Threats:

General:

PLSS:
Accuracy: 80 meters
Area (acres): 0
UTM:
Latitude/Longitude:
Elevation (feet): 2,540

County Summary:	Quad Summary:
El Dorado	Aukum (3812056)

Sources:

ROB08F0007	ROBERTS, K. (SIERRA PACIFIC INDUSTRIES) - FIELD SURVEY FORM FOR STRIX NEBULOSA 2008-06-06
ROB14U0001	ROBERTS, K. (SIERRA PACIFIC INDUSTRIES) - E-MAIL REGARDING GREAT GRAY OWL OCCURRENCES IN CNDDB 2014-01-27

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Map Index Number: 78261
Key Quad: Aukum (3812056)
Occurrence Number: 79
EO Index: 79181
Element Code: ABNSB12040
Occurrence Last Updated: 2014-02-07

Scientific Name: *Strix nebulosa*
Common Name: great gray owl

Listing Status: **Federal:** None
*** SENSITIVE *** **State:** Endangered
CNDDB Element Ranks: **Global:** G5
State: S1

Rare Plant Rank:
Other Lists: CDF_S-Sensitive
IUCN_LC-Least Concern
USFS_S-Sensitive

General Habitat:

RESIDENT OF MIXED CONIFER OR RED FIR FOREST HABITAT, IN OR ON EDGE OF MEADOWS.

Micro Habitat:

REQUIRES LARGE DIAMETER SNAGS IN A FOREST WITH HIGH CANOPY CLOSURE, WHICH PROVIDE A COOL SUB-CANOPY MICROCLIMATE.

Last Date Observed: 2007-06-06
Last Survey Date: 2007-06-06
Owner/Manager:
Presence: Presumed Extant

Occurrence Type: Natural/Native occurrence
Occurrence Rank: Excellent
Trend: Unknown

Location:

SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:

PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

RIPARIAN OAK SAVANNAH. NEST WAS IN A BROKEN BRANCH ON A VALLEY OAK TREE. SITE IS PROTECTED. OCCURRENCE SUPPRESSED DUE TO CONCERNS OF DISTURBANCE FROM AN INDIVIDUAL WHO BRINGS BIRDING GROUPS TO THE NEST SITES.

Threats:

General:

PLSS:
UTM:
Accuracy: 80 meters
Latitude/Longitude:
Area (acres): 0
Elevation (feet): 2,780

County Summary:	Quad Summary:
El Dorado	Aukum (3812056)

Sources:

ROB07F0004	ROBERTS, K. (SIERRA PACIFIC INDUSTRIES) - FIELD SURVEY FORM FOR STRIX NEBULOSA 2007-06-06
ROB14U0001	ROBERTS, K. (SIERRA PACIFIC INDUSTRIES) - E-MAIL REGARDING GREAT GRAY OWL OCCURRENCES IN CNDDB 2014-01-27

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Map Index Number: 78262
Key Quad: Aukum (3812056)
Occurrence Number: 80
EO Index: 79182
Element Code: ABNSB12040
Occurrence Last Updated: 2014-02-07

Scientific Name: *Strix nebulosa*
Common Name: great gray owl

Listing Status:
*** SENSITIVE ***
CNDDB Element Ranks:
Federal: None
State: Endangered
Global: G5
State: S1

Rare Plant Rank:
Other Lists: CDF_S-Sensitive
IUCN_LC-Least Concern
USFS_S-Sensitive

General Habitat:

RESIDENT OF MIXED CONIFER OR RED FIR FOREST HABITAT, IN OR ON EDGE OF MEADOWS.

Micro Habitat:

REQUIRES LARGE DIAMETER SNAGS IN A FOREST WITH HIGH CANOPY CLOSURE, WHICH PROVIDE A COOL SUB-CANOPY MICROCLIMATE.

Last Date Observed: 2006-06-06
Last Survey Date: 2006-06-06
Owner/Manager:
Presence: Presumed Extant
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Excellent
Trend: Unknown

Location:

SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:

PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

SIERRA MIXED CONIFER WITH LAVACAP/MEADOW 0.3 MI SOUTH. NEST WAS IN A BLACK OAK SNAG. SITE IS PROTECTED. OCCURRENCE SUPPRESSED DUE TO CONCERNS OF DISTURBANCE FROM AN INDIVIDUAL WHO BRINGS BIRDING GROUPS TO THE NEST SITES.

Threats:

General:

PLSS:
Accuracy: 80 meters
Area (acres): 0
UTM:
Latitude/Longitude:
Elevation (feet): 2,800

County Summary:	Quad Summary:
El Dorado	Aukum (3812056)

Sources:

ROB06F0017	ROBERTS, K. (SIERRA PACIFIC INDUSTRIES) - FIELD SURVEY FORM FOR STRIX NEBULOSA 2006-06-06
ROB14U0001	ROBERTS, K. (SIERRA PACIFIC INDUSTRIES) - E-MAIL REGARDING GREAT GRAY OWL OCCURRENCES IN CNDDB 2014-01-27

Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database

Map Index Number: 35355
EO Index: 29426
Key Quad: Fiddletown (3812057)
Element Code: CARA2443CA
Occurrence Number: 3
Occurrence Last Updated: 1996-09-24

Scientific Name: *Central Valley Drainage Hardhead/Squawfish Stream*
Common Name: Central Valley Drainage Hardhead/Squawfish Stream

Listing Status: **Federal:** None
State: None
Rare Plant Rank:
Other Lists:

CNDDB Element Ranks: **Global:** GNR
State: SNR

General Habitat:

Micro Habitat:

Last Date Observed: 1979-09-07
Occurrence Type: Natural/Native occurrence
Last Survey Date: 1979-09-07
Occurrence Rank: Fair
Owner/Manager: PVT
Trend: Decreasing
Presence: Presumed Extant

Location:

COSUMNES RIVER, NORTH OF PLYMOUTH.

Detailed Location:

FROM LATROBE ROAD UPSTREAM TO FORK OF COSUMNES. INCLUDES LOWER REACHES OF NORTH AND MIDDLE FORK COSUMNES UP TO COUNTY ROAD E-16.

Ecological:

SQUAWFISH AND SACRAMENTO SUCKERS PRESENT THROUHGOUT REACH; ONLY REPORT OF HARDHEAD IS 1 MILE BELOW HWY 49.

Threats:

PREDATION BY EXOTIC FISH SUCH AS SMALLMOUTH BASS. WATER DIVERSIONS AND CATTLE GRAZING DECREASING AVAILABLE FISH HABITAT.

General:

LITTLE INFORMATION ON AQUATIC ORGANISMS AVAILABLE FOR LOWER COSUMNES AS IT FLOWS THROUGH PRIVATE LANDS. NO MAJOR DAMS EXIST IN COSUMNES DRAINAGE, SO RIVER IS POTENTIALLY RESTORABLE.

PLSS: T09N, R10E, Sec. 35 (M)
Accuracy: non-specific area
Area (acres): 2,604
UTM: Zone-10 N4273382 E687736
Latitude/Longitude: 38.58909 / -120.84447
Elevation (feet): 800

County Summary:

Amador, El Dorado

Quad Summary:

Aukum (3812056), Fiddletown (3812057), Latrobe (3812058), Camino (3812066), Placerville (3812067)

Sources:

BLM79F0002	BUREAU OF LAND MANAGEMENT - FIELD SURVEY FORM FOR FRENCH CREEK, TRIBUTARY TO COSUMNES RIVER, EL DORADO COUNTY 1979-09-07
BLM80F0001	BUREAU OF LAND MANAGEMENT - FIELD SURVEY FORM FOR MARTINEZ CREEK, TRIBUTARY TO NF COSUMNES RIVER, EL DORADO COUNTY 1980-06-10
DFG60U0001	CORDONE, A. - DEPARTMENT OF FISH AND GAME STREAM SURVEY MEMO 1960-05-10
MOY91R0001	MOYLE, P. & C. SWIFT - CATALOGUE OF POTENTIAL AQUATIC DIVERSITY AREAS 1991-09-XX

Element_Type	Scientific_Name	Common_Name	Element_Code	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank	Quad_Code	Quad_Name	Data_Status	Taxono
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812056	AUKUM	Mapped	Animals Amphibia Ranidae boylii pop
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	3812056	AUKUM	Unprocessed	Animals Accipitric Accipiter
Animals - Birds	Strix nebulosa	great gray owl	ABNSB12040	None	Endangered	-	-	3812056	AUKUM	Mapped and Unprocessed	Animals Strigidae nebulosa
Animals - Birds	Strix occidentalis occidentalis	California Spotted Owl	ABNSB12013	None	None	SSC	-	3812056	AUKUM	Mapped	Animals Strigidae occidenta occidenta
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812056	AUKUM	Unprocessed	Animals Emydida marmora
Community - Aquatic	Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	-	-	3812056	AUKUM	Mapped	Commur - Central Drainage Hardhea Stream
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812056	AUKUM	Mapped and Unprocessed	Plants - V Agavace Chloroga grandiflo
Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812056	AUKUM	Unprocessed	Plants - V Montiace Claytonia ssp. gran
Plants - Vascular	Clarkia biloba ssp. brandegeeae	Brandegees clarkia	PDONA05053	None	None	-	4.2	3812056	AUKUM	Unprocessed	Plants - V Onagrac Clarkia b brandege
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812056	AUKUM	Unprocessed	Plants - V Onagrac Clarkia v
Plants - Vascular	Eriogonum tripodum	tripod buckwheat	PDPGN085Y0	None	None	-	4.2	3812056	AUKUM	Unprocessed	Plants - V Polygona Eriogonu

Element_Type	Scientific_Name	Common_Name	Element_Code	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank	Quad_Code	Quad_Name	Data_Status	Taxo
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812067	PLACERVILLE	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812066	CAMINO	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812065	SLY PARK	Mapped and Unprocessed	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812057	FIDDLETOWN	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812056	AUKUM	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812055	OMO RANCH	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812047	AMADOR CITY	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	AAABH01055	Proposed Endangered	Endangered	-	-	3812046	PINE GROVE	Mapped	Animal Amphil Ranida boylii p
Animals - Amphibians	Rana draytonii	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3812057	FIDDLETOWN	Mapped	Animal Amphil Ranida drayto
Animals - Amphibians	Rana draytonii	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3812065	SLY PARK	Mapped and Unprocessed	Animal Amphil Ranida drayto
Animals - Arachnids	Banksula grubbsi	Grubbs cave harvestman	ILARA14060	None	None	-	-	3812045	WEST POINT	Mapped and Unprocessed	Animal - Phala Banksu
Animals - Birds	Accipiter cooperii	Coopers hawk	ABNKC12040	None	None	WL	-	3812067	PLACERVILLE	Unprocessed	Animal Accipit Accipit
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	3812056	AUKUM	Unprocessed	Animal Accipit Accipit
Animals - Birds	Accipiter gentilis	northern goshawk	ABNKC12060	None	None	SSC	-	3812055	OMO RANCH	Mapped and Unprocessed	Animal Accipit Accipit
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP | WL	-	3812067	PLACERVILLE	Unprocessed	Animal Accipit chrysa

Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	3812067	PLACERVILLE	Mapped and Unprocessed	Animal Ardeid alba
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812067	PLACERVILLE	Unprocessed	Animal Ardeid herodi
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812066	CAMINO	Mapped	Animal Hirund Riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	3812067	PLACERVILLE	Mapped	Animal Hirund Riparia
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3812047	AMADOR CITY	Mapped	Animal Icterid tricolor
Animals - Birds	Strix nebulosa	great gray owl	ABNSB12040	None	Endangered	-	-	3812055	OMO RANCH	Mapped and Unprocessed	Animal Strigid nebulo
Animals - Birds	Strix nebulosa	great gray owl	ABNSB12040	None	Endangered	-	-	3812046	PINE GROVE	Unprocessed	Animal Strigid nebulo
Animals - Birds	Strix nebulosa	great gray owl	ABNSB12040	None	Endangered	-	-	3812045	WEST POINT	Unprocessed	Animal Strigid nebulo
Animals - Birds	Strix nebulosa	great gray owl	ABNSB12040	None	Endangered	-	-	3812056	AUKUM	Mapped and Unprocessed	Animal Strigid nebulo
Animals - Birds	Strix occidentalis occidentalis	California Spotted Owl	ABNSB12013	None	None	SSC	-	3812045	WEST POINT	Mapped	Animal Strigid occide occide
Animals - Birds	Strix occidentalis occidentalis	California Spotted Owl	ABNSB12013	None	None	SSC	-	3812046	PINE GROVE	Mapped	Animal Strigid occide occide
Animals - Birds	Strix occidentalis occidentalis	California Spotted Owl	ABNSB12013	None	None	SSC	-	3812055	OMO RANCH	Mapped	Animal Strigid occide occide
Animals - Birds	Strix occidentalis occidentalis	California Spotted Owl	ABNSB12013	None	None	SSC	-	3812056	AUKUM	Mapped	Animal Strigid occide occide
Animals - Birds	Strix occidentalis occidentalis	California Spotted Owl	ABNSB12013	None	None	SSC	-	3812065	SLY PARK	Mapped	Animal Strigid occide occide
Animals - Crustaceans	Stygobromus gradyi	Gradys Cave amphipod	ICMAL05460	None	None	-	-	3812046	PINE GROVE	Mapped	Animal Crusta Crango Stygob
Animals - Crustaceans	Stygobromus grahami	Grahams Cave amphipod	ICMAL05920	None	None	-	-	3812046	PINE GROVE	Mapped	Animal Crusta Crango Stygob grahan

Animals - Crustaceans	Stygobromus grahami	Grahams Cave amphipod	ICMAL05920	None	None	-	-	3812045	WEST POINT	Mapped	Animal Crusta Crango Stygob grahan
Animals - Fish	Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	-	-	3812067	PLACERVILLE	Unprocessed	Animal Salmo Oncorh mykiss 11
Animals - Insects	Bombus pensylvanicus	American bumble bee	IIHYM24260	None	None	-	-	3812067	PLACERVILLE	Mapped and Unprocessed	Animal Apidae pensyl
Animals - Insects	Bombus pensylvanicus	American bumble bee	IIHYM24260	None	None	-	-	3812045	WEST POINT	Unprocessed	Animal Apidae pensyl
Animals - Insects	Bombus pensylvanicus	American bumble bee	IIHYM24260	None	None	-	-	3812057	FIDDLETOWN	Unprocessed	Animal Apidae pensyl
Animals - Insects	Bombus pensylvanicus	American bumble bee	IIHYM24260	None	None	-	-	3812047	AMADOR CITY	Mapped and Unprocessed	Animal Apidae pensyl
Animals - Insects	Chrysis tularensis	Tulare cuckoo wasp	IIHYM72010	None	None	-	-	3812047	AMADOR CITY	Mapped	Animal Chrysi Chrysis
Animals - Insects	Atractelmis wawona	Wawona riffle beetle	IICOL58010	None	None	-	-	3812065	SLY PARK	Unprocessed	Animal Elmida Atracte
Animals - Insects	Cosumnoperla hypocrena	Cosumnes stripetail	IIPLE23020	None	None	-	-	3812065	SLY PARK	Mapped	Animal Perlod Cosum hypocr
Animals - Insects	Cosumnoperla hypocrena	Cosumnes stripetail	IIPLE23020	None	None	-	-	3812066	CAMINO	Mapped	Animal Perlod Cosum hypocr
Animals - Insects	Cosumnoperla hypocrena	Cosumnes stripetail	IIPLE23020	None	None	-	-	3812067	PLACERVILLE	Mapped	Animal Perlod Cosum hypocr
Animals - Insects	Cosumnoperla hypocrena	Cosumnes stripetail	IIPLE23020	None	None	-	-	3812057	FIDDLETOWN	Mapped	Animal Perlod Cosum hypocr
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3812046	PINE GROVE	Mapped and Unprocessed	Animal - Ereth Erethiz
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3812045	WEST POINT	Mapped and Unprocessed	Animal - Ereth Erethiz
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3812067	PLACERVILLE	Mapped	Animal - Ereth Erethiz
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	3812067	PLACERVILLE	Mapped	Animal - Muste Pekani

Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	3812066	CAMINO	Mapped	Animal - Muste Pekani
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812067	PLACERVILLE	Unprocessed	Animal - Muste Taxide
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812065	SLY PARK	Unprocessed	Animal - Muste Taxide
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812045	WEST POINT	Unprocessed	Animal - Muste Taxide
Animals - Mammals	Corynorhinus townsendii	Townsends big-eared bat	AMACC08010	None	None	SSC	-	3812045	WEST POINT	Unprocessed	Animal - Vespe Coryno townse
Animals - Mammals	Corynorhinus townsendii	Townsends big-eared bat	AMACC08010	None	None	SSC	-	3812046	PINE GROVE	Mapped and Unprocessed	Animal - Vespe Coryno townse
Animals - Mammals	Corynorhinus townsendii	Townsends big-eared bat	AMACC08010	None	None	SSC	-	3812047	AMADOR CITY	Unprocessed	Animal - Vespe Coryno townse
Animals - Mammals	Corynorhinus townsendii	Townsends big-eared bat	AMACC08010	None	None	SSC	-	3812055	OMO RANCH	Unprocessed	Animal - Vespe Coryno townse
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	3812045	WEST POINT	Mapped	Animal - Vespe Lasion noctiva
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	3812065	SLY PARK	Mapped	Animal - Vespe Lasion noctiva
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	3812066	CAMINO	Mapped	Animal - Vespe Lasion noctiva
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	3812067	PLACERVILLE	Mapped	Animal - Vespe Lasion noctiva
Animals - Mammals	Myotis thysanodes	fringed myotis	AMACC01090	None	None	-	-	3812065	SLY PARK	Mapped	Animal - Vespe Myotis
Animals - Mammals	Myotis volans	long-legged myotis	AMACC01110	None	None	-	-	3812065	SLY PARK	Mapped	Animal - Vespe Myotis
Animals - Mammals	Myotis volans	long-legged myotis	AMACC01110	None	None	-	-	3812055	OMO RANCH	Mapped	Animal - Vespe Myotis
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812055	OMO RANCH	Unprocessed	Animal Emydo marmo

Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812047	AMADOR CITY	Mapped and Unprocessed	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812045	WEST POINT	Unprocessed	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812046	PINE GROVE	Mapped	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812065	SLY PARK	Mapped and Unprocessed	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812057	FIDDLETOWN	Mapped and Unprocessed	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812056	AUKUM	Unprocessed	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812066	CAMINO	Mapped and Unprocessed	Animal Emydi marmo
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	3812067	PLACERVILLE	Mapped and Unprocessed	Animal Emydi marmo
Animals - Reptiles	Phrynosoma blainvillii	coast horned lizard	ARACF12100	None	None	SSC	-	3812067	PLACERVILLE	Unprocessed	Animal Phryno Phryno blainvil
Community - Aquatic	Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	-	-	3812067	PLACERVILLE	Mapped	Comm - Centr Draina Hardhe Stream
Community - Aquatic	Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	-	-	3812066	CAMINO	Mapped	Comm - Centr Draina Hardhe Stream
Community - Aquatic	Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	-	-	3812056	AUKUM	Mapped	Comm - Centr Draina Hardhe Stream
Community - Aquatic	Central Valley Drainage Hardhead/Squawfish Stream	Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	-	-	3812057	FIDDLETOWN	Mapped	Comm - Centr Draina Hardhe Stream
Community - Aquatic	Central Valley Drainage Resident Rainbow Trout Stream	Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA	None	None	-	-	3812065	SLY PARK	Mapped	Comm - Centr Draina Rainbo Stream
Community - Aquatic	Central Valley Drainage Resident Rainbow Trout Stream	Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA	None	None	-	-	3812066	CAMINO	Mapped	Comm - Centr Draina

											Rainbc Stream
Community - Aquatic	Central Valley Drainage Resident Rainbow Trout Stream	Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA	None	None	-	-	3812055	OMO RANCH	Mapped	Comm - Centr Draina Rainbc Stream
Community - Aquatic	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA	None	None	-	-	3812055	OMO RANCH	Mapped	Comm - Sacra Joaqui Foothil Ephem
Community - Aquatic	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA	None	None	-	-	3812066	CAMINO	Mapped	Comm - Sacra Joaqui Foothil Ephem
Community - Aquatic	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	Sacramento-San Joaquin Foothill/Valley Ephemeral Stream	CARA2130CA	None	None	-	-	3812065	SLY PARK	Mapped	Comm - Sacra Joaqui Foothil Ephem
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812056	AUKUM	Mapped and Unprocessed	Plants Agava Chloro grandif
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812055	OMO RANCH	Mapped and Unprocessed	Plants Agava Chloro grandif
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812046	PINE GROVE	Mapped	Plants Agava Chloro grandif
Plants - Vascular	Chlorogalum grandiflorum	Red Hills soaproot	PMLIL0G020	None	None	-	1B.2	3812045	WEST POINT	Mapped	Plants Agava Chloro grandif
Plants - Vascular	Allium sanbornii var. sanbornii	Sanborns onion	PMLIL02212	None	None	-	4.2	3812055	OMO RANCH	Unprocessed	Plants Alliace sanbor sanbor
Plants - Vascular	Eryngium pinnatisectum	Tuolumne button-celery	PDAPI0Z0P0	None	None	-	1B.2	3812047	AMADOR CITY	Mapped	Plants Apiace pinnati
Plants - Vascular	Eryngium pinnatisectum	Tuolumne button-celery	PDAPI0Z0P0	None	None	-	1B.2	3812046	PINE GROVE	Mapped	Plants Apiace pinnati
Plants - Vascular	Balsamorhiza macrolepis	big-scale balsamroot	PDAST11061	None	None	-	1B.2	3812047	AMADOR CITY	Mapped	Plants Astera Balsan macrol
Plants - Vascular	Jensia yosemitana	Yosemite tarplant	PDAST650J0	None	None	-	3.2	3812065	SLY PARK	Unprocessed	Plants Astera yosem
Plants - Vascular	Jensia yosemitana	Yosemite tarplant	PDAST650J0	None	None	-	3.2	3812066	CAMINO	Unprocessed	Plants Astera

											yosem
Plants - Vascular	Packera layneae	Laynes ragwort	PDAST8H1V0	Threatened	Rare	-	1B.2	3812067	PLACERVILLE	Mapped	Plants Astera Packer
Plants - Vascular	Viburnum ellipticum	oval-leaved viburnum	PDCPR07080	None	None	-	2B.3	3812067	PLACERVILLE	Mapped	Plants Caprifo Viburn
Plants - Vascular	Stellaria obtusa	obtuse starwort	PDCAR0X0U0	None	None	-	4.3	3812055	OMO RANCH	Unprocessed	Plants Caryop Stellari
Plants - Vascular	Hesperocyparis bakeri	Baker cypress	PGCUP04020	None	None	-	4.2	3812067	PLACERVILLE	Unprocessed	Plants Cupres Hespe bakeri
Plants - Vascular	Arctostaphylos nissenana	Nissenan manzanita	PDERI040V0	None	None	-	1B.2	3812067	PLACERVILLE	Mapped and Unprocessed	Plants Ericace Arctost nissen
Plants - Vascular	Arctostaphylos nissenana	Nissenan manzanita	PDERI040V0	None	None	-	1B.2	3812066	CAMINO	Mapped	Plants Ericace Arctost nissen
Plants - Vascular	Lathyrus sulphureus var. argillaceus	dubious pea	PDFAB25101	None	None	-	3	3812045	WEST POINT	Unprocessed	Plants Fabace sulphu argilla
Plants - Vascular	Juncus digitatus	finger rush	PMJUN013E0	None	None	-	1B.1	3812065	SLY PARK	Unprocessed	Plants Juncac digitatu
Plants - Vascular	Monardella candicans	Sierra monardella	PDLAM18050	None	None	-	4.3	3812067	PLACERVILLE	Unprocessed	Plants Lamiac Monar candic
Plants - Vascular	Calochortus clavatus var. avius	Pleasant Valley mariposa-lily	PMLIL0D095	None	None	-	1B.2	3812065	SLY PARK	Mapped and Unprocessed	Plants Liliacea Caloch var. av
Plants - Vascular	Calochortus clavatus var. avius	Pleasant Valley mariposa-lily	PMLIL0D095	None	None	-	1B.2	3812066	CAMINO	Mapped	Plants Liliacea Caloch var. av
Plants - Vascular	Calochortus clavatus var. avius	Pleasant Valley mariposa-lily	PMLIL0D095	None	None	-	1B.2	3812055	OMO RANCH	Mapped and Unprocessed	Plants Liliacea Caloch var. av
Plants - Vascular	Lilium humboldtii ssp. humboldtii	Humboldt lily	PMLIL1A071	None	None	-	4.2	3812046	PINE GROVE	Unprocessed	Plants Liliacea humbo humbo
Plants - Vascular	Lilium humboldtii ssp. humboldtii	Humboldt lily	PMLIL1A071	None	None	-	4.2	3812066	CAMINO	Unprocessed	Plants Liliacea humbo humbo
Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812066	CAMINO	Unprocessed	Plants Montia Clayto ssp. gr

Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812065	SLY PARK	Unprocessed	Plants Montia Clayto ssp. gr
Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812067	PLACERVILLE	Unprocessed	Plants Montia Clayto ssp. gr
Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812046	PINE GROVE	Unprocessed	Plants Montia Clayto ssp. gr
Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812056	AUKUM	Unprocessed	Plants Montia Clayto ssp. gr
Plants - Vascular	Claytonia parviflora ssp. grandiflora	streambank spring beauty	PDPOR030D1	None	None	-	4.2	3812057	FIDDLETOWN	Unprocessed	Plants Montia Clayto ssp. gr
Plants - Vascular	Camissonia lacustris	grassland suncup	PDONA030W0	None	None	-	1B.2	3812066	CAMINO	Mapped	Plants Onagra Camis
Plants - Vascular	Clarkia biloba ssp. brandegeeae	Brandegees clarkia	PDONA05053	None	None	-	4.2	3812066	CAMINO	Mapped	Plants Onagra Clarkia brande
Plants - Vascular	Clarkia biloba ssp. brandegeeae	Brandegees clarkia	PDONA05053	None	None	-	4.2	3812056	AUKUM	Unprocessed	Plants Onagra Clarkia brande
Plants - Vascular	Clarkia biloba ssp. brandegeeae	Brandegees clarkia	PDONA05053	None	None	-	4.2	3812067	PLACERVILLE	Mapped and Unprocessed	Plants Onagra Clarkia brande
Plants - Vascular	Clarkia biloba ssp. brandegeeae	Brandegees clarkia	PDONA05053	None	None	-	4.2	3812057	FIDDLETOWN	Mapped and Unprocessed	Plants Onagra Clarkia brande
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812055	OMO RANCH	Unprocessed	Plants Onagra Clarkia
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812047	AMADOR CITY	Unprocessed	Plants Onagra Clarkia
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812046	PINE GROVE	Unprocessed	Plants Onagra Clarkia
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812045	WEST POINT	Unprocessed	Plants Onagra Clarkia
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812056	AUKUM	Unprocessed	Plants Onagra Clarkia
Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812066	CAMINO	Unprocessed	Plants Onagra Clarkia

Plants - Vascular	Clarkia virgata	Sierra clarkia	PDONA05160	None	None	-	4.3	3812065	SLY PARK	Unprocessed	Plants Onagra Clarkia
Plants - Vascular	Diplacus pulchellus	yellow-lip pansy monkeyflower	PDSCR1B280	None	None	-	1B.2	3812055	OMO RANCH	Mapped	Plants Phryma Diplacu
Plants - Vascular	Erythranthe marmorata	Stanislaus monkeyflower	PDPHR01130	None	None	-	1B.1	3812045	WEST POINT	Mapped	Plants Phryma Erythra marmo
Plants - Vascular	Erythranthe marmorata	Stanislaus monkeyflower	PDPHR01130	None	None	-	1B.1	3812046	PINE GROVE	Mapped	Plants Phryma Erythra marmo
Plants - Vascular	Sphenopholis obtusata	prairie wedge grass	PMPOA5T030	None	None	-	2B.2	3812046	PINE GROVE	Mapped	Plants Poacea Sphen obtusa
Plants - Vascular	Sphenopholis obtusata	prairie wedge grass	PMPOA5T030	None	None	-	2B.2	3812047	AMADOR CITY	Mapped	Plants Poacea Sphen obtusa
Plants - Vascular	Navarretia prolifera ssp. lutea	yellow bur navarretia	PDPLM0C0N1	None	None	-	4.3	3812065	SLY PARK	Unprocessed	Plants Polem Navarr ssp. lu
Plants - Vascular	Navarretia prolifera ssp. lutea	yellow bur navarretia	PDPLM0C0N1	None	None	-	4.3	3812066	CAMINO	Unprocessed	Plants Polem Navarr ssp. lu
Plants - Vascular	Eriogonum tripodum	tripod buckwheat	PDPGN085Y0	None	None	-	4.2	3812056	AUKUM	Unprocessed	Plants Polygo Eriogo
Plants - Vascular	Eriogonum tripodum	tripod buckwheat	PDPGN085Y0	None	None	-	4.2	3812067	PLACERVILLE	Unprocessed	Plants Polygo Eriogo
Plants - Vascular	Eriogonum tripodum	tripod buckwheat	PDPGN085Y0	None	None	-	4.2	3812057	FIDDLETOWN	Unprocessed	Plants Polygo Eriogo
Plants - Vascular	Horkelia parryi	Parrys horkelia	PDROS0W0C0	None	None	-	1B.2	3812055	OMO RANCH	Mapped	Plants Rosac parryi
Plants - Vascular	Horkelia parryi	Parrys horkelia	PDROS0W0C0	None	None	-	1B.2	3812067	PLACERVILLE	Mapped	Plants Rosac parryi
Plants - Vascular	Horkelia parryi	Parrys horkelia	PDROS0W0C0	None	None	-	1B.2	3812066	CAMINO	Mapped and Unprocessed	Plants Rosac parryi
Plants - Vascular	Bolandra californica	Sierra bolandra	PDSAX03010	None	None	-	4.3	3812066	CAMINO	Unprocessed	Plants Saxifra Boland
Plants - Vascular	Jepsonia heterandra	foothill jepsonia	PDSAX0J010	None	None	-	4.3	3812057	FIDDLETOWN	Unprocessed	Plants Saxifra Jepsor
Plants - Vascular	Jepsonia heterandra	foothill jepsonia	PDSAX0J010	None	None	-	4.3	3812047	AMADOR CITY	Unprocessed	Plants Saxifra

CNPS Rare Plant Inventory

California Native Plant Society

Search Results

5 matches found. Click on scientific name for details

Search Criteria: Quad is one of [**3812056**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
Clarkia biloba ssp. *brandegeeae*	Brandegee's clarkia	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	May-Aug	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Claytonia parviflora ssp. *grandiflora*	streambank spring beauty	Montiaceae	annual herb	Feb-May	None	None	G5T3	S3	4.2	Yes	2006-09-29	No Photo Available
Eriogonum tripodum	tripod buckwheat	Polygonaceae	perennial deciduous shrub	May-Jul	None	None	G4	S4	4.2	Yes	1974-01-01	 ©2008 Steven Perry

Showing 1 to 5 of 5 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 18 September 2023].

CNPS Rare Plant Inventory

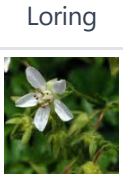
California Native Plant Society

Search Results

27 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [**3812045:3812046:3812056:3812055:3812066:3812065:3812057:3812067:3812047**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Allium sanbornii var. *sanbornii*	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	None	None	G4T4?	S3S4	4.2		1994-01-01	 ©2018 Steven Perry
Arctostaphylos nissenana	Nissenan manzanita	Ericaceae	perennial evergreen shrub	Feb-Mar	None	None	G1	S1	1B.2	Yes	1974-01-01	No Photo Available
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©1998 Dean Wm. Taylor
Bolandra californica	Sierra bolandra	Saxifragaceae	perennial herb	Jun-Jul	None	None	G4	S4	4.3	Yes	1974-01-01	No Photo Available
Calochortus clavatus var. *avius*	Pleasant Valley mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4T2	S2	1B.2	Yes	1980-01-01	No Photo Available
Camissonia lacustris	grassland suncup	Onagraceae	annual herb	Mar-Jun	None	None	G2	S2	1B.2		2022-09-19	 © 2021 Ryan O'Dell
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
Clarkia biloba ssp. *brandegeeae*	Brandegee's clarkia	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	May-Aug	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Claytonia parviflora ssp. *grandiflora*	streambank spring beauty	Montiaceae	annual herb	Feb-May	None	None	G5T3	S3	4.2	Yes	2006-09-29	No Photo Available

Diplacus pulchellus	yellow-lip pansy monkeyflower	Phrymaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2018 Sierra Pacific Industries
Engellaria obtusa	obtuse starwort	Caryophyllaceae	perennial rhizomatous herb	May-Sep(Oct)	None	None	G5	S4	4.3		1988-01-01	 ©2014 Kirsten Bovee
Eriogonum tripodum	tripod buckwheat	Polygonaceae	perennial deciduous shrub	May-Jul	None	None	G4	S4	4.2	Yes	1974-01-01	 ©2008 Steven Perry
Eryngium pinnatisectum	Tuolumne button-celery	Apiaceae	annual/perennial herb	May-Aug	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2007 Robert E. Preston, Ph.D.
Erythranthe marmorata	Stanislaus monkeyflower	Phrymaceae	annual herb	Mar-May	None	None	G2?	S2?	1B.1	Yes	1974-01-01	No Photo Available
Hesperocyparis bakeri	Baker cypress	Cupressaceae	perennial evergreen tree		None	None	G3	S3	4.2		1974-01-01	 © 2021 Scot Loring
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	None	None	G2	S2	1B.2	Yes	1974-01-01	 © 2009 Barry Breckling
Jensia yosemitana	Yosemite tarplant	Asteraceae	annual herb	(Apr)May-Jul	None	None	G3	S3	3.2	Yes	1994-01-01	No Photo Available
Jepsonia heterandra	foothill jepsonia	Saxifragaceae	perennial herb	Aug-Dec	None	None	G3	S3	4.3	Yes	1994-01-01	 © 2014 Belinda Lo
Juncus digitatus	finger rush	Juncaceae	annual herb	(Apr)May-Jun	None	None	G1	S1	1B.1	Yes	2009-01-02	 Image by Wendy Boes

Lathyrus sulphureus var. *argillaceus*	dubious pea	Fabaceae	perennial herb	Apr-May	None	None	G5T1T2Q	S1S2	3	Yes	1994-01-01	No Photo Available
Lilium humboldtii ssp. *humboldtii*	Humboldt lily	Liliaceae	perennial bulbiferous herb	May-Jul(Aug)	None	None	G4T3	S3	4.2	Yes	1994-01-01	 © 2008 Sierra Pacific Industries
Monardella candicans	Sierra monardella	Lamiaceae	annual herb	Apr-Jul	None	None	G4	S4	4.3	Yes	1994-01-01	 © 2011 Jean Pawek
Navarretia prolifera ssp. *lutea*	yellow bur navarretia	Polemoniaceae	annual herb	May-Jul	None	None	G4T3	S3	4.3	Yes	1974-01-01	No Photo Available
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	FT	CR	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	Apr-Jul	None	None	G5	S2	2B.2		1974-01-01	No Photo Available
Viburnum ellipticum	oval-leaved viburnum	Viburnaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3?	2B.3		1974-01-01	 © 2006 Tom Engstrom

Showing 1 to 27 of 27 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 18 September 2023].

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

El Dorado County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. 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.

The following species are potentially affected by activities in this location:

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ

below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Lewis's Woodpecker Melanerpes lewis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30

Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

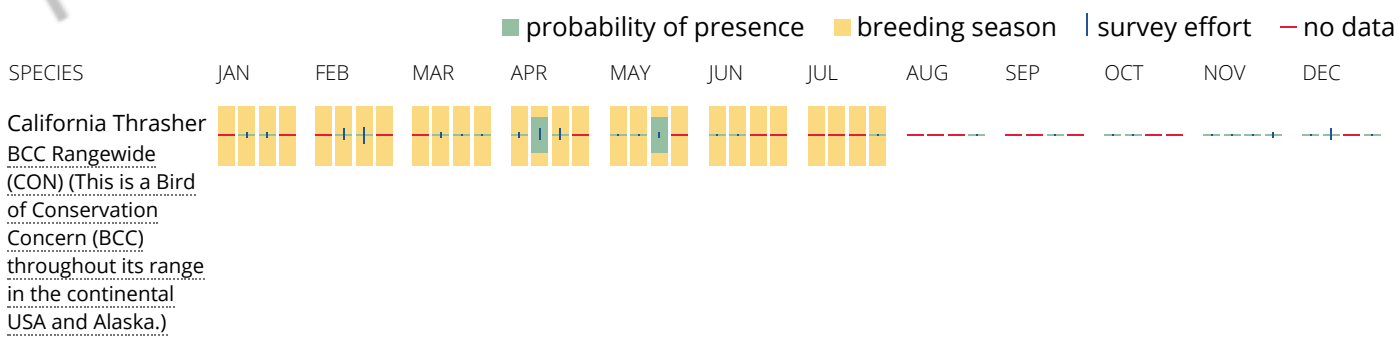
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

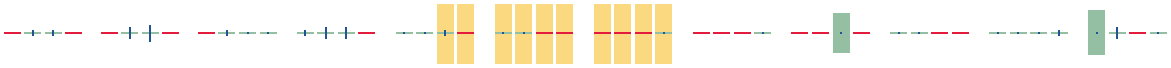
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

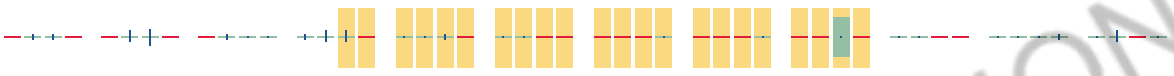


Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



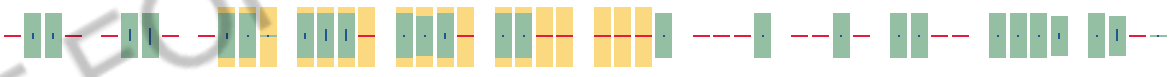
Lawrence's Goldfinch
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Lewis's Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

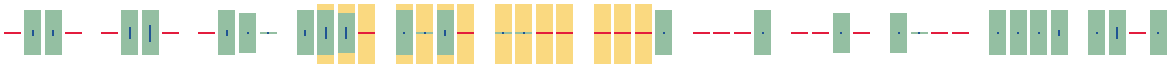
Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

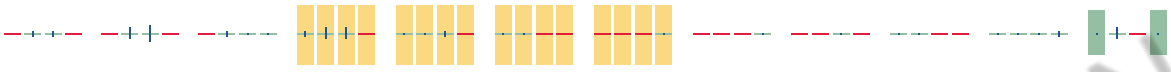
Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Wrentit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look

carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

R4SBC

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix I

Fire Safe Plan

John Pickett, RPF #2976
2235 Catalina Dr., South Lake Tahoe, CA 96150
(775) 220-7675 jpickettRPF@gmail.com

RE: Fire Plan for the Parcel 046-710-017-100

Introduction
Single Source Solutions intends to develop an outside marijuana cultivation site on approximately 2-acres of land near Mt. Aukum, El Dorado County. The development of cultivation enterprises in El Dorado County requires developing a fire safety plan of sufficient detail to demonstrate that worker safety can be assured and that the activity does not pose a risk to adjacent communities or landscapes. A fire plan evaluates existing vegetation, slope, aspect, elevation, weather, and fire history to create an actionable plan that reduces the potential for dangerous fires to threaten the property or region.

This report builds on the Biological Assessment performed by Greg Matuzak and is included by reference in this fire plan.

Parcel Description
Vegetation and Wildland Fuel Type
The subject parcel is 46.5 acres, which is the area of analysis for this fire plan. The forest stand is an overstocked ponderosa pine forest, with decadent canyon live oak and gray pine present along with non-native annual weeds. The parcel is north facing and wind-protected from southwest winds and sheltered from the south and west sun. The dense canyon live oak and annual weeds create a volatile fuel mix that will cause crowning in overstory conifers even during moderate fire weather.

Over the decades, there have been numerous fires in the region, with the Sand Fire burning within ½ mile in 2014. The fuel model that best describes the vegetation on the property is an SH7 – Very High Load, Dry Climate Shrub, in the *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model. General Technical Report RMRS-GTR-153, Scott and Burgen.*

Slope and Aspect
Slope and aspect combine to create the topographical influences of fire on a slope. The project area generally has north-facing slopes, and so the parcel is protected from typical southwest winds that drive fire behavior in the area. However, a fire in the Cosumnes River drainage could readily burn to the parcel in up-canyon winds typical in the area. The parcel is moderately protected from the south and west sun that dries fuels earlier in the season.

The parcel is exposed to significant fire risk from the slopes above the Flat Creek. Flat Creek is a second-order tributary creek to the Cosumnes River. The Cosumnes River has a major influence on winds in the region. The "Delta breeze" can add to the typical upslope diurnal winds. The canyon can be quite gusty during the driest time of the day and will act as a chimney during a wildland fire.

Elevation
Elevation has an important influence on fire behavior by influencing the amount and timing of precipitation and determining exposure to prevailing winds or extreme fire behavior. The subject parcel ranges from approximately 1,700 feet to 2,320 feet in elevation. This elevation has hot, dry summers with distinct seasons and moderately cool winter with precipitation falling as rain and averaging 40 inches per year. Rainfall in amounts sufficient to influence fire behavior is rare after May, and fire season begins in earnest as early as June. This leaves a long hot summer with dry fuel.

John Pickett, RPF #2976
2235 Catalina Dr., South Lake Tahoe, CA 96150
(775) 220-7675 jpickettRPF@gmail.com

Weather

Local weather drives fire behavior in the Sierra Nevada. El Dorado County is exposed to dangerous Diablo winds when low pressure off California's coast and high pressure over the Great Basin result in strong, dry winds from the northeast. The subject parcel is exposed to northeast winds several times each fall. The subject parcel is exposed to strong upslope winds during much of the fire season because of the effects of solar radiation and the diurnal wind cycle in the Cosumnes River Canyon. Fires are likely to exhibit moderate spread rates with moderate flame lengths during diurnal wind and fuel-driven fires; fires can exhibit extreme fire behavior during drought. The subject parcel is also exposed to strong southwest winds from approaching low-pressure systems as they drop from the Gulf of Alaska. During these events, winds pick up from the southwest, and before the arrival of moisture, there can be a very low humidity dry slot for up to a day before the arrival of increased humidities and wetting precipitation. During this period, fires can grow explosively.

Fire Hazard on the Subject Parcel

The subject parcel is exposed to considerable hazard from a volatile fuel mix and steep slopes. The SH7 fire model burns with moderate rates of spread but with very high flame lengths. And while this is an active fuel model, it is possible to moderate this hazard by reducing fuels between the best and healthiest conifers, spacing canyon live oak trees, clearing around evacuation routes and roads, and then using methods to reduce the total tonnage of biomass available to burn.

Defensible Space Around Homes and Work Areas

Both homes and work areas are required to have effective defensible space so as not to expose workers or structures to unreasonable fire risk. The home's defensible space, and work area defensible space work together to create a reduced fuel area to the northeast of the home. The defensible space treatments should then be augmented to the west of the field so that a fire cannot run up the river canyon with intensity.

The structures on the property must have effective defensible space given the fire risk on the site. Dr. Jack Cohen of the U.S. Forest Service's Rocky Mountain Research Station made the following statement in his definition of the home ignition zone:

> "it is a home's construction and immediate surroundings that will determine a homes probability of ignition, not its site on a fire-prone landscape."

Effective defensible space involves reducing fuels in concentric rings around the structure. The zones of defensible space are:

- Non-combustible Area – this area extends from the structure and out to five feet. In this area, no combustible vegetation or ground covers are permitted. Examples of non-flammable vegetation would be well-irrigated flowers or succulent plants. Compost may be used; however, flammable mulches are prohibited, such as pine needles, shredded bark, bark, and woodchips.

- Lean, Clean, and Green Area – this area extends from the Non-combustible area out to 30 feet. In this area, single isolated specimens of flammable plants are permitted, and most plants are kept healthy and free of dead material. Combustible mulches may not be used as a widespread ground cover and in a manner that will not carry fire.

John Pickett, RPF #2976
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- Wildland Fuel Reduction Area – this area extends from the Lean, Clean, and Green Area out to the wildland. In general, it is recommended that homeowners complete at least 100 feet of defensible space, but that distance may be increased up to 300 feet in areas of particular fire hazard. In the Wildland Fuel Reduction Area, there must not be horizontal and vertical fuel continuity. Isolated patches of native shrubs, trees, and some patches of flammable ground covers are allowed. However, they must not be continuous and capable of creating a clear path for fire to reach the home or work area. Vertical fuel continuity is a condition where surface fuels are present under small or medium-sized trees directly under the larger trees that compose the forest canopy. Ladder fuels enable surface fire to travel into the forest canopy and produce flame lengths far greater than what firefighters can safely engage.

Defensible Space and Prescription in Work Areas
Defensible space around the structures will be critically important because of the likely ember production from fuel below the property. Defensible space is divided into three zones: the wildland fuel zone, the Lean, Clean, and Green Zone, and the Non-combustible zone.

- The wildland fuel zone should effectively extend 200 feet or to the slope break from the structure with the annual mowing of grasses and brush.

- The Lean, Clean, and Green Zone extends from the structure to 30 feet. This zone must be mowed when grasses or brush are greater than 4 inches tall. No flammable vegetation may be present.

- The non-combustible zone extends from the structure to five feet. The subject parcel will be subject to massive ember wash during the next wildland fire. Maintaining a non-combustible zone combined with fire-safe venting and Class A roofing is the primary mitigation for ember ignition. Ember ignition generally occurs when embers strike a wall or fall in wind vertices and accumulate at the bottom of the wall or in an inside corner of the structure. If there is any flammable material in this area, the structure will be at increased risk. This area should likely be graveled in and treated with herbicide so that no vegetation can grow in this area. No leaf litter should be allowed to accumulate.

Evacuation Planning
It is recommended that a written evacuation plan be created for the subject parcel. During fire season and particularly on red flag days, people should monitor local news and look for smoke in the region of the property. A meeting area should be established, and workers shown where to assemble for further evacuation instructions. Workers new to the area should practice evacuating by several different routes. The Fire Marshal can help review a general evacuation plan.

Prescription for Fuels Reduction
The SH7 fuel model is a chaparral fuel model that can exhibit quite extreme fire behavior. Flame lengths can be quite high. In this fuel model, it is imperative to create a 200 to 300-foot buffer around the home and structures to enable firefighters to engage a fire. The SH7 is too volatile for direct attack during extreme fire weather.

The basic prescription for fuels reduction on the property is to create gaps of at least 20-feet between oak crowns or 25-feet of space between conifer boles. Retain the dominant and codominant conifers on the parcel. Then retain mature trees greater than 25-feet from another designated leave tree.

John Pickett, RPF #2976
2235 Catalina Dr., South Lake Tahoe, CA 96150
(775) 220-7675 jpickettRPF@gmail.com

Retain all trees greater than 24 inches DBH for pine and 36 inches DBH for oak. Retain trees in the following order: Ponderosa pine, black oak, blue oak, valley oak, and canyon live oak.

It is my opinion that the above prescription complies with the El Dorado Oak Management Program and is exempt because it is a fire-safe treatment related to an existing structure.

The shaded fuel break units will be treated using three different treatment methodologies.

- Mastication – A skid steer-mounted masticator can effectively mow canyon live oak. An example is the Fecon FTX350. The downside is that it will leave significant mulch depths that will be slow to decay.

- Tree shear or hot saw, skid, and chip – In this treatment, a tree sheer or hot saw cuts the excess trees creating at least 30-foot crown spacing. The sheer bunches the cut material, which is then skidded to a landing for processing. This is an excellent treatment for live oak, with the caveat that chipping and hauling are expensive.

- Tree shear or hot saw, machine grapple pile, and burn - In this treatment, trees, focusing on the canyon live oak, are cut and piled. The piles can be up to 15'x15' but must be at least 10 feet from residual trees. Pile burning can be completed during the winter period.

Conclusion
The project area is in a high fire hazard area with dense canyon live oak and native chaparral composing the primary fuel types. The parcel is a fuel model SH7 capable of supporting high rates of spread with high flame lengths. Effective fuel reduction can be obtained by creating a reduced fuel zone approximately 300-feet wide around the structure and then creating effective defensible space. The parcel is exposed to considerable fire hazard, and currently, the structure on the property is unlikely to survive a wildland fire.

It is recommended that the property owner work with the neighborhood to apply for a landscape scale grant to treat the extreme fuel loading in the canyon below the community. A grant would be quite competitive, particularly if it covers a large portion of the community.

Appendix J

AB 52 Consultation Record

PLANNING AND BUILDING DEPARTMENT

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(530) 542-9082 Fax

June 28, 2021

Colfax-Todds Valley Consolidated Tribe
Pamela Cubbler, Treasurer
P.O. Box 4884
Auburn, CA 95604

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION -** a Proposed Project within the County of El Dorado

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.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
> **County Planner: Aaron Mount, 530-621-5345**

Project Documentation can be viewed by using the following link:
https://drive.google.com/drive/folders/17vwVrwbUBvaCDB1TVATdlR7zoaO3dhQK?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. Clyde Prout, Chairperson

PLANNING AND BUILDING DEPARTMENT

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June 28, 2021

Ione Band of Miwok Indians
Sara D. Setshwaelo, Chairperson
9252 Bush Street, Suite 2
Plymouth, CA 95669

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS 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.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
> **County Planner: Aaron Mount, 530-621-5345**

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June 28, 2021

Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Mr. Cosme Valdez, Chairperson
P.O. Box 580986
Elk Grove, CA 95758

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS 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.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
> **County Planner: Aaron Mount, 530-621-5345**

Project Documentation can be viewed by using the following link:
https://drive.google.com/drive/folders/17vwVrwbUBvaCDB1TVATdlR7zoaO3dhQK?usp=sharing

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June 28, 2021

Shingle Springs Band of Miwok Indians
Regina Cuellar, Chairperson
P.O. Box 1340
Shingle Springs, CA 95682

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS 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.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
> **County Planner: Aaron Mount, 530-621-5345**

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cc. James Sarmento, Executive Director of Cultural Resources

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June 28, 2021

Tsi Akim Maidu
Mr. Don Ryberg, Chairperson
P.O. Box 510
Browns Valley, CA 95918

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION -** a Proposed Project within the County of El Dorado

Dear Mr. Ryberg,

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 Geographic Area of Traditional and Cultural Affiliation.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
> **County Planner: Aaron Mount, 530-621-5345**

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cc. Grayson Coney, Cultural Director

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June 28, 2021

United Auburn Indian Community of the Auburn Rancheria — CERTIFIED MAIL
Gene Whitehouse, Chairperson
10720 Indian Hill Road
Auburn, CA 95603

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS 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.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
> **County Planner: Aaron Mount, 530-621-5345**

Project Documentation can be viewed by using the following link:
https://drive.google.com/drive/folders/17vwVrwbUBvaCDB1TVATdlR7zoaO3dhQK?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.

PLANNING AND BUILDING DEPARTMENT

PLANNING SERVICES DIVISION

http://www.edcgov.us/DevServices/

PLACERVILLE OFFICE:
2850 Fairlane Court, Placerville, CA 95667
BUILDING
(530) 621-5315 / (530) 622-1708 Fax
bldgdept@edcgov.us
PLANNING
(530) 621-5355 / (530) 642-0508 Fax
planning@edcgov.us

LAKE TAHOE OFFICE:
924 B Emerald Bay Rd
South Lake Tahoe, CA 96150
(530) 573-3330
(530) 542-9082 Fax

June 28, 2021

Washoe Tribe of Nevada and California
Darrel Cruz, Cultural Resources Department
919 Highway 395 North
Gardnerville, NV 89410

CERTIFIED MAIL

RE: Assembly Bill 52 Consultation for **CCUP21-0004/SINGLE SOURCE SOLUTIONS 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.

> **CCUP21-0004/SINGLE SOURCE SOLUTIONS COMMERCIAL CANNABIS CULTIVATION (John Muraco, Joe Wiseman, Rod Miller/Michael and Joan Pinette).** The proposed project will be located on property, identified by Assessor's Parcel Number 046-710-017, consists of 46.53 acres, and is located on the north side of D'Agostini Drive, **in the Mt. Aukum area**.
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cc. Serrell Smokey, Chairperson

Appendix K

Acoustics Analysis

Earth Groovy Products LLC 530-503-9078 Office 530-748-9822 earthgroovy.com

Technical Memo
Acoustic Assessment
Commercial Cannabis Cultivation
CUP-Application of
Single Source Solutions Inc.
4941 D'agostini Dr. Somerset, CA
APN# 046-710-17-100
Owners John Muraco Jr., Joe Wiseman, and Michael Pinette
May 24th, 2021

Summary and Background

The applicants seek licenses for two acres of commercial cannabis cultivation in the form of 87,120 sq. ft. outdoor full-term cultivation. The project includes the development of security features, fire safety features, modular office, eight modified shipping containers for harvest storage and processing, and solar power. Phase Two of the project will have 1.28 acres of hoop houses installed on the east side of the cultivation area.

The cannabis activity is located in the middle of a 46.53 acre parcel. Its located in a valley with a 2+ acre clearing within a heavily forested area. The closest neighbor residence is approximately 745' away from the cultivation area.

The project area is an existing vineyard that utilizes a tractor for agricultural activity.

The only new sound source from the project beyond temporary construction vehicles is a backup generator housed within a shed.

Generator

While the property has PG&E electricity, the cannabis premises will use solar power with a backup generator to power the cannabis cultivation.

The generator utilized will be the same or comparable to Model #ESI7000iER-EFI Lifan 7000 watt gasoline generator. According to the manufacturer's specifications, the generator produces 53 decibels 23 feet from the generator. The generator will be housed within a Tuff Shed that holds the batteries and inverter for the solar system. The Tuff Shed will be fitted with

rubber mats and wall and window soundproofing. It is reasonable to estimate that a Tuff Shed fitted with soundproofing will reduce the decibels of the generator operating in the shed by 10 decibels. Hence, the generator will produce 43 decibels. The closest property line is over 86' to the West. The ambient sound level for the property is 31-45 dBs depending on the wind.

Pursuant to the Inverse Square Law for every doubling of distance from the sound source, the sound level reduces by 6 decibels (dB). The generator will not exceed county noise standards (50-60 decibels at the property line depending on the time day in Rural Regions). Generator Sound likely will be detectable at the property line but near the lowest end of the ambient sound level averaging 31.5 dB.

Monitoring

Db generated by the generator or other unknown sources will be monitored for compliance with county noise and worker protection standards. If there is noise exceeding, on average, county, state, or federal standards then the project will take further steps to mitigate noise.

Construction Noise

Contract provisions will be used with construction contractors that will require them to comply with county noise standards while constructing project components.

Prepared by Rod Miller Managing Member Earth Groovy Products LLC

Appendix L

Soil Resource Report

United States Department of Agriculture

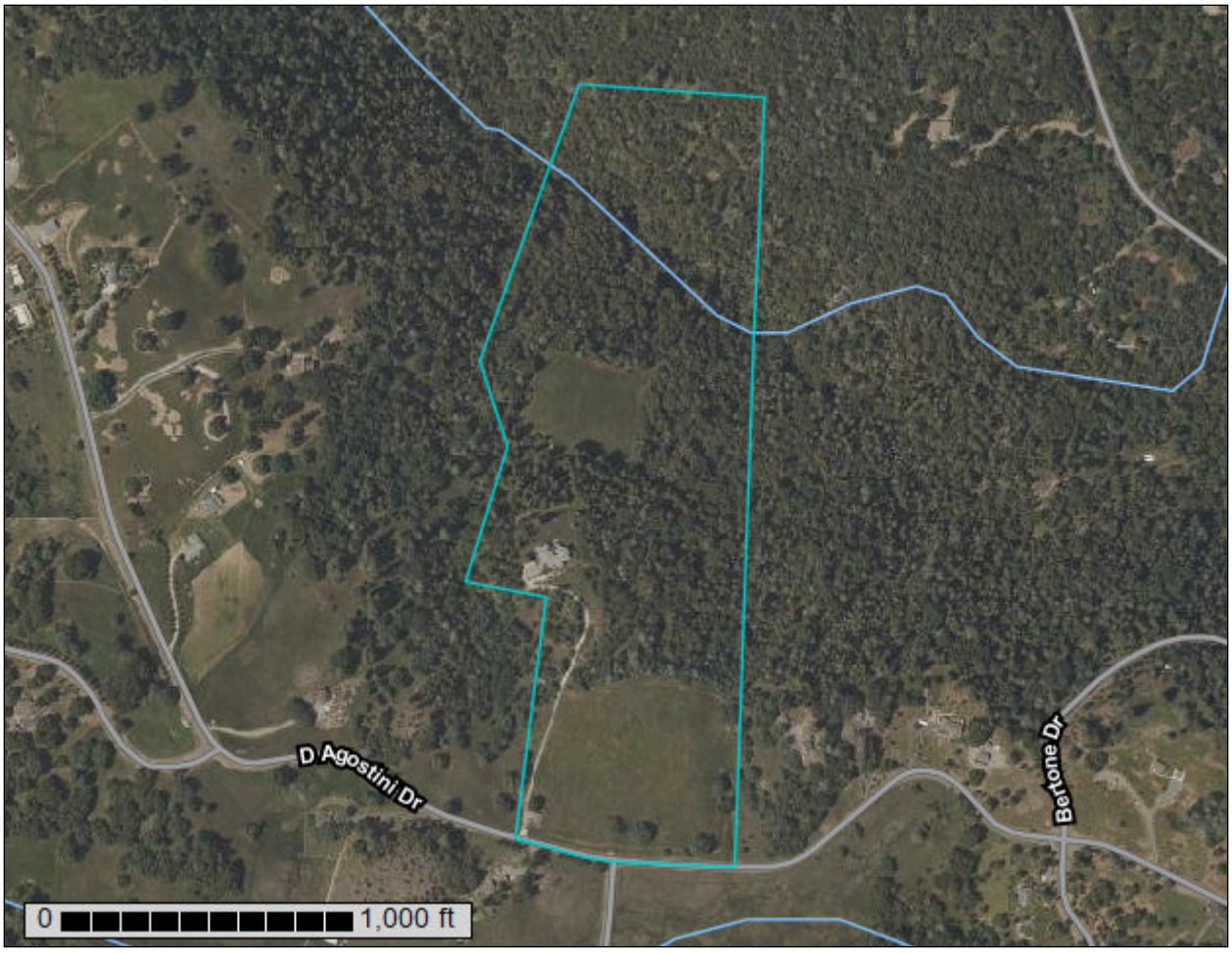
NRCS

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

SingleSource



June 21, 2022

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.

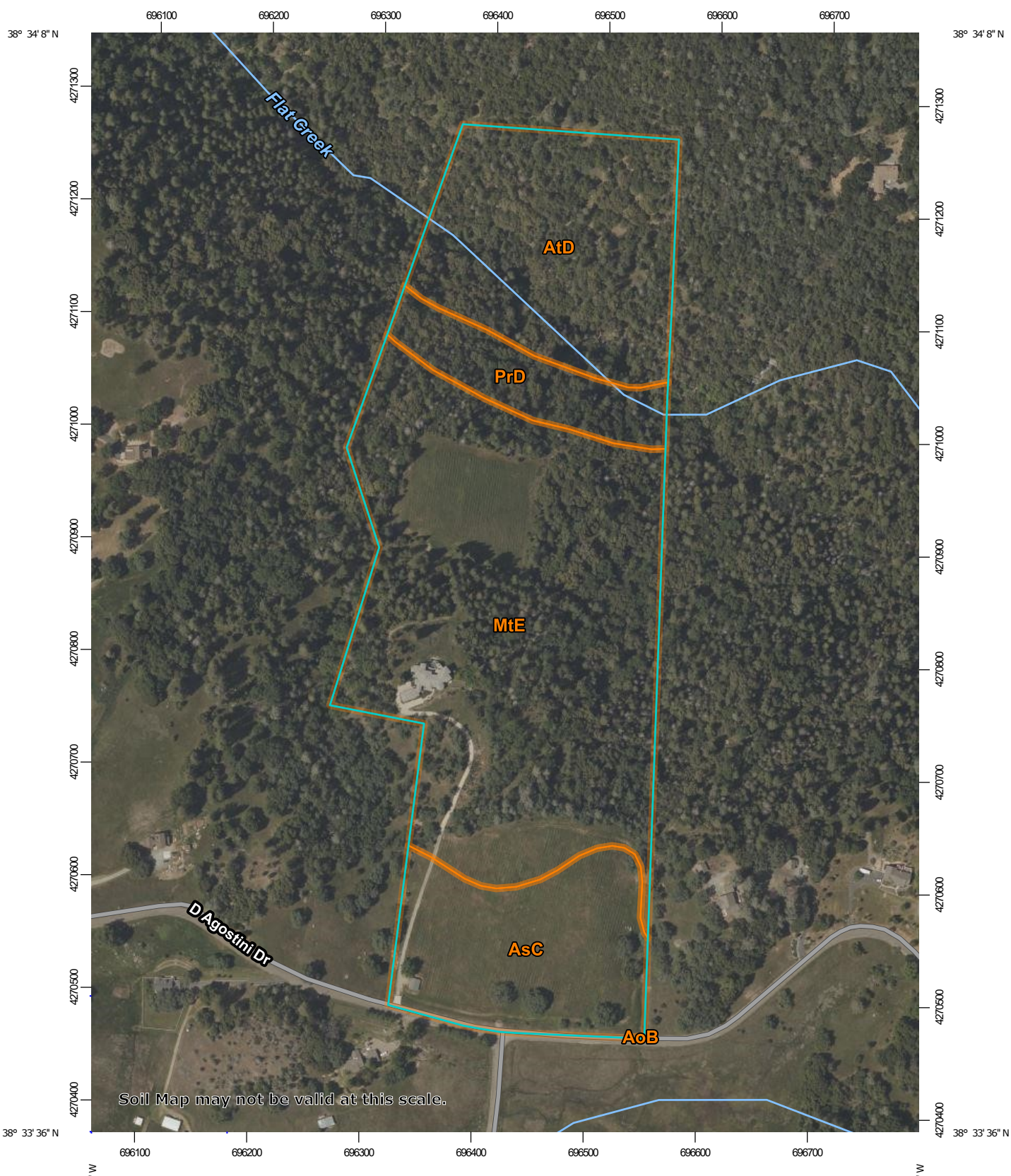
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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 Scale: 1:4,760 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

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 13, Sep 3, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 3, 2019—Oct 29, 2019

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
AoB	Argonaut loam, seeped variant	0.0	0.0%
AsC	Auberry rocky coarse sandy loam, 5 to 15 percent slopes	7.9	16.5%
AtD	Auberry very rocky coarse sandy loam, 15 to 30 percent slopes	10.7	22.5%
MtE	Musick very rocky sandy loam, 15 to 50 percent slopes	25.7	53.9%
PrD	Placer diggings	3.4	7.1%
Totals for Area of Interest		**47.7**	**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

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

AsC—Auberry rocky coarse sandy loam, 5 to 15 percent slopes

Map Unit Setting

National map unit symbol: hhyl
Elevation: 400 to 3,500 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 150 to 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Auberry and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auberry

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from granite and/or residuum weathered from granodiorite

Typical profile

H1 - 0 to 13 inches: coarse sandy loam
H2 - 13 to 36 inches: sandy clay loam
H3 - 36 to 56 inches: coarse sandy loam
H4 - 56 to 60 inches: weathered bedrock

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: 56 to 60 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 7.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F018XI205CA - Thermic Granitic Foothills 27-40 PZ
Hydric soil rating: No

Minor Components

Ahwahnee

Percent of map unit: 8 percent
Hydric soil rating: No

Sierra

Percent of map unit: 7 percent
Hydric soil rating: No

AtD—Auberry very rocky coarse sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hhym
Elevation: 400 to 3,500 feet
Mean annual precipitation: 25 to 35 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 150 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Auberry and similar soils: 75 percent
Rock outcrop: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Auberry

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from granite and/or residuum weathered from granodiorite

Typical profile

H1 - 0 to 13 inches: coarse sandy loam

H2 - 13 to 36 inches: sandy clay loam
H3 - 36 to 56 inches: coarse sandy loam
H4 - 56 to 60 inches: weathered bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 56 to 60 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
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 7.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F018XI205CA - Thermic Granitic Foothills 27-40 PZ
Hydric soil rating: No

Description of Rock Outcrop

Setting

Parent material: Granite and/or granodiorite

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Ahwahnee

Percent of map unit: 4 percent
Hydric soil rating: No

Boomer

Percent of map unit: 3 percent
Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Sierra

Percent of map unit: 3 percent
Hydric soil rating: No

MtE—Musick very rocky sandy loam, 15 to 50 percent slopes

Map Unit Setting

National map unit symbol: hj0s
Elevation: 2,000 to 5,000 feet
Mean annual precipitation: 35 to 70 inches
Mean annual air temperature: 50 to 57 degrees F
Frost-free period: 140 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Musick and similar soils: 75 percent
Rock outcrop: 15 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Musick

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Mountainflank, mountaintop
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Colluvium derived from granite and/or colluvium derived from granodiorite

Typical profile

H1 - 0 to 12 inches: sandy loam
H2 - 12 to 18 inches: sandy clay loam
H3 - 18 to 42 inches: sandy clay loam
H4 - 42 to 56 inches: sandy clay loam
H5 - 56 to 60 inches: sandy loam

Properties and qualities

Slope: 15 to 50 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 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Rock Outcrop

Setting
Parent material: Granite

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Holland
Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Shaver
Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Hydric soil rating: No

Chaix
Percent of map unit: 2 percent
Hydric soil rating: No

Josephine
Percent of map unit: 2 percent
Hydric soil rating: No

PrD—Placer diggings

Map Unit Composition
Placer diggings: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Placer Diggings

Setting

Parent material: Alluvium derived from mixed sources

Typical profile

H1 - 0 to 60 inches: fine sandy loam, cobbles

Properties and qualities

Slope: 2 to 15 percent
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Frequency of flooding: OccasionalNone
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: R018XD084CA - PLACER DIGGINGS
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 10 percent
Landform: Channels
Hydric soil rating: Yes

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