



INITIAL STUDY/MITIGATED NEGATIVE DECLARATION PETALUMA HILL ROAD

Prepared for: **CALIFORNIA DEPARTMENT OF CANNABIS CONTROL**

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Appendix A – Biological Resources Information

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AFVs	alternative fuel vehicles
ALUCP	Airport Land Use Compatibility Plan
Applicant	Fiasco Farms, Leverage Farms, One Love Gardens, Over the Hump
AST	aboveground storage tank
BMPs	best management practices
BOS	Stanislaus County Board of Supervisors
CAC	county agricultural commissioner
CalARP	California Accidental Release Prevention
CalEPA	California Environmental Protection Agency
California Energy Code	Title 24, Part 6, Building Energy Efficiency Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Cal/OSHA	California Occupational Safety and Health
CARB	California Air Resources Board
CBC	California Building Code
CCA	Commercial Cannabis Activity Permit
CCR	California Code of Regulations
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Pesticide Regulation
CEC	California Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFC	California Fire Code
CNEL	Community noise equivalent level
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CoIWMP	Countywide Integrated Waste Management Plan
CUPAs	Certified Unified Program Agencies
CRHR	California Register of Historical Resources
CTR	California Toxics Rule
CWA	Clean Water Act
CWPP	Sonoma County Community Wildfire Protection Plan
CO	carbon monoxide
DA	Development Agreement
dBA	A-weighted decibel
DCC	Department of Cannabis Control
DER	Department of Environmental Resources
DOC	California Department of Conservation
DPR	Department of Pesticide Regulation
DTSC	Department of Toxic Substances Control

EPAct	Energy Policy Act
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GSA	groundwater sustainability agencies
GSP	groundwater sustainability plan
HAPs	hazardous air pollutants
HCP	Habitat Conservation Plan
HMAP	Hazardous Materials Area Plan
HMBP	Hazardous Materials Business Plan
HMIS	Hazardous Materials Inventory Statement
HMMP	Hazardous Materials Management Plan
Hz	Hertz
IS/MND	Initial Study/Mitigated Negative Declaration
kW	kilowatt
kWh	kilowatt per hour
LAFCO	Local Agency Formation Commission
Ldn	Day-night sound level
Leq	Equivalent sound level
LRA	Local Responsibility Area
MAUCRSA	Medicinal and Adult-Use Cannabis Regulation and Safety Act
MBTA	Migratory Bird Treaty Act
MCRSA	Medical Cannabis Regulation and Safety Act
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MS4s	municipal separate storm sewer systems
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NEHRP	National Earthquake Hazards Reduction Program
NHPS	National Historic Preservation Act
NMFS	Marine Fisheries Service
NO ₂	nitrogen dioxide
NO _x	nitrous oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTR	National Toxics Rule
NWIC	Northwest Information Center
NWSRS	National Wild and Scenic Rivers System
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PM _{2.5}	2.5 micrometers or less
PM ₁₀	10 micrometers or less

PPE	personal protective equipment
PPV	Peak Particle Velocity
Proposed Project	Petaluma Hill Road Project
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act
RMP	risk management plan
RO	reverse osmosis
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SDWA	Safe Drinking Water Act
SGMA	Sustainable Groundwater Management Act
RHNP	Regional Housing Needs Plan
SMARA	Surface Mining and Reclamation Act
SOI	Sphere of Influence
SPCC	Spill Prevention, Control, and Countermeasure
SRA	State Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TCPs	Traditional Cultural Properties
TCRs	tribal cultural resources
TISG	Transportation Impact Study Guide
TPZs	timber protection zones
TTC	temporary traffic control
UID	Universal Identification
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VdB	Vibration Decibel
VMT	Vehicle Miles Traveled
WDRs	waste discharge requirements
VHFHSZ	Very High Hazard Severity Zones

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1 INTRODUCTION AND PURPOSE

The California Department of Cannabis Control (DCC) has prepared this initial study/mitigated negative declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Petaluma Hill Road (Proposed Project). This document has been prepared in accordance with the requirements of the California Environmental Quality Act of 1970, as amended (CEQA) (Public Resources Code [Pub. Resources Code] § 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14 [CEQA Guidelines]),

DCC is evaluating the issuance of State licenses for the proposed operation of an outdoor commercial cannabis cultivation operation located on one acre (43,560 square feet) at 8270 Petaluma Hill Road, in unincorporated Sonoma County. The commercial cannabis cultivation site is located within a 30.84-acre parcel (Assessor Parcel Number [APN] 047-101-019). The outdoor commercial cannabis cultivation activities currently consist of four separate licenses, each license consists of 10,000 square feet totaling 40,000 square feet of outdoor commercial cannabis cultivation. Commercial cannabis cultivation activities would occur within an approximate 2-acre fenced area which includes 40,000 square feet of canopy (Proposed Project).

The annual license applicants have applied to DCC for annual commercial cannabis cultivation licenses to conduct operations at the project site. DCC is the lead agency under CEQA with respect to the project activity because it has discretionary authority over the approval of the applicants' state commercial cannabis cultivation licenses.

This chapter describes the intent and scope of this IS/MND, the public involvement process, the organization and scope of the document, and specific impact-related terminology used in the document.

1.1 Intent and Scope of this Document

1.1.1 Scope of the Analysis

This IS/MND has been prepared in accordance with CEQA, under which the Proposed Project is evaluated at a project level (CEQA Guidelines, § 15378). DCC, as the lead agency under CEQA, will consider the Proposed Project's potential environmental impacts when considering whether to approve the Proposed Project. This IS/MND is an informational document to be used in the planning and decision-making process for the Proposed Project and does not recommend approval or denial of the Proposed Project.

This IS/MND describes the Proposed Project; its environmental setting (existing conditions and regulatory setting); and the potential environmental impacts of the Proposed Project with regard to the following topics:

- | | |
|-----------------------------------|---------------------------------|
| ▪ Aesthetics | ▪ Land Use and Planning |
| ▪ Agriculture/Forestry Resources | ▪ Mineral Resources |
| ▪ Air Quality | ▪ Noise |
| ▪ Biological Resources | ▪ Population and Housing |
| ▪ Cultural Resources | ▪ Public Services |
| ▪ Energy | ▪ Recreation |
| ▪ Geology, Soils, and Seismicity | ▪ Tribal Cultural Resources |
| ▪ Greenhouse Gas Emissions | ▪ Transportation |
| ▪ Hazards and Hazardous Materials | ▪ Utilities and Service Systems |
| ▪ Hydrology and Water Quality | ▪ Wildfire |

1.1.2 Public Comment Period

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines sections 15073 and 15105(b), subdivision require that the lead agency designate a period during the IS/MND process when agencies and the public can provide comments on the potential impacts of the Proposed Project. Accordingly, DCC is circulating this document for a 30-day public and agency review period. The beginning and ending dates of the comment period are identified in the Notice of Intent to Adopt a Mitigated Negative Declaration.

Comments on this IS/MND can be submitted by mail or email to the following contact:

Kevin Ponce, Senior Environmental Scientist Supervisor
California Department of Cannabis Control
2920 Kilgore Rd. Rancho Cordova, CA 95670-6157
kevin.ponce@cannabis.ca.gov

All comments received before 5:00 p.m. on the date identified for closure of the public comment period in the Notice of Availability will be considered by DCC during its deliberations on whether to approve the Proposed Project.

1.2 Organization of This Document

This IS/MND contains the following components:

Chapter 1, *Introduction*, provides a brief description of the intent and scope of this IS/MND, the public involvement process under CEQA, the organization of the document, and terminology used in this IS/MND.

Chapter 2, *Project Description*, describes the Proposed Project, including its purpose and goals, the project site where the Proposed Project would be constructed and operated, construction methods, operation-related activities, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the environmental checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter includes brief regulatory environmental setting descriptions for each resource topic, evaluates the Proposed Project's anticipated environmental impacts, and identifies mitigation measures that would be required to reduce potentially significant impacts to a less-than-significant level.

Chapter 4, *Report Preparers*, identifies the individuals who prepared portions of this document.

Chapter 5, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this IS/MND.

Appendices

Appendix A. *Biological Resources Information*

Appendix B. *Cultural Resources and Tribal Cultural Resources Evaluation*

1.3 Impact Terminology

This IS/MND uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of no impact is made when the analysis concludes that the Proposed Project would not affect the particular environmental resource or issue.
- An impact is considered less than significant if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered less than significant with mitigation if the analysis concludes that no substantial adverse change in the environment would result with the implementation of the mitigation measures described.
- An impact is considered potentially significant if the analysis concludes that a substantial effect on the environment could result.
- Mitigation refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.
- A cumulative impact refers to one that can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this IS/MND focuses on whether the Proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.
- Because the term "significant" has a specific usage in evaluating the impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.

1.4 Regulatory Background

Until 1996, the cultivation, use, and sale of cannabis for any purpose was illegal in the State of California. In 1996, California voters approved Proposition 215, the Compassionate Use Act of 1996, which allowed seriously ill Californians the right to obtain and use cannabis for medical purposes when recommended by a physician. The passage of Senate Bill (SB) 420 (Statutes of 2003) enacted the Medical Marijuana Program Act, which clarified the scope and application of the Compassionate Use Act and established a voluntary program for the issuance of identification cards to qualified patients and established procedures under which a qualified patient with an identification card may use cannabis for medical purposes to protect patients and their caregivers from arrest.

In 2015, the State Legislature enacted the Medical Cannabis Regulation and Safety Act (MCRSA) through a series of three separate bills (Assembly Bill (AB) 266, AB 243, and Senate Bill (SB) 643; former Bus. & Prof. Code, § 19300 et seq.), which established a comprehensive State licensure and regulatory framework for commercial cannabis cultivation, manufacturing, distribution, transportation, testing, and retail sale. As the State was developing regulations in compliance with MCRSA, California voters in 2016 approved Proposition 64 (Adult Use of Marijuana Act [AUMA]), which legalized the use and possession of non-medicinal cannabis within California by adults 21

years and older. In June 2017, the State Legislature passed a budget trailer bill, SB 94, which integrated MCRSA with AUMA to create the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). (Bus. & Prof Code, § 26000 et. seq.) MAUCRSA provides the regulatory structure for commercial cannabis activities in California. In December 2017, the licensing authorities began accepting applications for temporary commercial cannabis licensure and on January 1, 2018, the first temporary licenses for medicinal and adult-use cannabis became effective.

On July 12, 2021, the governor signed AB 141 (Chapter 70, statutes of 2021), which consolidated the three former cannabis licensing authorities – the Department of Consumer Affairs’ Bureau of Cannabis Control, which was charged with the licensing, regulation, and enforcement of commercial cannabis distribution, retail, microbusinesses, testing laboratories, and temporary cannabis events; the Department of Food and Agriculture’s CalCannabis Cultivation Licensing Division, which was responsible for the licensing regulation, and enforcement of commercial cannabis cultivation; and the Department of Public Health’s Manufactured Cannabis Safety Branch, which was responsible for the regulation of commercial cannabis manufacturing. DCC inherited all the powers, duties, purposes, functions, responsibility, and jurisdiction of the legacy licensing authorities and serves as the single regulatory and enforcement entity for all licensed and commercial cannabis in California.

Notably, MAUCRSA also recognizes the authority of local governments to regulate cannabis businesses located in their jurisdictions. (See Bus. & Prof Code, § 26032.) Local governments have the authority to impose restrictions and/or requirements on commercial cannabis businesses, or to ban them entirely.

DCC’s regulations pertaining to State-licensed cannabis businesses are codified in the California Code of Regulations, title 4, division 19. These regulations establish a licensing and regulatory program for licensed commercial cannabis cultivation, manufacturing, retail sale, distribution, transport, and laboratory testing of medicinal and adult-use cannabis. The regulations specify a tiered system of license types, and requirements related to the qualifications for state commercial cannabis licensure and conducting cannabis business activities, including environmental protection requirements.

1.5 Environmental Baseline of Analysis

Some of the activities that are described in the Project Description (Chapter 2) are currently ongoing. MAUCRSA authorized DCC to issue “provisional” licenses to applicants that allow for the conduct of commercial cannabis activities prior to the completion of CEQA analysis, provided that applicants submitted a completed application to the DCC and met certain application milestones. MAUCRSA specifies that CEQA “does not apply to the issuance of a [provisional] license pursuant to [Bus. & Prof. Code, § 26050.2] by the department, except as otherwise provided in [Bus & Prof. Code, § 26050.2].” (Bus. & Prof. Code, § 26050.2, subd. (I).)

Consistent with the legislature’s establishment of provisional licensing under MAUCRSA, there are some projects for which state provisional licensure of legal cannabis activities proceeded prior to the DCC becoming the lead agency. Upon issuance of a provisional license from DCC and any additional local approvals, cannabis businesses were able to begin operations, which sometimes included construction of permanent facilities. For the purposes of fully analyzing the impacts of the Proposed Project, this document presents an analysis of all impacts that would result from the development and operation of the legal cannabis activity if DCC approves issuance of an annual license, while recognizing that some impacts may have already occurred or may be impossible to analyze due to

construction, development, and operational activities already undertaken by Applicant pursuant to local approvals and a provisional license.

For the Proposed Project, the site was previously used for agricultural uses, although it was fallow prior to the start of project activities. As such, the previous activities or operations would have resulted in certain environmental impacts. These activities and resulting impacts would be considered to represent existing conditions as the environmental baseline. The impact analysis in this document, therefore, focuses on the increment of change that would result from the development and operation of the cannabis operation since the time of the application for an annual license, and therefore will analyze impacts of both current and future cannabis business development and operations.

The Proposed Project received local approval to begin development and operation of the Proposed Project upon issuance of four ministerial Zoning Permits, in March, 2021. The Proposed Project received provisional commercial cultivation licenses from the State of California in 2021 (see **Table 2.1-1**). Based on these approvals, the cannabis license applicants began legal cannabis business operations at the project site. Although it is possible that development of the site may have resulted in impacts to the environment, there is no way to complete an analysis of every potential impact to the environment that could have occurred as a result of the site development.

Among the basic purposes of CEQA are to identify potential significant environmental effects of proposed decisions and identify ways to avoid or significantly reduce environmental damage. (Cal. Code Regs., tit.14, § 15002.) If an activity has already occurred in compliance with law (and without any intent to circumvent CEQA) and damage cannot be avoided or mitigated, the analysis is mooted. (See, e.g. *Hixon v. Cnty. of Los Angeles* (1974) 38 Cal.App.3d 370, 378; *Santa Monica Baykeeper v. City of Malibu* (2011) 193 Cal.App.4th 1538, 1549-51.) Further, to the extent certain types of activities were conducted in accordance with law (and without any intent to circumvent CEQA) but may have had an impact on the environment, it may be the case that it is currently impossible to do a CEQA analysis of those impacts that already occurred. As an example, if grading of soils or surfaces for the construction of a building that has already been built caused impacts to subsurface resources (such as unknown archeological resources), there will sometimes be no way to analyze those impacts or to undo or mitigate those impacts following the building's construction, and therefore there is no reason under CEQA to attempt to analyze those impacts. However, if the building that was constructed may have ongoing aesthetics impacts (such as creating glare), there may be opportunities to mitigate such impacts and those ongoing impacts should be examined.

This document, therefore, will analyze the impacts of site development (including already completed site development) and operation of the Proposed Project that could potentially be avoided or mitigated. If there are impacts that cannot be analyzed, those impacts and the reasons they cannot be analyzed will be discussed in the individual resource sections.

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2 PROJECT DESCRIPTION

2.1 Overview

The Department of Cannabis Control (DCC) is evaluating the issuance of State licenses for the proposed operation of an outdoor commercial cannabis cultivation operation at 8270 Petaluma Hill Road, in unincorporated Sonoma County. The commercial cannabis cultivation site is located within a 30.84-acre parcel (Assessor Parcel Number [APN] 047-101-019). The outdoor commercial cannabis cultivation activities currently consist of four separate licenses, each license consists of 10,000 square feet totaling 40,000 square feet of outdoor commercial cannabis cultivation. Commercial cannabis cultivation activities would occur within an approximate 2-acre fenced area which includes 40,000 square feet of canopy (Proposed Project). No commercial cannabis processing or packaging occur at the project site.

On January 14, 2021, four separate applicants (Fiasco Farms, Leverage Farms, One Love Gardens, and Over the Hump) (collectively “Applicants”) applied to the California Department of Food and Agriculture (CDFA)¹ and the DCC for four separate annual small outdoor commercial cannabis cultivation licenses held by different businesses. CDFA and DCC issued State provisional licenses for these activities on the dates indicated in **Table 2.1-1**. Sonoma County issued local approvals for the commercial cannabis cultivation sites for the Proposed Project in April and May 2021. On the basis of those state and local approvals, the facility began legal operations at the 8270 Petaluma Hill Road. As discussed in Section 1.5, the CEQA baseline for this environmental analysis is the date the Proposed Project applied for annual commercial cannabis cultivation licenses with the State of California. Therefore, facilities and settings described as “existing” in this chapter are intended to refer to items that existed as of January 14, 2021.

Table 2.1-1. Local and State Approvals

Business Name	APN	Address	Sonoma County Approval Date	DCC Annual License Application Date	DCC Provisional License Issuance Date	DCC Provisional License Number
Fiasco Farms	047-101-019	8270 Petaluma Hill Road	3/5/2021	1/14/2021	5/20/2021	CCL21-0000143
Leverage Farms	047-101-019	8270 Petaluma Hill Road	3/5/2021	1/14/2021	4/30/2021	CCL21-0000146
One Love Gardens	047-101-019	8270 Petaluma Hill Road	3/5/2021	1/14/2021	5/20/2021	CCL21-0000148
Over the Hump	047-101-019	8270 Petaluma Hill Road	3/5/2021	1/14/2021	4/30/2021	CCL21-0000147

¹ CDFA was the predecessor licensing agency to DCC in California for state commercial cannabis cultivation licenses. In 2021, commercial cannabis regulation and licensing previously under the California Department of Food and Agriculture’s CalCannabis Cultivation Licensing Division, the California Department of Public Health’s Manufactured Cannabis Safety Branch, and the California Department of Consumer Affairs’ Bureau of Cannabis Control, were consolidated into a new agency, the California Department of Cannabis Control.

Source: DCC 2025, Sonoma County 2024.

DCC is the lead agency under CEQA with respect to the project activity because it has discretionary authority over the approval of the state annual commercial cannabis business licenses.

This chapter describes the Proposed Project and discusses its purpose, objectives, location, proposed actions, and necessary permits and approvals.

2.2 Proposed Project Purpose and Objectives

The Proposed Project is the operation of an outdoor commercial cannabis cultivation operation. Commercial cannabis activities commenced in 2021 and consist of four separate licenses of 10,000 square feet outdoor cultivation for a total of 40,000 square feet of outdoor commercial cannabis cultivation. Outdoor commercial cannabis cultivation activities are located on a 30.84-acre parcel. Commercial cannabis cultivation activities would occur within an approximate 2-acre fenced area which includes 40,000 square feet of canopy.

Specific project objectives are as follows:

- Operate a facility that meets all state and local requirements for commercial cannabis cultivation and associated business activities, including security and environmental standards required by the State of California;
- Operate a facility that meets all local laws, regulations, and ordinances that may apply to site development and building standards (e.g., building codes, local ordinances); and
- Operate a facility that provides employment up to a maximum 10 full-time employees.

2.3 Proposed Project Location and Setting

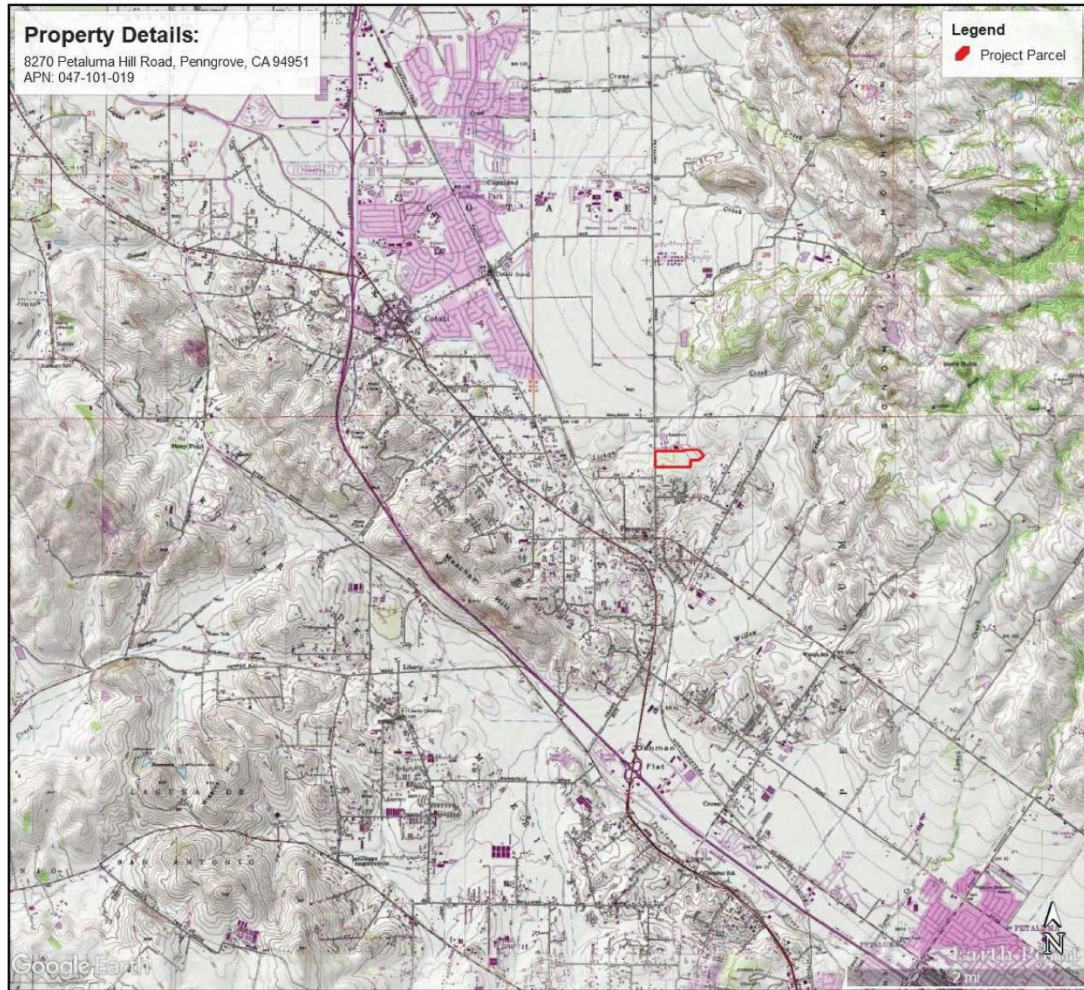
The project site is located at 8270 Petaluma Hill Road, Penngrove, in unincorporated Sonoma County. The project site is located approximately three miles southeast of the town of Cotati. (**Figure 2.3-1, Proposed Project Vicinity**). Entry to the project parcel is via Petaluma Hill Road, a county-maintained road. Entry to the commercial cannabis cultivation area is located approximately 0.25 miles from the main entrance via a paved driveway. Outdoor commercial cannabis cultivation activities occur within a leased area in the eastern portion of the 30.84-acre parcel (APN 047-101-019) within an approximate 2-acre fenced area which includes 40,000 square feet of canopy (**Figure 2.3-2, Proposed Project Location**).

The site is currently zoned as Diverse Agriculture (DA). Under the Sonoma County Code, the DA zone “enhances and protects land where soil, climate, and water conditions support farming but where small acreage intensive farming and part-time farming activities are predominant, and where farming may not be the principal occupation of the farmer.” (Sonoma County Code § 26-06-020.) This designation allows a variety of uses including commercial cannabis cultivation. The property is not within any Williamson Act contract.

The commercial cannabis cultivation site is located on primarily fallow agricultural land and has been fallow for approximately one year. The project parcel, outside of the commercial cannabis cultivation area, is developed with a large farm, roads, and crops (primarily flowers). Existing structures include a single-family residence, a 110,000 square foot greenhouse associated with a non-cannabis commercial nursery, a 10,000 square foot metal

warehouse/shop building that houses a construction business and two mobile office buildings, two ponds, and other associated agricultural improvements (Sonoma County 2024) (**Figure 2.3-3 Site Layout**).

Surrounding land uses are also zoned Diverse Agriculture (DA) and Agriculture and Residential (AR) and are predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential development. The closest residences, located on adjacent parcels, are approximately 600 feet to the east, 775 feet to the southwest, 774 feet to the south, and over 1,000 feet to the west of the commercial cannabis cultivation area.



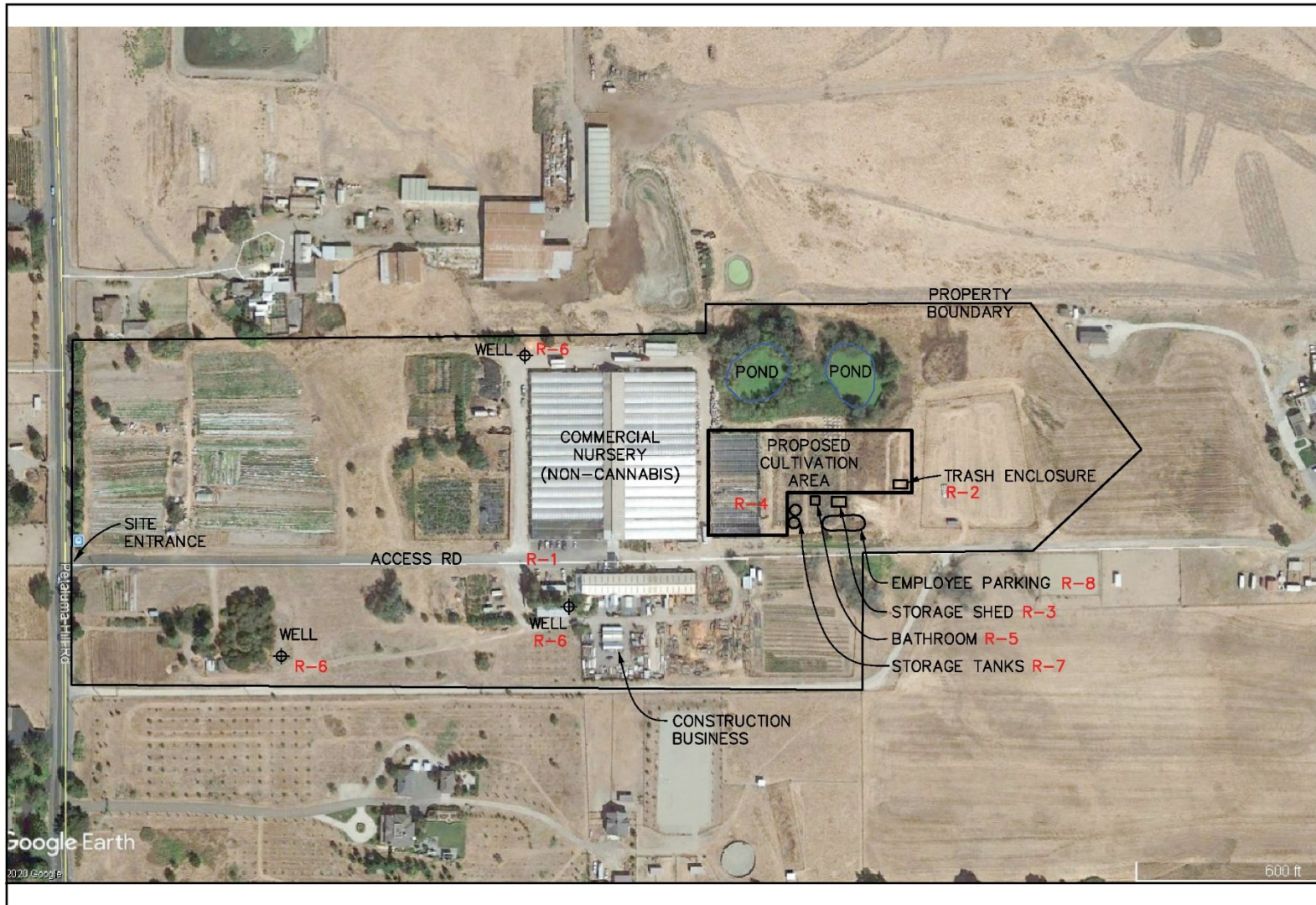
Source: 8270 Holdings LLC, 2022

Figure 2.3-1. Proposed Project Vicinity



Source: 8270 Holdings LLC, 2022.

Figure 2.3-2. Proposed Project Location



Source: Site Plan, Site Management Plan, Hurvitz Environmental Services, 8/6/2020.

Figure 2.3-3. Site Layout

2.4 General Description of Regulated Commercial Cannabis Cultivation Processes and Cannabis Business Activities

This section provides an overview of the types of activities typically associated with commercial cannabis cultivation processes and business activities. DCC issues licenses to outdoor, indoor, and mixed-light cannabis cultivators; cannabis nurseries; and cannabis processing, manufacturing, and distribution facilities, where the local jurisdiction authorizes these activities. (Bus. & Prof. Code, § 26012, subd. (a).) The Applicants would be required to obtain one or more licenses from DCC to operate the Proposed Project, as identified below.

The environmental impact evaluation in Chapter 3, *Environmental Analysis*, of this IS/MND addresses these activities as they apply to the Proposed Project, unless otherwise indicated.

2.4.1 Overview of Cultivation Operations

Commercial cannabis cultivation begins with the selection and planting of cannabis cuttings or seeds. The cuttings or seeds are typically planted in pots with either a growing medium, soil, or an inert material used in hydroponic cultivation methods. Cuttings are preferred over seeds when the cultivator wishes to guarantee the genetics of a plant and ensure the consistency of the cannabis product.

After the plants have developed their first leaves and a root system that extends through the bottom of the growth medium, the cannabis plants are transplanted or repotted to larger pots, where they continue to grow in a vegetative stage (i.e., the period of growth between germination and flowering during which the plant has no observable flowers or buds). During this stage, the plants are given water and nutrients (through compost teas, which are created by steeping compost material in water, or other amendments) and exposed to natural and/or artificial light to maintain the vegetative stage (18 hours of daylight and 6 hours of darkness). Other climate conditions (e.g., temperature, humidity, airflow) are often controlled to meet the plant's growth needs. In addition, once the plants have a healthy root system, older leaves (identified by their pale green or yellow coloring) can be selectively removed (pruned) from the plants to improve airflow, decrease shading, increase light penetration, and allow plants to focus valuable energy on new leaves (rather than on the removed older leaves).

Pest monitoring and, if necessary, pest management activities occur throughout the cultivation period. DCC regulates the types of pesticides, rodenticides, and herbicides that may be applied to cannabis plants in the cultivation process and regulates the methods by which these chemicals are used.

Once plants reach a desirable size, they are transitioned to the flowering phase, either as a result of natural changes in the period of light (photoperiod) for outdoor cultivation or by altering the light pattern so that the plants are exposed to 12 hours of light and 12 hours of darkness for indoor or mixed-light cultivation. In approximately 6-14 weeks, the flowers will ripen and be ready for harvesting.

Harvesting is the next step in producing the raw cannabis material and occurs when most of the plant's trichomes² have changed from clear to either a light amber or cloudy white color. The primary portion of the plant that is harvested is the cannabis flowers, which are generally located at the top of the plant. Flowers are removed using

² Trichomes are small resin glands protruding from the buds, leaves, and other areas on the plant. This is the only part of the plant that produces the cannabinoids (i.e., the chemical compounds in cannabis that affect neurotransmitters in the brain). There are multiple types of trichomes on a cannabis plant.

a sharp pair of pruners. Since flowers at the top of the plant may be riper than those lower on the plant, harvesting of the top flowers may precede harvesting of the lower flowers.

Once cannabis plants are harvested, they go through a series of processing steps to become cannabis products. Processing operations may consist of trimming, drying, curing, labeling, and packaging of cannabis, as described in Section 2.4.2 below.

More information is provided below about the various types of cultivation processes.

Outdoor Cultivation

Outdoor cannabis cultivation is conducted without the use of artificial lighting for plant growth, with the exception that artificial lighting is permissible to maintain immature plants as a source for plant propagation. Cannabis can be grown outdoors in fabric pots, grow bags, planters, or raised beds; directly in the ground (natural soils); and in greenhouses. Cannabis strains typically used for outdoor cannabis cultivation operations are bred to require less time to reach the flowering stage (How to Marijuana 2016). Cannabis plants grown outdoors may grow to be much taller (15 feet or more) compared to those grown in mixed-light or indoor environments because indoor cultivators can control plant height by topping or training the plants and controlling the height at which the plant will flower.

Outdoor cannabis cultivation typically involves planting rooted cannabis cuttings or seeds in the early spring and harvesting the plants in the fall (mid-September through November), after the plants flower. Soils used in the pots or grow bags are typically amended to ensure that nutrients are available to the plants throughout the growing season. Compost teas may also be used to fulfill nutrient needs (Ingham 2014). Water and nutrient supplement needs for outdoor cultivation may vary depending on the type of growing container selected. For example, raised beds typically require more watering and additional liquid nutrient application compared to other growing container options.

2.4.2 State Cannabis Regulations

DCC is responsible for the licensing, regulation, and enforcement of commercial cannabis business activities, as defined in the Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) and DCC's implementing regulations. (Bus. & Prof. Code, § 26012, subd. (a).) DCC has jurisdiction over the issuance of licenses to cultivate, propagate, and process commercial cannabis in California. DCC issues licenses to outdoor, indoor, and mixed-light commercial cannabis cultivators; nurseries; processing; manufacturing; and distribution facilities, where the local jurisdiction authorizes these activities. (Bus. & Prof. Code, § 26012, subd. (a).) All commercial cannabis businesses within California require a license from DCC for each associated type of business activity.³

The State Water Resources Control Board (SWRCB) Order WQ 2023-0102-DWQ, General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Attachment A, Section 1, General Requirements and Prohibitions), includes a number of requirements for state-licensed cultivation sites. These provisions include best management practices for cultivation businesses related to the protection of water quality.

³ For more information pertaining to commercial cannabis business license requirements, including DCC regulations, please visit: <https://cannabis.ca.gov/cannabis-laws/dcc-regulations/>.

The California Department of Pesticide Regulation (DPR) oversees state pesticide laws, including pesticide labeling, and is vested by EPA to enforce federal pesticide laws in California. DPR also oversees the activities of the county agricultural commissioners related to enforcement of pesticide regulations and related environmental laws and regulations locally. These regulations include permitting requirements and limitations on the use of "restricted" pesticides (pesticides considered to be dangerous to human health or the environment if not used correctly) and non-restricted pesticides that may require permitting or must be handled consistent with the pesticide's specifications. Pesticides legal for use on commercial cannabis must have active ingredients that are exempt from residue tolerance requirements and are either exempt from registration requirements or registered for a use that is broad enough to include use on cannabis. (CDPR 2021.)

2.4.3 Local Cannabis Ordinances and Regulations

On December 20, 2016 Sonoma County adopted the Personal Use and Medical Cannabis Use Ordinance. The ordinance allowed ministerial approval of zoning permits for medicinal outdoor commercial cultivation projects measuring up to 10,000 square feet of cultivation area in agricultural zones. It further allowed a property owner to sublease to multiple small-scale operators with ministerial permits if requirements regarding minimum lot size and total area were not exceeded. It also allowed a single entity to obtain multiple cultivation permits so long as the total did not exceed one acre.

Subsequently, the Sonoma County Board of Supervisors adopted additional ordinance amendments addressing commercial cannabis cultivation activities. On October 16, 2018, the Board of Supervisors adopted Ordinance number 6245, amending Chapter 26 to allow commercial adult use cannabis in Sonoma County in addition to medical use, enhance neighborhood compatibility with a 10-acre minimum parcel size for cultivation, add new definitions, and make minor non-substantive amendments to align with California state law and regulations, where appropriate.

On September 21, 2021, the Board adopted Ordinance No. 6354 to establish a temporary (45-day) moratorium on multi-tenant cannabis cultivation permits. On September 28, 2021, the Board received a report summarizing results of community engagement conducted in August and early September 2021, which included a request that the Board adopt a Resolution of Intention and Cannabis Program Update Framework to direct and guide staff in preparation of a draft ordinance, potential General Plan Amendments, and a Programmatic Environmental Impact Report to amend the Cannabis Land Use Ordinance and related regulations. Preparation of the Programmatic Environmental Impact Report is ongoing.

On October 26, 2021, the Board adopted Ordinance No. 6356 to extend Ordinance No. 6354 and amend the cannabis ordinance to prohibit large-scale multi-tenant cannabis cultivation permits, so that multiple zoning permits may only be issued on a single parcel if the aggregate cultivation area does not require a use permit.

The ordinance requires a biotic assessment for all cannabis cultivation projects at the time of application (Sonoma County Code, § 26-88-254(f)(11)). It also requires that all operations in a historic district undergo review by the landmarks commission, unless exempt, and that all operations involving ground disturbance must complete a cultural resources survey which is referred to the Northwest Information Center and local tribes (Sonoma County Code, § 26-88-254(f)(14)). Finally, the ordinance also requires cultivators to demonstrate that the water source for the project is adequate to meet all uses on a sustainable basis. (Sonoma County Code, § 26-88-254(g)(10)).

Refer to Chapter 3, *Environmental Checklist*, for “Local Laws, Regulations, and Policies” pertaining to specific environmental resources.

2.4.4 Site Specific Approval

The site is zoned Diverse Agriculture (DA). Pursuant to Section 26-06-020(B)(3) of the Sonoma County Zoning Ordinance, the Diverse Agriculture zone allows for outdoor commercial cannabis cultivation activities, subject to the approval of a Zoning Permit in accordance with Sections 26-88-250(d); 26-88-254(c) which include permit requirements for commercial cannabis cultivation activities.

Sonoma County issued approvals for the Proposed Project on the dates shown in Table 2.1-1.

2.5 Proposed Project Characteristics

This section describes the facilities and outdoor cannabis operation activities that would be part of the Proposed Project.

2.5.1 Outdoor Cultivation Facilities and Activities

Commercial cannabis cultivation activity would occur within an approximate 2-acre fenced area which includes 40,000 square feet of canopy and an existing 20,000 square foot shade structure that would be retained as part of the Proposed Project. As shown on **Figure 2.3-3** commercial cannabis cultivation occurs in the eastern portion of the project parcel. Immature plants are delivered to the site from a licensed commercial cannabis nursery facility to the commercial cannabis cultivation site and planted in fabric pots that sit on top of the ground in the designated canopy areas. Following harvest, harvested plants are immediately transferred offsite to a licensed cannabis facility for further processing (e.g., drying, trimming, packaging, etc.). There are no structures in the commercial cannabis cultivation area, and no construction activities or site modifications such as grading, new roads, vegetation removal, and new drainage systems are required for the Proposed Project.

2.5.2 Project Site Development

Utilities

The Proposed Project site has existing access to the utilities that would be required to serve project operations, including water communications infrastructure. **Table 2.5-1** lists anticipated utility service agencies that would serve the Proposed Project.

Table 2.5-1. Local Utility Agencies Serving the Project Area

Utility Service	Utility Agency
Water Supply	Penngrove Water Company
Sanitary Sewer	N/A; portable restrooms
Electrical Service	N/A
Natural Gas Service	N/A
Fire Protection Service	Rancho Adobe Fire Station
Police Protection Service	Sonoma County Sheriff’s Department

Water Supply

The Proposed Project would receive water service from the Penngrove Water Company for irrigation purposes. The Penngrove Water Company is a privately owned, investor-owned utility regulated by the California Public

Utilities Commission. Approximately 720 gallons per day (gpd) of water would be required for the commercial cannabis cultivation facility. This water would not be discharged from the commercial cannabis cultivation facilities as hand and/or drip irrigation would be implemented by the Applicants, which should ensure that no water is lost to throughflow and wasted, and that only a minimal amount of water is lost due to evaporation and leaching. Water conservation practices include the use of driplines (instead of spray irrigation), mulching, soil moisture meters, and weather monitoring, to minimize discharge of irrigation water nutrients (One Love Gardens 2025).

Water use would be monitored during all watering events and recorded on a weekly basis. The operator would submit annual reports to the Regional Water Board in accordance with the State Water Board's monitoring and reporting program. Multiple meters would be installed to track water use. One meter would be used to track the amount of water supplied from Penngrove Water Company. Four meters would be used to track the usage the commercial cannabis cultivation sites (Sonoma County 2024).

Sewer System

Sonoma Water manages and operates eight different sanitation zones and districts throughout Sonoma County. The project site is located within the Penngrove Sanitation Zone. The Proposed Project is not connected to the municipal sewer system. No wastewater treatment facilities would be required for the commercial cannabis cultivation activities. A portable toilet with a handwashing station would be provided and would be serviced weekly.

Electrical

The commercial cannabis cultivation area is located entirely outdoors and would not require connection to the local utility to operate. The project site would be equipped with solar and/or battery-powered motion-sensor security lights and cameras. The Proposed Project would not need additional energy resources.

Communications

Existing communication lines (i.e., for telephone, cable, and Internet) serve the project site. The Proposed Project would not require communications infrastructure improvements.

Stormwater Drainage

When plant materials are stored onsite, tarps and sediment control devices (e.g., silt fences, straw wattles) would be used to prevent material from discharging in stormwater runoff. The irrigation system would utilize either hand water and/or drip irrigation and automated irrigation controllers to ensure that no water is lost to throughflow and that a minimal amount of water is lost due to evaporation and leaching.

The following erosion and sediment control measures will be implemented:

- Implement effective wind erosion controls including fencing.
- Provide effective stabilization for all disturbed soils and other erodible areas prior to a forecasted storm event.
- Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site.

- Divert run-on and stormwater generated from within the site away from all erodible materials.
- If sediment traps or basins are installed, ensure that they are working properly and emptied of accumulated sediment and litter. (Hurvitz Environmental Services 2020.)

No new drainage systems are proposed and no change to the existing site is proposed as part of the Proposed Project.

Site Access and Circulation

Vehicle entrance and exit to the project parcel is accessed from Petaluma Hill Road, a county-maintained road. Petaluma Hill Road can be accessed from the south by Old Adobe Road or Old Redwood Highway and from the north by East Railroad Avenue, the closest major intersection. The entrance to the parcel and commercial cannabis cultivation area is a paved driveway connecting to Petaluma Hill Road. The entrance to the commercial cannabis cultivation area is located approximately 0.25 miles from the main entrance to the parcel.

Other Site Elements

The following site elements of the Proposed Project would support the operations of the Proposed Project.

Staffing

The number of employees onsite during the commercial cannabis cultivation season (March to November) varies based on the plant growth phase and site activities.

- Site Preparation: 6 employees for 5 days
- Planting: 10 employees for 2 days
- Growing/Maintaining: 2 employees 6-7 days per week
- Harvest: 10 employees for 2 days
- Site Cleanup/Winterization: 3 employees for 3 days.

Deliveries

Employees carpool from a central office in Santa Rosa to minimize vehicle traffic to and from the site. This office also serves as the main storage facility for all commercial cannabis cultivation supplies and materials used at this site. Deliveries and shipments are limited to 8:00 a.m. to 5:00 p.m. Monday through Friday. The site is closed to the public.

Employee Trip Data:

- Site Preparation: 12 one-way trips per day for 5 days
- Planting: 12 one-way trips per day for 2 days
- Growing/Maintaining: 4 one-way trips per day 6-7 days per week
- Harvest: 20 one-way trips per day for 2 days
- Site Cleanup/Winterization: 6 one-way trips per day for 3 days

Truck Deliveries/Shipments:

- Site Preparation: 2-4 one-way trips per day over a 5-day period (18-foot box truck)
- Planting: 2-4 one-way trips per day over a 2-day period (26-foot box truck)
- Growing/Maintaining: an employee working at the site uses a company pickup truck to deliver supplies (e.g., nutrients) and collect waste (e.g., trash, recycling) as required. Trips are accounted for under the employee section above.
- Harvest: 4 one-way trips per day over a 2-day period (26-foot truck)
- Site Cleanup/Winterization: 2 one-way trips per day over a 5-day period (18-foot box truck)

A private vendor accesses the site once a week to service the portable toilets and handwashing stations.

Waste Storage

As of August 2022, the project generated less than three cubic yards of solid waste annually. Solid waste would not be stored for more than seven calendar days and would be properly disposed of at a county transfer station or county landfill before the end of the seventh day. Cannabis waste resulting from plant death or de-leafing activities would be composted onsite and reintroduced into the commercial cannabis cultivation site at the end of the growing season. No waste would be generated from processing activities (e.g., drying, trimming) since all cannabis material will be transferred offsite immediately after harvest. (Fiasco Farms et. al. 2022).

Non-Cannabis waste bins and containers would be stored next to the outdoor commercial cannabis cultivation area. Spill kits would also be stored in this area. Other areas designated for compost and organic material destruction would be located to the south of the commercial cannabis cultivation areas and adjacent to the non-organic waste bins. This area would be demarcated for temporary storage prior to disposal at an approved waste management site. The following material handling and waste management measures will be implemented at all times:

- Prevent or minimize handling of chemical/industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm event.
- Contain all stored non-solid chemical/industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with stormwater during handling.
- Cover waste disposal containers and material storage containers that contain chemical/industrial materials when not in use.
- Divert run-on and stormwater generated from within the site away from all stockpiled materials.
- Clean all spills of chemical/industrial materials or wastes that occur during handling in accordance with the spill response procedures).
- Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with chemical/industrial materials or wastes.

A sandbag barrier with plastic sheeting would be placed around temporary storage areas to prevent stormwater run-on from adjacent upstream areas. Sheds or shipping containers would be used to store hand tools, small parts, and most commercial cannabis cultivation materials. Very large items would be stored in the open in the general

storage areas. Such materials would be elevated with pallets or cement blocks to minimize contact with stormwater. Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers would be maintained and stored in the onsite shed. To reduce or eliminate pollution of storm water from stockpiles of soil and commercial cannabis cultivation materials, stockpiles would be surrounded with sediment control measures as needed. Plastic covers would be used, as needed, before rain events or before strong winds begin. BMPs would be implemented to minimize storm water contact with waste materials and prevent waste discharges. Solid waste would be removed and disposed off-site at least monthly at an appropriately designated receiving facility. (Hurvitz Environmental Services 2020.)

Hazardous Materials Storage

No hazardous materials would be stored onsite permanently. While onsite, all flammable materials would be properly stored in labeled containers, will comply with the riparian setback requirements, be in a location in compliance with label instructions, and be protected from accidental ignition, weather, and wildlife. All hazardous materials would be placed in appropriate secondary containment vessels, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage. Storage containers will be of suitable material and construction to be compatible with the substances stored and conditions of storage, such as pressure and temperature.

Several pest management methods would be employed to control pest and disease, beginning with ensuring that the commercial cannabis cultivation area and equipment are routinely cleaned to prevent build up of dirt and debris. Biological control methods may be utilized as a preventative and reactive/curative method with the release of natural enemies (insect, arachnid, and/or nematode). Microbial pesticides may also be used prophylactically when pest and disease pressure is high and reactively under pre-infestation level pest and pathogen levels. Acceptable microbial insecticides active ingredients include *Bacillus thuringiensis* subsp. *Kurkstaki*, *B. thuringiensis* subsp. *Israelensis*, *Beauveria bassiana*, *Burkholderia* spp., *Chromobacterium subtsugae*, and *Isaria fumosorosea*. Acceptable microbial fungicides and bactericides active ingredients include *Bacillus amyloliquefaciens*, *B. subtilis*, *Streptomyces lydicus*, and *Trichoderma harzianum* (Petaluma Hill 2020).

Similar to microbial pesticides, many of the pesticides acceptable for use of cannabis in California are most effective when applied preventatively and/or when pest populations and disease levels are low. Examples of acceptable chemical pesticides that can or must be used prophylactically are azadirachtin, neem oil, phosphorous acid, potassium silicate, *Reynoutria sachalinensis* extract, and sulfur. Curative chemical control fungicides/bactericides generally have three modes of action: leaving residue on leaf surface that changes leaf chemistry in fashion unsuitable for pathogens, oxidation, and desiccation; examples of these active ingredients include potassium bicarbonate, hydrogen dioxide and peroxyacetic acid, potassium salts of fatty acid, horticultural oil, and sulfur. While curative control methods are affective at eradicating pests and pathogens, they are most effective when applied prior to infestation levels and make curative applications prior to severe outbreaks occurring (Petaluma Hill 2020).

Substances used for pest prevention and control within the commercial cannabis cultivation area would be stored within the commercial cannabis cultivation growing area in a pesticide storage container.

Landscaping and Irrigation

No landscape is included because the entire cultivation area is not visible to public view (see below for fencing details). The irrigation system would utilize either hand water and/or drip irrigation and automated irrigation controllers to ensure that no water is lost to throughflow and that a minimal amount of water is lost due to evaporation and leaching. No new drainage systems are proposed for and no change to the existing site is proposed as part of the Proposed Project.

Ancillary Improvements

Fencing

There is currently seven-foot mesh wire fencing around the perimeter of the commercial cannabis cultivation site. The entrance to the site has a manual gate that is kept locked at all times. The fence is secured with T-Post and has privacy screening around the perimeter, screening the entire site from view.

Security Lighting and Cameras

Solar and/or battery powered motion-sensor security lighting would be installed throughout the commercial cannabis cultivation area and perimeter for safety and security purposes in accordance with state and local security protocols and would be directed downward to minimize off-site glare.

Solar and/or battery powered motion-sensor video surveillance cameras would be located throughout the commercial cannabis cultivation area to deter and prevent unauthorized entry into the facility and deter potential criminal activity.

2.6 Construction Activities

No construction activities or site modifications such as site preparation or earthwork, grading, new roads, vegetation removal, or new drainage systems are proposed for the Proposed Project. There would be no demolition of existing structures and no construction of new buildings or structures as part of the Proposed Project.

2.7 Permits and Approvals

CEQA defines a responsible agency as “a public agency, other than the lead agency, which has responsibility for carrying out or approving a project”. (Pub. Resources Code, § 21069.) A trustee agency is “a state agency that has jurisdiction by law over natural resources affected by a project, that are held in trust for the people of the State of California” (Pub. Resources Code, § 21070.) For the Proposed Project, the California Department of Fish and Wildlife, Central Region, is considered a trustee agency. Sonoma County is a responsible agency for the Proposed Project.

The Proposed Project would require permits and/or approvals from various state and local regulatory agencies. The permits and regulatory compliance requirements for the Proposed Project are described in **Table 2.7-1**.

Table 2.7-1. Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
California Department of Cannabis Control	Medical and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA)	State licensing of commercial cannabis cultivation, distribution, transportation, and manufacturing	Commercial Cannabis License (s)
Sonoma County	General Plan, zoning ordinance, development requirements	Establish requirements related to building, landscaping, and other construction- and design-related activities; establish sewer connections and drainage plans; establish water supply	Water Resource Monitoring, Cannabis Use Permit, Fire Construction Permits, Agricultural Cannabis Permits,

3 ENVIRONMENTAL CHECKLIST

This chapter of the Initial Study/Mitigated Negative Declaration (IS/MND) assesses the environmental impacts of the Petaluma Hill Road Project (Proposed Project) based on the environmental checklist provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

1. Project Title	Petaluma Hill Road
2. Lead Agency Name and Address	Department of Cannabis Control, 2920 Kilgore Road, Rancho Cordova, CA 95670
3. Contact Person, Phone Number and Email	Kevin Ponce, Senior Environmental Scientist Supervisor, (916) 247-1659, kevin.ponce@cannabis.ca.gov
4. Project Location and Assessor's parcel number (APN)	8270 Petaluma Hill Road, Penngrove, Sonoma County 047-101-019
5. Property Owner(s)	8720 Holdings LLC
6. General Plan Designation	Diverse Agriculture 20
7. Zoning	Diverse Agriculture B6 20/2 (Ac/DU)/Ac MIN, SR VOH
8. Description of Project	The Proposed Project is the operation of an outdoor commercial cannabis cultivation operation. Commercial cannabis activities commenced in 2021 and consist of four separate licenses of 10,000 square feet of mature outdoor commercial canopy for a total of 40,000 square feet of mature commercial outdoor canopy. Outdoor commercial cannabis cultivation activities are located within a 30.84-acre parcel. Commercial cannabis cultivation activities would occur within an approximate 2-acre fenced area.
9. Surrounding Land Uses and Setting	Surrounding land uses are also zoned Diverse Agriculture (DA) and Agriculture and Residential (AR) and predominantly consists of pastureland, dairy farms, horse training and boarding facilities, and rural residential development.
10. Other Public Agencies whose Approval or Input May Be Needed	Sonoma County Northern Sonoma County Air Pollution Control District

11. Native American Consultation**The Bay Area Air Quality Management District**

An email request was made to the Native American Heritage Commission (NAHC) on February 3, 2025, to review its files for the presence of recorded sacred sites on the project area. The NAHC responded on February 6, 2025. The results of the Sacred Lands database review were negative for any sacred sites within the project area.

On April 24 and May 1, 2025, letters were sent to the 6 tribal contacts provided by the Native American Heritage Commission to review its files for the presence of recorded sacred sites on the project area. The letters requested any additional information regarding tribal resources and to notify DCC if they wished to initiate consultation regarding the Proposed Project actions. DCC received a response from Lytton Rancheria, who stated that the Tribe is not requesting further consultation based on the information provided by DCC. DCC received a response from the Federated Indians of Graton Rancheria (FIGR) on June 5, 2025, requesting consultation regarding the Proposed Project. DCC sent responses to FIGR via e-mail on July 14, August 4, August 15, August 27, and September 8, 2025, and called FIGR on September 4, 2025, to provide additional information about the Proposed Project and schedule a consultation. FIGR responded on September 8, 2025 to schedule a consultation for October 1, 2025. Results of the consultation are described in the Tribal Cultural Resources section.

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by the Proposed Project, as indicated by the checklist on the following pages.

- | | |
|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Land Use/Planning | |

Determination

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of sources of information cited in this document, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site.

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 (EIR) 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 on 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.

Kevin Ponce

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Signature _____

Date 1/15/26

Kevin Ponce

Senior Environmental Scientist Supervisor

Department of Cannabis Control

3.1 Aesthetics

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 Regulatory Setting

Federal Laws, Regulations, and Policies

The Wild and Scenic Rivers Act

The Act provides federal protection for certain free-flowing, wild, scenic, and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS). NWSRS was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. § 1271 et seq., as amended) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

Each river or river segment in the NWSRS is administered with the goal of protecting and enhancing the values that caused it to be eligible for inclusion in the system. Designated rivers need not include the entire river and may include tributaries.

State Laws, Regulations, and Policies

California Scenic Highway Program

The Department of Transportation (Caltrans) manages the State Scenic Highway Program. California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment (Caltrans 2025). The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, sections 260 through 263.

A highway may be designated as scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Caltrans manages and maintains a listing of officially designated State Scenic Highways.

DCC Commercial Cannabis Business Regulations

DCC regulations implementing MAUCRSA include environmental protection measures requiring that all outdoor lighting be downward facing and shielded to minimize the visual effects of the presence of lighting (Cal Code Regs., tit. 4, § 16304 subd. (a)(6)), and that lighting for mixed-light operations must be shielded between sunset and sunrise to minimize nighttime glare (Cal. Code Regs., tit. 4, § 16304 subd. (a)(7)).

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254 (f)(6). Property Setbacks - Outdoor. Outdoor cultivation areas and all structures associated with the cultivation shall not be located in the front yard setback area and shall be screened from public view. Outdoor cultivation areas shall not be visible from a public right of way. Outdoor cultivation areas shall be setback a minimum of one hundred feet (100') from property lines and a minimum of three hundred feet (300') from residences and business structures on surrounding properties.

Outdoor cultivation sites shall be setback a minimum of one thousand feet (1,000') from a school providing education to K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. The distance shall be measured in a straight line from the property line of the protected site to the closest property line of the parcel with the cannabis cultivation use. This park setback may be reduced with a use permit when it is determined that an actual physical equivalent separation exists due to topography, vegetation or slope, that no offsite impacts will occur, and that the cannabis operation is not accessible or visible from the park.

Sonoma County Code section 26-88-254 (f)(7). Property Setbacks - Indoor. All structures used for indoor cultivation shall comply with the setbacks for the base zone and any applicable combining zone. Structures associated with cultivation shall not be located in the front yard setback area and shall be screened from public view. There shall be no exterior evidence of cultivation either within or outside the structure.

Indoor cultivation within agricultural and resource zones shall be setback a minimum of six hundred feet from a school providing education to K-12 grades. The distance shall be measured in a straight line from the property line of the protected site to the closest property line of the parcel with the cannabis cultivation use.

Sonoma County Code section 26-88-254(f)(8). Property Setbacks - Mixed Light. Mixed light structures shall be setback a minimum of one hundred feet (100') from property lines and a minimum of three hundred feet from

residences and business structures on surrounding properties in agricultural and resource zones. Mixed Light structures in industrial zones shall be setback three hundred feet from residences on surrounding properties.

Mixed light structures in all zones shall be setback a minimum of one thousand feet from a school providing education to K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. The distance shall be measured in a straight line from the property line of the protected site to the closest property line of the parcel with the cannabis cultivation use. This park setback may be reduced with a use permit when it is determined that an actual physical equivalent separation exists due to topography, vegetation or slope, that no offsite impacts will occur, and that the cannabis operation is not accessible or visible from the park.

Sonoma County Code section 26-88-254(f)(12). Conversion of Timberland. Cannabis cultivation activities, including associated structures, may only be located within a non-forested area that was in existence prior to December 20, 2016, and there shall be no tree removal or timber conversions to accommodate cultivation sites, unless a use permit is obtained.

Sonoma County Code section 26-88-254(f)(19). Lighting. All lighting shall be fully shielded, downward casting and not spill over onto structures, other properties or the night sky. All indoor and mixed light operations shall be fully contained so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise.

Sonoma County Code section 26-64. SR Scenic Resources Combining District. Outlines the purpose and development criteria for the Scenic Resources Combining District. The purpose is to preserve the visual character and scenic resources of lands in the county and to implement the provisions of Sections 2.1, 2.2 and 2.3 of the General Plan Open Space and Resources Conservation Element. Article 64 provides specific provisions that impact development for scenic landscape units and scenic corridors within the county. Such requirements include that structures should be sited below ridgelines, be screened by vegetation, and that development should be clustered.

In addition, Article 64 outlines requirements regarding Community Separators. The Community Separators help to achieve the County's General Plan Land Use Element goal to maintain natural character and low intensities of development in open spaces between cities and communities.

3.1.2 Environmental Setting

Visual Character and Quality of the Site

The Proposed Project is located within unincorporated Sonoma County, in a low density rural residential area. The project area is visually defined by low density agricultural and residential buildings, open fields, trees, and mountains in the distance. The parcel underlying the project site has a "SR – Scenic Resource" community separator zoning overlay (Sonoma County 2025).

Light and Glare

Existing sources of light and glare within the project site and wider area include safety lighting, light spillage from windows and open doors, and light from vehicles. Sources of glare include reflections from glass and metal surfaces on buildings and vehicles in the area.

Scenic Highways and Corridors

There are no designated scenic highways or federal scenic byways in the project area and the closest officially designated route is State Route 12 approximately 9 miles to the east of the Project Site (Caltrans 2018). The closest eligible route is State Route 116 approximately 3.2 miles to the northwest (Caltrans 2018). Furthermore, Petaluma Hill Road has a buffer of approximately 180 feet on each side which is designated as “SR Scenic Resource” scenic corridor overlay by Sonoma County (Permit Sonoma 2025).

Viewer Groups and Sensitivity

The primary viewers of the site would be passing motorists, employees of neighboring agricultural developments, and local residents.

Due to proximity and duration of time spent in the area, it is expected that local residents would be most sensitive to changes to the viewshed, employees of neighboring businesses would be somewhat less sensitive, and when taking into consideration the speed of travel for passing motorists, and the distance of the main road from the Project Site, it is expected that they would be least sensitive to changes to the viewshed.

3.1.3 Discussion of Checklist Responses

a. Have substantial adverse effects on scenic vistas (Less than Significant Impact)

A scenic vista is generally considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. Presently, there are no designated scenic vistas on or near the project site. However, as discussed above, the project site is approximately 1300 feet from a highway which has a scenic corridor overlay and is located on a parcel which has a scenic zoning overlay classification of “Community Separators.” Despite the relatively close proximity of the Proposed Project Site to Petaluma Hill Road, existing development and vegetation in the area would largely screen the Proposed Project from view. The zoning overlay also requires that, should structures be visible from public roads, screening with native, fire-resistant vegetation may be required (Sonoma County Code, § 26.64.020). The Proposed Project’s compliance with local and state regulations would ensure that the Proposed Project would not be easily visible from offsite and would therefore not have a significant impact on local scenery. Therefore, impacts would be **less than significant**.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (No Impact)

As discussed above, there is no officially designated California Scenic Highway in the vicinity of the Proposed Project. Further, as parts of the project site have previously been used for agricultural purposes, there are no potentially significant scenic resources on site which would be impacted. Therefore, the Proposed Project would have **no impact** on scenic resources within a state scenic highway.

c. In non-urbanized areas substantially degrade the existing visual character or quality of the site or surroundings (Less than Significant Impact)

The site is located in a rural residential area; however, it is also less than a mile north of the main urban area of Penngrove. The Proposed Project is also located under a zoning overlay defining the area as a community separator, the intent of which is to maintain rural open space, provide visual relief from urban development and

prevent sprawl (Sonoma County 2016). The project site is set back from public roads and rights of way so project buildings and operations would only be visible from public views at a distance, and the largest structure, the 20,000 square foot shade structure predates the Proposed Project. The Proposed Project's compliance with local and state regulations, particularly Sonoma County Code, § 26.64.020, would ensure that the Proposed Project would be difficult to view from offsite, and would therefore be more consistent with the intention of the scenic overlay on-site. Therefore, the Proposed Project will not substantially degrade the visual characteristics of the area, and impacts would be **less than significant**.

d. Create new sources of substantial light or glare (Less than Significant Impact)

As discussed in Chapter 2, construction associated with the Proposed Project is complete and as discussed in Section 1.5 the analysis of construction impacts which have already been completed is mooted.

During operation, motion sensor lights would be used around the fence line and in the commercial cannabis cultivation area. All lighting would be directed downward to minimize offsite glare. Existing on-site development and vegetation would help to screen the lights, and any glare generated by metal components on site. Therefore, impacts relating to light and glare would be **less than significant**.

3.2 Agriculture and Forestry Resources

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.2.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural or forestry resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 as a nonregulatory program to provide a consistent and impartial analysis of agricultural land use and land use changes throughout California. Creation of the FMMP was supported by the California State Legislature and a broad coalition of building, business, government, and conservation interests. The first Important Farmland maps, produced in 1984, covered 30.3 million acres in 38 counties. This is an ongoing data set; DOC collects data every 2 years to assist in understanding changes in agricultural land in the state. Data now span more than 32 years and have expanded to 49.1 million acres as modern soil surveys have been completed

by the U.S. Department of Agriculture (USDA). The FMMP now maps agricultural and urban land use for nearly 98 percent of California's privately held land (DOC 2024a).

The FMMP has developed categorical definitions of Important Farmland that incorporate the land's suitability for agricultural production rather than solely relying on the physical and chemical characteristics of the soil. The FMMP includes data on the location of agricultural land, land use changes from agriculture to urban development, and soil quality. Land that is identified as Important Farmland is mapped as one of the following four categories (DOC 2024b):

- **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 usually are irrigated but may include nonirrigated 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.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965, better known as the Williamson Act, is California's primary program to protect agricultural land. The Williamson Act discourages premature and unnecessary conversion of agricultural land to urban uses. The legislation benefits landowners by allowing them to enter into long-term contracts (10 or 20 years) with the State of California to keep agricultural land in production. In return, the State reduces property taxes based on a complex calculation tied to agricultural income. The State implements the Williamson Act when a city or county creates an agricultural preserve. The purpose of an agricultural preserve is the long-term conservation of agricultural and open space lands; the lands are restricted to agricultural, open space, or recreational uses in exchange for reduced property tax assessments. After a preserve is established, the landowner enters into a contract with a city or county. The landowner and any successors-in-interest are obligated to adhere to the contract's enforceable restrictions unless the contract is rescinded or cancelled.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(15). Farmland Protection. Where a commercial cultivation site is located within an agricultural zone (LIA, LEA, DA), the operation shall be consistent with General Plan Policy AR-4a. Indoor and mixed light cultivation facilities shall not remove agricultural production within important farmlands, including prime, unique and farmlands of statewide importance as designated by the state farmland mapping and monitoring program, but may offset by relocating agricultural production on a 1:1 ratio.

If the premises is located on a site under a Land Conservation Act (Williamson Act) contract, the use must comply with the Land Conservation Act contract, any applicable land conservation plan, and the Sonoma County Uniform Rules for Agricultural Preserves and Farmland Security Zones, including provisions governing the type and extent of compatible uses listed therein.

3.2.2 Environmental Setting

The Proposed Project is located in a rural residential area. The project site is located on land classified by the California Department of Conservation as “Unique Farmland,” “Farmland of Local Importance,” and “Other Land” (DOC 2022). The Proposed Project is not identified as being under a Williamson Act contract (Permit Sonoma 2025a). There is no timberland or forest zoning designation which applies to the project site.

3.2.3 Discussion of Checklist Responses

a. Convert farmland to non-agriculture use, or result in conflicts with or loss of agricultural or forest lands (No Impact)

According to DOC, the project site is situated on lands designated as “Unique Farmland,” “Farmland of Statewide Importance,” and “Farmland of Local Importance” (DOC 2022). The purpose of the Proposed Project is to use the land for agricultural purposes and any development would be to support commercial cannabis growing on-site. Therefore, the Proposed Project would not convert the site to non-agricultural use or result in a loss of agricultural lands. There would be **no impact**.

b. Conflict with existing zoning for agriculture use, Williamson Act Contract, or forest land or timber land (No Impact)

The project site has an agricultural zoning classification. The Proposed Project, as it involves growing commercial cannabis, would be consistent with this zoning designation, which is supported by the issuance of a use permit by Sonoma County. Therefore, the Proposed Project would not conflict with existing agricultural zoning.

Furthermore, as discussed above, the project site is not enrolled under a Williamson Act Contract. Therefore, there would be no conflict with a Williamson Act Contract. There would be **no impact**.

c. Conflict with existing zoning for agriculture use, Williamson Act Contract, or forest land or timber land (No Impact)

There is no timberland or forest zoning designation which applies to the project site. However, it is classified as Valley Oak Habitat (Permit Sonoma 2025b). No tree removal would be necessary as part of the Proposed Project. Therefore, there would be no conflict with forest or timberland zoned land. There would be **no impact**.

d. Result in the loss of forest land or conversion of forest land to non-forest use (No Impact)

As discussed above, the Proposed Project would not affect forest land or convert forest land to non-forest use. Therefore, there would be **no impact**.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agriculture use, or result in conflicts with or loss of agricultural or forest lands (No Impact)

There are no forests on the site of the Proposed Project. The purpose of the Proposed Project is to use the land for agricultural purposes and development would be to support commercial cannabis growing on site. Therefore, the Proposed Project would not convert the site to non-agricultural use or result in a loss of agricultural or forest lands. There would be **no impact**.

3.3 Air Quality

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 Regulatory Setting

Federal and State Laws, Regulations, and Policies

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. EPA's air quality mandates draw primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments were made by Congress in 1990. EPA's air quality efforts address both criteria air pollutants (CAPs) and hazardous air pollutants (HAPs). EPA regulations concerning CAPs and HAPs are presented in greater detail below.

Criteria Air Pollutants

The CAA required EPA to establish national ambient air quality standards (NAAQS) for common air pollutants found all over the United States. EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM₁₀), fine particulate matter with aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}), and lead. The NAAQS are shown in **Table 3.3-1**. The primary standards protect public health, and the secondary standards protect public welfare. The CAA also required each state to prepare a state implementation plan (SIP) for attaining and maintaining the NAAQS. The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to

incorporate additional control measures to reduce air pollution. California's SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, EPA may prepare a federal implementation plan that imposes additional control measures. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

Table 3.3-1. California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California (CAAQS) ^{a, b}	National	(NAAQS) ^c
			Primary ^{b, d}	Secondary ^{b, e}
Ozone	1-hour	0.09 ppm (180 µg/m ³)	—	Same as primary standard
	8-hour	0.070 ppm (137 µg/m ³)	0.070 ppm (147 µg/m ³)	
Carbon monoxide (CO)	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	Same as primary standard
	8-hour	9 ppm ^f (10 mg/m ³)	9 ppm (10 mg/m ³)	
Nitrogen dioxide (NO ₂)	Annual arithmetic mean	0.030 ppm (57 µg/m ³)	53 ppb (100 µg/m ³)	Same as primary standard
	1-hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	—
Sulfur dioxide (SO ₂)	24-hour	0.04 ppm (105 µg/m ³)	—	—
	3-hour	—	—	0.5 ppm (1300 µg/m ³)
	1-hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	—
Respirable particulate matter (PM ₁₀)	Annual arithmetic mean	20 µg/m ³	—	Same as primary standard
	24-hour	50 µg/m ³	150 µg/m ³	
Fine particulate matter (PM _{2.5})	Annual arithmetic mean	12 µg/m ³	9.0 µg/m ³	15.0 µg/m ³
	24-hour	—	35 µg/m ³	Same as primary standard
Lead ^f	Calendar quarter	—	1.5 µg/m ³	Same as primary standard
	30-day average	1.5 µg/m ³	—	—
	Rolling 3-month average	—	0.15 µg/m ³	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m ³)	No national standards	
Sulfates	24-hour	25 µg/m ³		
Vinyl chloride ^f	24-hour	0.01 ppm (26 µg/m ³)		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: CAAQS = California ambient air quality standards; NAAQS = national air quality standards; µg/m³ = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million.

^a California standard for ozone, carbon monoxide, SO₂ (1- and 24-hour), NO₂, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in CCR, Title 17, Section 70200.

^b Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

^c National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM₁₀ 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average

concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. The $\text{PM}_{2.5}$ 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.

^d National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect public health.

^e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^f The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Sources: CARB 2024a.

Hazardous Air Pollutants and Toxic Air Contaminants

Toxic air contaminants (TACs), or in federal parlance “hazardous air pollutants” (HAPs), are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally rather than regionally. TACs can cause long-term health effects, such as cancer, birth defects, neurological damage, asthma, bronchitis, and genetic damage, or short-term acute effects, such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches.

For evaluation purposes, TACs are separated into carcinogens and noncarcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 3.3-1). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure.

EPA regulates HAPs through its National Emission Standards for Hazardous Air Pollutants. The standards for a particular source category require the maximum degree of emission reduction that EPA determines to be achievable, which is known as the Maximum Achievable Control Technology standards. These standards are authorized by Section 112 of the 1970 CAA and the regulations are published in Title 40 of the Code of Federal Regulations (CFR), Parts 61 and 63.

State Laws, Regulations, and Policies

California Clean Air Act

The California Clean Air Act (CCAA) of 1988 requires nonattainment areas to achieve and maintain the California ambient air quality standards (CAAQS) by the earliest practicable date and local air districts to develop plans for attaining the state ozone, CO, SO₂, and NO₂ standards. The California Air Resources Board (CARB) CARB sets the CAAQS.

Under the CCAA, areas not in compliance with the standard must prepare plans to reduce ozone. Noncompliance with the state ozone standard does not affect the ability to proceed with any transportation plan, program, or project. The first Bay Area Clean Air Plan was adopted in 1991, and updates to the Clean Air Plan have occurred

since then, with the most recent adopted version being the *2017 Clean Air Plan: Spare the Air, Cool the Climate*. The *2017 Clean Air Plan* provides “all feasible measures” to reduce ozone precursors—reactive organic gases (ROG) and oxides of nitrogen (NO_x)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Clean Air Plan builds upon and enhances the Bay Area Air District’s (formerly the Bay Area Air Quality Management District [BAAQMD]) efforts to reduce emissions of PM_{2.5} and TACs (BAAQMD 2017b).

Senate Bill 656 (Chapter 738, Statutes of 2003)

In 2003, the California Legislature enacted SB 656 (Chapter 738, Statutes of 2003), codified as Health and Safety Code Section 39614, to reduce public exposure to PM₁₀ and PM_{2.5}. SB 656 required CARB, in consultation with local air pollution control and air quality management districts (air districts), to develop and adopt, by January 1, 2005, a list of the most readily available, feasible, and cost-effective control measures that could be employed by CARB and the air districts to reduce PM₁₀ and PM_{2.5} (collectively referred to as PM). The legislation established a process for achieving near-term reductions in PM throughout California ahead of federally required deadlines for PM_{2.5} and provided new direction on PM reductions in those areas not subject to federal requirements for PM. Measures adopted as part of SB 656 complement and support those required for federal PM_{2.5} attainment plans, as well as for state ozone plans. This ensures continuing focus on PM reduction and progress toward attaining California’s more health protective standards. This list of air district control measures was adopted by CARB on November 18, 2004.

The Bay Area Air District also complied with this legislation; staff developed a Particulate Matter Implementation Schedule that was adopted by the Bay Area Air District in November 2005, and the Bay Area Air District adopted the measures identified in the Implementation Schedule (Bay Area Air District 2012).

Toxic Air Contaminant Identification and Control Act of 1983

The Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) created California's program to reduce exposure to air toxics. The program involves a two-step process: risk identification and risk management.

In the risk identification step, and upon CARB's request, the Office of Environmental Health Hazard Assessment (OEHHA) evaluates the health effects of substances other than pesticides and their pesticidal uses. Substances with the potential to be emitted or that are currently being emitted into the ambient air may be identified as a TAC.

In the risk management step, once a substance is identified as a TAC, and with the participation of local air districts, industry, and interested public, CARB prepares a report that outlines the need and degree to regulate the TAC through a control measure (CARB 2020).

Assembly Bill 2588: Air Toxics “Hot Spots” Information and Assessment Act of 1987

The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) was enacted in September 1987. Under this act, stationary sources are required to report the types and quantities of certain substances their facilities routinely release into the air. Emissions of interest are those that result from the routine operation of a facility or that are predictable, including but not limited to continuous and intermittent releases and process upsets or leaks.

The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, and notify nearby residents of significant risks. In September 1992, the "Hot Spots" Act was

amended by SB 1731 (Calderon) to address the reduction of significant risks. The bill requires that owners of significant-risk facilities reduce their risks below the level of significance (CARB 2020).

Diesel Risk Reduction Plan

In August 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as TACs, based on data linking diesel PM emissions to increased risks of lung cancer and respiratory disease. Following the identification process, CARB was required to determine if there was a need for further control, which led to creation of the Diesel Advisory Committee to assist in the development of a risk management guidance document and risk reduction plan. In September 2000, CARB adopted the Diesel Risk Reduction Plan, which recommended control measures to reduce the risks associated with diesel PM and achieve a goal of 75-percent diesel PM reduction by 2010 and 85 percent by 2020. It is estimated that by 2035, emissions of diesel PM will be less than half of those in 2010 (CARB 2023a).

Specific statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles are continuing to be evaluated and developed. The goal of these regulations is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions.

California Health and Safety Code

Under the California Health and Safety Code, division 26 (Air Resources), CARB is authorized to adopt regulations to protect public health and the environment through the reduction of TACs and other air pollutants with adverse health effects. CARB has promulgated several mobile and stationary source airborne toxic control measures (ATCMs) pursuant to this authority. For instance, effective as of July 2003, CARB approved an ATCM that limits school bus idling and idling at or near schools to only when necessary for safety or operational concerns (13 CCR Chapter 10, Section 2480). This ATCM is intended to reduce diesel PM and other TACs and air pollutants from heavy-duty motor vehicle exhaust. It applies to school buses, transit buses, school activity buses, youth buses, general public paratransit vehicles, and other commercial motor vehicles. This ATCM focuses on reducing public exposure to diesel PM and other TACs, particularly for children riding in and playing near school buses and other commercial motor vehicles, who are disproportionately exposed to pollutants from these sources (CARB 2010). In addition, effective February 2005, CARB approved an ATCM to limit the idling of diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds, regardless of the state or country in which the vehicle is registered (Cal. Code Regs., tit. 13, § 2485).

Advanced Clean Trucks Regulation

CARB adopted the Advanced Clean Trucks Regulation (ACT) in 2020. ACT requires manufacturers to sell an increasing percentage of heavy-duty zero-emission vehicles between 2024 and 2035 where by 2035, 40 percent of Class 8 truck purchases will be required to be zero emission. Fleets with 50 or more vehicles will be required to report on their fleet's composition and activities to help CARB craft new strategies to hasten the adoption of zero-emission vehicles.

Local Laws, Regulations, and Policies

Local air quality districts are responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and for ensuring that NAAQS and CAAQS are met.

Responsibilities of local air quality districts also include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, and overseeing agricultural burning permits.

Sonoma County is served by two air quality districts: the Bay Area Air District and Northern Sonoma County Air Pollution Control District (NSCAPCD). NSCAPCD covers the northern and coastal areas of Sonoma County, including, Annapolis, Bodega, Bodega Bay, Camp Meeker, Cazadero, Cloverdale, Duncans Mills, Forestville, Geyserville, Gualala, Guerneville, Healdsburg, Jenner, Monte Rio, Rio Nido, and The Sea Ranch. The Bay Area Air District covers the southern portion of Sonoma County, including, Bloomfield, Cotati, Glen Ellen, Graton, Kenwood, Penngrove, Petaluma, Rohnert Park, Santa Rosa, and Sonoma. The Proposed Project is located within the Bay Area Air District's boundaries and is thus subject to its jurisdictions, rules, and policies (discussed below).

Bay Area Air Quality Management District

The Bay Area Air District attains and maintains air quality conditions in the San Francisco Bay Area Air Basin (SFBAAB) through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the Bay Area Air District includes the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The Bay Area Air District also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA and CCAA.

As mentioned above, the Bay Area Air District adopts rules and regulations. All projects are subject to the Bay Area Air District's rules and regulations in effect at the time of construction. Specific rules applicable to project construction and operation may include, but are not limited to, the following rules:

- **Regulation 2, Rule 1, General Permit Requirements.** This rule includes criteria for issuance or denial of permits, exemptions, appeals against decisions of the air pollution control officer, and the Bay Area Air District actions on applications.
- **Regulation 6, Rule 1, General Requirements.** Regulation 6 limits the quantity of PM in the atmosphere by controlling emission rates, concentration, visible emissions, and opacity.
- **Regulation 7, Odorous Substances.** Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. A person (or facility) must meet all limitations of this regulation but meeting such limitations shall not exempt such person from any other requirements of the Bay Area Air District, state, or national law. The limitations of this regulation shall not be applicable until the Bay Area Air District receives odor complaints from 10 or more complainants within a 90-day period, alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel, or residence. When the limits of this regulation become effective, as a result of the citizen complaints described above, the limits shall remain effective until such time as no citizen complaints have been received by BAAQMD for 1 year. The limits of this regulation shall become applicable again if BAAQMD receives odor complaints from five or more complainants within a 90-day period. BAAQMD staff investigate and track all odor complaints it receives and make attempts to visit the site and identify the source of the objectionable odor and assist the owner or facility in finding a way to reduce the odor.

The Bay Area Air District developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a Proposed Project could result in potentially significant air quality impacts. If all of the screening criteria are met by a Proposed Project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration, and the screening criteria do not account for project design features, attributes, or local development requirements that could also result in lower emissions. For projects that are mixed-use, infill, and/or proximate to transit service and local services, emissions would be less than the greenfield type project that these screening criteria are based on.

According to the Bay Area Air District CEQA Guidelines (2023), if a Proposed Project includes any of the following screening criteria, then the lead agency or applicant would not need to perform a detailed assessment of the Proposed Project's criteria air pollutant and precursor emissions:

- The project size is at or below the applicable operational screening level size shown in Table 4-1 of the Bay Area Air District CEQA Guidelines and reproduced as **Table 3.3-2** below.
- Operational activities would not include stationary engines (e.g., backup generators) and industrial sources subject to the Bay Area Air District rules and regulations.
- Operational activities would not overlap with construction-related activities.

Table 3.3-2. Criteria Air Pollutants and Precursors Screening Level Sizes

Land Use Category	Land Use Subcategory	Land Use Unit	Construction Screening Level	Operation Screening Level
Commercial	Bank	KSF	452	102
Commercial	General Office Building	KSF	452	765
Commercial	Government (Civic Center)	KSF	452	314
Commercial	Government Office Building	KSF	452	445
Commercial	Hospital	KSF	452	611
Commercial	Medical Office Building	KSF	452	293
Commercial	Office Park	KSF	452	706
Commercial	Pharmacy-Drug Store	KSF	452	89
Commercial	Research & Development	KSF	452	692
Education	Daycare Center	KSF	452	232
Education	School – Elementary	KSF	452	488
Education	School – Junior High	KSF	452	475
Education	School – High School	KSF	452	579
Education	College – Junior (2-year)	KSF	452	426
Education	College – University (4-year)	KSF	452	779
Education	Library	KSF	452	123
Education	Worship Place	KSF	452	642

Land Use Category	Land Use Subcategory	Land Use Unit	Construction Screening Level	Operation Screening Level
Industrial	General Heavy Industry	KSF	452	1,009
Industrial	General Light Industry	KSF	452	998
Industrial	Industrial Park	KSF	452	1,247
Industrial	Manufacturing	KSF	452	1,009
Industrial	Warehouse ¹	KSF	452	1,423
Recreational	Arena	KSF	732	600
Recreational	City Park	Acres	10	175
Recreational	Fast Food Restaurant	KSF	452	21
Recreational	Health Club	KSF	452	261
Recreational	Hotel	Rooms	312	633
Recreational	Motel	Rooms	230	767
Recreational	Movie Theater	KSF	458	80
Recreational	Restaurant – High Turnover (Sit-Down)	KSF	452	75
Recreational	Restaurant – Quality (Fine Dining)	KSF	452	105
Recreational	Racquet Club	KSF	452	457
Recreational	Recreational Swimming Pool	KSF	452	376
Residential	Apartments	DU	416	638
Residential	Condo-Townhouse	DU	416	637
Residential	Mobile Home Park	DU	377	721
Residential	Congregate Care/Retirement Community	DU	416	1,008
Residential	Single Family Housing	DU	254	421
Retail	Auto Care Center	KSF	452	356
Retail	Convenience Market	KSF	452	11
Retail	Discount Store	KSF	452	150
Retail	Home Improvement Superstore/ Hardware-Paint Store	KSF	452	221
Retail	Regional Shopping Center	KSF	452	221
Retail	Strip Mall	KSF	452	204
Retail	Supermarket	KSF	452	72

Notes: DU = dwelling unit; KSF = thousand square feet.

¹ The use of the warehouse land is not appropriate for a logistics or distribution center. These types of projects should use project-specific traffic data or a more land use-specific trip generation rate.

Source: BAAQMD 2023.

Clean Air Plan

The CCAA requires that all local air districts in the state endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts should focus particular attention on reducing the emissions from transportation and areawide emission sources and provides districts with the authority to regulate indirect sources.

For state air quality planning purposes, the Bay Area is classified as a serious nonattainment area for the 1-hour ozone standard. The “serious” classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that the Bay Area update the Clean Air Plan every 3 years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data.

The 2017 Clean Air Plan (adopted April 19, 2017) provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how the Bay Area Air District will continue making progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The 2017 plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as PM, ozone, and TACs; reduce emissions of methane and other “super-GHGs” that are potent climate pollutants in the near term; and decrease emissions of carbon dioxide by reducing fossil fuel combustion.

Highlights of the 2017 plan include the following goals and measures:

- **Limit Fossil Fuel Combustion:** Develop a regionwide strategy to increase fossil fuel combustion efficiency at industrial facilities, beginning with the three largest sources of industrial emissions: oil refineries, power plants, and cement plants.
- **Stop Methane Leaks:** Reduce methane emissions from landfills and from oil and natural gas production, storage, and distribution.
- **Reduce Exposure to Toxics:** Reduce emissions of TACs by adopting more stringent limits and methods for evaluating toxic risks at existing and new facilities.
- **Put a Price on Driving:** Implement pricing measures to reduce travel demand.
- **Advance Electric Vehicles:** Accelerate the widespread adoption of electric vehicles.
- **Promote Clean Fuels:** Promote the use of clean fuels and low- or zero-carbon technologies in trucks and heavy-duty vehicles.
- **Accelerate the Production of Low-Carbon Buildings:** Expand the production of low-carbon, renewable energy by promoting on-site technologies, such as rooftop solar and ground-source heat pumps.
- **Support More Energy Choices:** Support community choice energy programs throughout the Bay Area.
- **Make Buildings More Efficient:** Promote energy efficiency in both new and existing buildings.

- Make Space and Water Heating Cleaner: Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings. (BAAQMD 2020).

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(6) Property Setbacks - Outdoor. Outdoor cultivation areas and all structures associated with the cultivation shall not be located in the front yard setback area and shall be screened from public view. Outdoor cultivation areas shall not be visible from a public right of way. Outdoor cultivation areas shall be setback a minimum of one hundred feet (100') from property lines and a minimum of three hundred feet (300') from residences and business structures on surrounding properties.

Sonoma County Code section 26-88-254(g)(2) Operating Standards - Air Quality and Odor. All indoor and mixed light cultivation operations and any drying, aging, trimming and packing facilities shall be equipped with odor control filtration and ventilation system(s) to control odors, humidity, and mold. All cultivation sites shall utilize dust control measures on access roads and all ground disturbing activities.

3.3.2 Environmental Setting

As stated above, the Proposed Project is located in the southern portion of Sonoma County, which is within the SFBAAB. The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by natural factors, such as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

Table 3.3-2 shows the attainment status for each criteria pollutant with respect to the CAAQS and the NAAQS in Sonoma County.

Climate, Meteorology, and Topography

Climate

The Mediterranean climate type of Sonoma County is characterized by warm, dry summers and cool, rainy winters. During the summer, daily temperatures range from 70 degrees Fahrenheit (°F) to more than 90°F. The inland location and surrounding hills shelter some areas from the ocean breezes that keep the coastal regions moderate in temperature. Most precipitation in the area results from air masses that move in from the Pacific Ocean, usually from the west or northwest, during the winter months. More than half the total annual precipitation falls during the winter rainy season (November through February); the average winter temperature is a moderate 50°F. Also characteristic of Sonoma County, winters consist of periods of dense and persistent low-level fog, which are most prevalent between storms. However, microclimates within the county vary significantly due to topographic and elevational differences. Coastal areas experience cooler temperatures and more fog, while inland valleys are warmer and drier. The region is also susceptible to periodic droughts and wildfires.

Topography

Sonoma County presents a diverse landscape encompassing valleys, mountains, coastal plains, and redwood forests. Bounded by the Pacific Ocean to the west, the Mayacamas Mountains to the east, and the Sonoma Mountains to the south, the county's topography influences its Mediterranean climate with warm, dry summers

and cool, wet winters. The Russian River, the largest in the county, flows southward through prominent valleys: Alexander Valley, Russian River Valley, and Sonoma Valley, each known for viticulture. Other significant valleys include Dry Creek Valley and Bennett Valley. The Mayacamas Mountains, with Mount Saint Helena as its highest peak, define the eastern county line. The Sonoma Mountains extend along the southern portion. This varied terrain supports diverse ecosystems, including coastal redwood forests, oak woodlands, grasslands, and wetlands, providing habitat for numerous species. Furthermore, the complex topography can create barriers to airflow, which can lead to the entrapment of air pollutants when meteorological conditions are unfavorable for transport and dilution. The highest frequency of poor air movement occurs in the fall and winter when high-pressure cells are often present over the SFBAAB. The lack of surface wind during these periods, combined with the reduced vertical flow caused by a decline in surface heating, reduces the influx of air and leads to the concentration of air pollutants under stable meteorological conditions. Surface concentrations of air pollutant emissions are highest when these conditions occur in combination with wood-burning activities or with temperature inversions, which hamper dispersion by creating a ceiling over the area and trapping air pollutants near the ground.

Meteorology

May through October is ozone season in the SFBAAB. This period is characterized by high temperatures, abundant sunlight, and low humidity, which create favorable conditions for ozone formation. In addition, longer daylight hours provide a plentiful amount of sunlight to fuel photochemical reactions between ROG and NO_x, which result in ozone formation. Typically, the prevailing westerly winds and the Delta Breeze transport air pollutants northward and eastward out of the SFBAAB, but under certain conditions, they can become trapped within the basin. The local meteorology of the Program area and surrounding vicinity is represented by measurements recorded at the Western Regional Climate Center (WRCC) station at the Charles M. Schulz – Sonoma County Airport (STS) weather station. The normal annual precipitation is approximately 29.43 inches. January temperatures range from a normal minimum of 37°F to a normal maximum of 57°F. July temperatures range from a normal minimum of 51°F to a normal maximum of 89°F (WRCC 2023). The prevailing wind direction (1991-2020) in Sonoma County is northwest (WRCC 2023).

Air Pollution Potential

Sonoma County's potential for air pollution is influenced by its topography and meteorology. The surrounding mountains can trap pollutants under stable atmospheric conditions. Prevailing winds can transport pollutants from other areas into the county, while local wind patterns may recirculate them. However, the county's air quality is generally good due to the limited sources of pollution. The primary sources of pollution are associated with agricultural activities, motor vehicles emissions, and residential wood burning. As the county's population grows and tourism increases, motor vehicle emissions and wood smoke are likely to become more significant contributors to air pollution.

Criteria Air Pollutants

Concentrations of criteria air pollutants are used to indicate the quality of the ambient air. A brief description of key criteria air pollutants in the SFBAAB is provided below. Sonoma County's attainment status for the CAAQS and NAAQS is shown in **Table 3.3-3**. The NCAB is currently in attainment or unclassified for criteria air pollutants under CAAQS and NAAQS.

Table 3.3-3. Sonoma County Attainment Status for the SFAAB

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	Nonattainment – Marginal (8-hour) (2008 standard)	Nonattainment - transitional
	Nonattainment – Marginal (8-hour) (2015 standard)	
Respirable particulate matter (PM10)	Attainment	Nonattainment
Fine particulate matter (PM2.5)	Attainment (2012 standard)	Nonattainment
	Nonattainment – Moderate (2006 standard)	
Carbon monoxide (CO)	Maintenance – Moderate ≤ 12.7 ppm	Attainment
Nitrogen dioxide (NO ₂)	Unclassified/attainment	Attainment
Sulfur dioxide (SO ₂)	Attainment	Attainment
Lead (particulate)	Attainment	Attainment
Hydrogen sulfide	No federal standard	Unclassified
Sulfates	No federal standard	Attainment
Visibility-reducing particles	No federal standard	Unclassified
Vinyl chloride	No federal standard	Unclassified

Note: This table represents the attainment status of Sonoma County for only the SFAAB.

Sources: EPA 2025; CARB 2023.

Ozone

Ozone is a reactive pollutant that is not emitted directly into the atmosphere but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving ROG and NO_x. sources (e.g., motor vehicle exhaust) and area sources (e.g., industrial emissions, gasoline vapors, architectural coatings, various consumer products, and chemical solvents) are some of the main sources of ROG and NO_x that contribute to the formation of ozone. Ozone is a regional air pollutant because it is formed downwind of sources of ROG and NO_x under the influence of wind and sunlight. During summertime (particularly on hot, sunny days with little or no wind), ozone levels are at their highest.

Short-term exposure to elevated concentrations of ozone is linked to such health effects as eye irritation and breathing difficulties. Repeated exposure to ozone can make people more susceptible to respiratory infections and aggravate preexisting respiratory diseases. Long-term exposures to ozone can cause more serious respiratory illnesses. Ozone also damages trees and other natural vegetation; reduces agricultural productivity; and causes deterioration of building materials, surface coatings, rubber, plastic products, and textiles.

Nitrogen Dioxide

NO₂ is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO₂ are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the

atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as NO_x and are reported as equivalent NO₂. Because NO₂ is formed and depleted by reactions associated with photochemical smog (ozone), the NO₂ concentration in a particular geographical area may not be representative of the local sources of NO_x emissions (EPA 2024a). Most of the Bay Area's NO₂ comes from on-road motor vehicles. Since the year 2010, the Bay Area has had three exceedances of the national NO₂ standard – one exceedance each in 2012 and 2017, with nine days above the national standard in 2023.

Particulate Matter

PM includes dirt, dust, soot, smoke, and liquid droplets found in the air. PM₁₀ is primarily composed of large particles from sources such as road dust, residential wood burning, construction/demolition activities, and emissions from on- and off-road engines. Some sources of PM, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. PM_{2.5} contains particles formed in the air from primary gaseous emissions. Examples include sulfates formed from SO₂ emissions from power plants and industrial facilities; nitrates formed from NO_x emissions from power plants, automobiles, and other combustion sources; and carbon formed from organic gas emissions from automobiles and industrial facilities.

The Bay Area experiences its highest PM concentrations in the winter, especially during evening and night hours, because of the cool temperatures, low wind speeds, low inversion layers, and high humidity. Specifically, PM_{2.5} is viewed as a major component of the region's total PM problem because PM_{2.5} accounts for roughly half of PM₁₀ annually. On winter days when the PM standards are exceeded, PM_{2.5} from wood burning at residential land uses are the most likely contributors daily PM emissions (BAAQMD 2012: 89, 135).

Coarse and fine PM is small enough to get into the lungs and can cause numerous health problems, including respiratory conditions, such as asthma and bronchitis, and heart and lung disease. People with heart or lung disease, the elderly, and children are at the highest risk from exposure to PM.

Carbon Monoxide

CO is an odorless and invisible gas. It is a nonreactive pollutant that is a product of incomplete combustion of gasoline in automobile engines. CO is a localized pollutant, and the highest concentrations are found near the source. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic and are influenced by wind speed and atmospheric mixing. CO concentrations are highest in flat areas on still winter nights when temperature inversions trap the CO near the ground. When inhaled at high concentrations, CO reduces the oxygen-carrying capacity of the blood, which, in turn, results in reduced oxygen reaching parts of the body. Most of the Bay Area's CO comes from on-road motor vehicles, although a large amount also comes from burning wood in fireplaces.

Toxic Air Contaminants

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being diesel PM. Diesel PM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration

estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. It's important to note that the term "Toxic Air Contaminant" refers specifically to air pollutants that are known to cause or suspected of causing cancer or other serious health effects. Naturally occurring plants compounds that have not been concentrated or manufactured for commercial purposes are generally not considered TACs. For example, beta-myrcene, a common terpene found in many plants, including hops and cannabis, is not classified as a TAC by the state. There are no existing TAC sources within 1,000 feet of the project site. Sensitive receptors exist near the project site and are disclosed in Section 3.3.2.5, "Sensitive Receptors," below.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. Land uses typically associated with odor complaints include wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants. Some agricultural operations may also generate nuisance odors as well from sources such as the crop itself and manure application as fertilizer. The Proposed Project is surrounded by land uses also zoned for Diverse Agriculture (DA) and Ag and Residential (AR) and are predominantly pastureland, dairy farms, horse training and boarding facilities. The closest of these agricultural uses are located directly against the project boundary.

Cannabis Odor

The typical smell of cannabis originates from roughly 140 different terpenes. A terpene is a volatile, unsaturated hydrocarbon that is found in essential oils of plants, especially conifers and citrus trees. Some terpenes are identified explicitly in research (myrcene, pinene, limonene). The "skunk" odor is primarily volatile thiols. Cannabis contains alpha-linolenic acid, which may break down under ultraviolet rays of sunlight into methyl and butyl thiols (Yolo County 2019).

Some researchers define an "odor activity value" (OAV), which is the chemical compound concentration divided by the chemical compound odor detection threshold (which is a literature-based value). A higher OAV could mean a more significant odor. One shortcoming of the OAV is that the quality of the odor detection thresholds may be low. Highly odorous compounds in low concentrations that may have a more potent OAV include nonanal, decanol, o-cymene, and benzaldehyde. In other research findings, it is believed the majority of the odor in cannabis flowers is linked to pinene, limonene, and terpinolene. Terpenes that are commonly identified and

thought to warrant further evaluation for odor impacts include myrcene, pinene, limonene, b-caryophyllene, terpinolene, and o-cymene (Yolo County 2019). Research indicates that cannabis has a range of OAV depending on the age of the plant, proximity to it, and nature in which it is kept (i.e., loose leaf compared to enclosed in plastic); fresh, loose leaf cannabis is considered to have high OAV (Rice and Koziel 2015).

Currently, there is not a clear or consistent numerical threshold to use for cannabis odors. Because odor is a perception-based phenomenon and involves complex mixtures of substances rather than single chemically defined substances, it is important to evaluate odors comprehensively rather than breaking down individual chemical constituents of the odor. Dispersion modeling has been conducted to determine the distance from which cannabis odor may be detected. The results of modeling by Kern County indicated that specific cannabis compounds may be detectable at a distance of 2 miles or more depending on weather conditions (Kern County 2017). Nevada County released an EIR (State Clearinghouse No. 2018082023) for its Commercial Cannabis Cultivation Ordinance in 2019 and identified in their odor detection modeling that cannabis odors could be detected in some circumstances between 100 feet and as far 1 mile from the source of the odor (Nevada County 2019). Typically, the odor is detectable much closer to the source, such as adjacent to or on a cannabis cultivation site. The distance for odor detection is very site-specific and can be affected by many variables, including meteorology, topography, and plant stages of plant growth. In addition, human perception of cannabis plant odors may be influenced by personal views regarding cannabis. Whether the odor is acceptable and the level at which it should be defined as objectionable varies by the individual sensitive receptor depending on various strengths and distances.

When cannabis is grown in enclosed, indoor environments (buildings and greenhouses), odor-causing chemicals are concentrated and have been found to generate significant odors within the air space. Cannabis grown in greenhouses can generate odor with strengths ranging from 30,000 to 50,000 odor units (First Canadian Odour Conference 2018).

Public Health/Nuisance Issues

A review of scientific publications identified no studies that evaluated the health effects associated with exposure to cannabis odors. An evidence brief prepared by Public Health Ontario (Public Health Ontario 2018) states that “most substances responsible for odors in the outdoor air are not present at levels that can cause long-term health effects. However, exposure to unpleasant odors may affect an individual’s quality of life and sense of well-being.” This statement was made in reference to odors in general and not cannabis odors in particular. The City of Denver prepared a Cannabis Environmental Best Management Practices document (City of Denver 2018), which states that “the rate of VOC [volatile organic compound] emissions from cannabis cultivation facilities is relatively unknown.... [T]hese VOCs from the cannabis industry typically do not pose a direct threat to human health.” Although research is limited, the research that is available demonstrates that the concentration of cannabis odors is not significant enough to create a public health concern for off-property residential receptors.

As noted above, cannabis odors are attributed to terpenes that include beta-myrcene. Beta-myrcene is listed as a chemical that causes cancer under Proposition 65. Beta-myrcene is part of a class of terpene hydrocarbons which are commercially manufactured and naturally occurs in hundreds of plants and spices including but not limited to parsley, basil, mangoes, wild thyme, apricot, bell pepper, cinnamon, carrots, celery, and grapes. It is also present in the emissions of many trees. The concentration of beta-myrcene in essential oils of plants varies considerably

between plant species and varieties, geographical areas, season of harvesting, part of the plant and agronomical factors (SafeBridge Consultants 2025).

California Code of Regulations, title 27, section 25501 states that human consumption of a food shall not constitute an “exposure” for purposes of section 25249.6 of the Safe Drinking Water and Toxic Enforcement Act to a listed chemical in the food to the extent that the person responsible for the exposure can show that the chemical is naturally occurring in the food, meaning that beta-myrcene found inherently in a plant or spice consumed as food, rather than used as an additive, is not subject to Proposition 65. This listing was based on the use of beta-myrcene as a refined component in essential oils to produce aroma and flavor chemicals; as a flavoring agent in food and beverages; and as a fragrance in cosmetics, soaps, and detergents (OEHHA 2012).

The safety of beta-myrcene has also been reviewed by the Food and Drug Administration (FDA). This review was based on the perceived risk of beta-myrcene as a potential human carcinogen as a result of studies conducted by the National Toxicology Program (NTP). Those studies reported increased incidence of neoplasms in rodents upon exposure to extremely high levels of beta-myrcene. The FDA concluded beta-myrcene does not pose a risk to public health, is unlikely to induce tumors in humans and is safe under its conditions of intended use as a flavor. Similar conclusions upon review of the toxicological data for beta-myrcene have also been made by the European Food Safety Authority, Joint Expert Committee on Food Additives and the Expert Panel of the Flavor and Extract Manufacturers Association (Safebridge Consultants 2025).

It is important to note that exposure of commercially manufactured beta-myrcene differs from the natural occurrence and associated concentration of beta-myrcene in cannabis that generates detectable odors near harvest.

Sensitive Receptors

Sensitive receptors include land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants or the potential for increased and prolonged exposure of individuals to pollutants. The closest residences, located on adjacent parcels, are approximately 600 feet to the east, 775 feet to the southwest, 774 feet to the south, and over 1,000 feet to the west of the project site.

3.3.3 Discussion of Checklist Responses

a. Conflict with or obstruct implementation of the applicable air quality plan (Less than Significant Impact)

Air quality impacts from exposure to criteria air pollution are inherently regional. The location of criteria air pollutants emissions affects the attainment and nonattainment designation of an air basin.

The southern portion of Sonoma County is located in the SFBAAB and is under the jurisdiction of the Bay Area Air District. The Bay Area Air District’s thresholds are inherently tied to long-term regional air quality planning (i.e., the Bay Area Air District’s 2017 Clean Air Plan). To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors (ROG and NOX) and reduce the transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Clean Air Plan builds upon and enhances the Bay Area Air District’s efforts to reduce emissions of PM_{2.5} and TACs.

The SFBAAB is currently designated as nonattainment for the ozone, PM₁₀, and PM_{2.5} NAAQS and the ozone and PM_{2.5} CAAQS. The Bay Area Air District has developed the 2017 Clean Air Plan, which presents comprehensive strategies to reduce criteria pollutant emissions from stationary, area, mobile, and indirect sources to achieve attainment status of the NAAQS and CAAQS. The emission inventories used to develop air quality action plans (AQAPs) are based primarily on projected population and employment growth and associated vehicle miles travelled (VMT) for the SFBAAB. This growth is estimated for the region based, in part, on the planned growth identified in regional and local land use plans, such as general plans and community plans. Therefore, projects that would result in population or employment growth beyond what is projected in regional or local plans could result in increases in VMT above that forecasted in the attainment plans, further resulting in mobile source emissions that could conflict with or obstruct implementation of the AQAP. Increases in VMT beyond what is projected in the Association of Bay Area Government's (ABAG) regional VMT modeling, the County General Plan, and the 2017 Clean Air Plan generally would be considered to have a significant adverse incremental effect on the SFBAAB's ability to attain CAAQS and NAAQS for all criteria air pollutants.

The Proposed Project does not include any changes to the DA land use designation and the site is currently permitted and used for commercial cannabis cultivation activities. Proposed commercial cannabis uses would be required to comply with all County and state cannabis requirements. Because commercial cannabis use applicants would be required to obtain necessary approvals, the County would have a mechanism for control of land uses. Existing and proposed commercial cannabis cultivation operations are required to comply with all applicable regulations included in Section 26-88-254, "Cannabis cultivation—commercial," of the Sonoma County Code and detailed in Section 3.3.1.3 "Local Laws, Regulations, and Policies," above. Because the Proposed Project does not alter the land use designations of the County General plan, the growth assumed in the County, as determined by the General Plan, is already accounted for in the emissions inventorying and projections of the 2017 Clean Air Plan.

Because implementation of the Proposed Project would not result in changes to land use designations, emissions from these land uses have already been accounted for in the regional emissions modeling conducted by ABAG, which informs the emissions reduction targets, strategies, and measures of the 2017 Clean Air Plan. Therefore, implementation of the Proposed Project would not obstruct the Bay Area Air District's efforts to attain and maintain the NAAQS and CAAQS in the SFBAAB. This impact would be **less than significant**.

b. Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area (Less than Significant Impact)

Construction

All construction activities are complete; no construction activities involving demolition, simultaneous occurrence of two or more construction phases, extensive site preparation (e.g., grading, cut and fill, or earth movement), extensive material transport (e.g., soil import and export requiring a considerable amount of haul truck activity), or stationary sources (e.g., backup generators) subject to air district rules and regulations would occur. Therefore, according to the Bay Area Air District CEQA Guidelines, project emissions for all criteria pollutants would be below the Bay Area Air District average daily thresholds of significance and would not result in adverse health impacts.

Operation

Operation of the Proposed Project could result in operational emissions of ROG, NO_x, PM_{2.5}, and PM₁₀ related to activities such as maintenance, fertilizer application, or potential use of on road or offroad vehicles such as light-duty pickups and ATVs. Emissions would also be generated by employee vehicle trips. Daily employee trips would be minimal, with the greatest number of daily employee trips occurring during harvesting operations. Harvesting operations would require approximately 20 one-way trips per day for two days. Operation of the Proposed Project would involve maintenance using a combination of machine and hand tools as needed. Harvesting operations would primarily be accomplished using hand tools. Air pollutant emissions would also occur from outgoing cannabis product transportation during operations. Cannabis product would be transported offsite using 26-foot trucks. As stated in Chapter 2, *Project Description*, the greatest number of truck trips would occur during site preparation, which would involve up to four one-way hauling trips per day over a five-day period.

While the Bay Area Air District CEQA Guidelines do not have specific screening criteria for a project identical to the Proposed Project, Table 4-1 of the Bay Area Air District CEQA Guidelines show that a city park not exceeding 175 acres would not exceed the Bay Area Air District's average daily mass emissions thresholds (BAAQMD 2022a: Table 4-1). Regarding operations, the Proposed Project would involve similar emissions-generating activities to a park such as maintenance and landscaping-type activities (e.g., watering, trimming, planting). As detailed above, Table 4-1 of the Bay Area Air District CEQA Guidelines, titled "Single Land Use Construction and Operational Criteria Air Pollutant and Precursor Screening Levels," was developed by the Bay Area Air District to aid in screening out projects which would not contribute to excess emissions based on the size and type of land use. Table 4-1 of the Bay Area Air District CEQA Guidelines shows that a general office building less than 765,000 sf would not result in operational emissions exceeding the Bay Area Air District's average daily mass emissions thresholds (BAAQMD 2022a: Table 4-1). As Table 4-1 of the Bay Area Air District identifies that a much larger 752,000 sf office building would be screened from further analysis of criteria air pollutants and precursors, it can be reasoned that the Proposed Project, involving agricultural operations in an approximately 2-acre area with 40,000 square feet of canopy, would not result in operational emissions in excess of the Bay Area Air District's thresholds. Therefore, operation of 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.

Conclusion

Because the Proposed Project would not include any construction activities, the Proposed Project would not generate construction-related criteria pollutants emissions and would not result in adverse health impacts. Further, operation of the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant. This impact would be **less than significant**.

c. Expose sensitive receptors to substantial pollutant concentrations (Less than Significant Impact)

Toxic Air Contaminants

No construction activities or site modifications such as site preparation or earthwork, grading, new roads, vegetation removal, or new drainage systems are proposed for the Proposed Project. There would be no

demolition of existing structures and no construction of new buildings or structures as part of the Proposed Project.

Because no construction activities would occur, receptors would not be exposed to construction-related TAC emissions. Operational activities would not include any major sources of stationary TACs such as smokestacks, and all operations would be required to comply with setback distances specified in County Code Section 26-88-254(f)(6) which requires cannabis premises to be setback a minimum of 100 feet from property lines and a minimum of 300 feet from residences and business structures on surrounding properties a minimum of 1,000 feet from a school providing education to K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. Notably, the Proposed Project is not located within 1,000 feet of schools with K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. Given no construction activities are required for the Proposed Project, the lack of newly introduced major sources of TACs, and the setback requirements, operation of commercial new cannabis facilities would not expose existing receptors to substantial TAC concentrations.

See the discussion below regarding exposure to emissions of beta myrcene.

CO Hot Spots

The Bay Area Air District recommends that local “hot spots” of CO resulting from traffic congestion must be accounted for using a health-based screening approach. The Bay Area Air District recommends screening criteria for CO hotspots that can be applied to the Proposed Project because emissions of CO are generally similar statewide, and those criteria have been applied here. Regarding the potential for CO hot spots at local intersections, these types of effects have the potential to occur only at intersections experiencing extremely high volumes of traffic. For instance, the Bay Area Air District has determined that CO hot spots have the potential to occur only at intersections that experience a traffic volume greater than 44,000 vehicles per hour (BAAQMD 2022). Based on the extent of commercial cannabis uses identified in Chapter 2, *Project Description*, the greatest number of truck trips would occur during site preparation, which would involve up to four, one-way hauling trips per day over a five-day period, while the greatest number of daily employee trips would occur during harvesting operations and would be approximately 20 one-way trips per day for two days. Operational activities associated with the Proposed Project would not be anticipated to generate traffic volumes at this level. Thus, it would not be anticipated that operations-related vehicle trips would result in congestion at any intersection that experiences high volumes of vehicles or long wait times exceeding the Bay Area Air District’s CO hot spot threshold of 44,000 vehicles per hour at any one intersection. For these reasons, additional trips associated with new commercial cannabis operations would not contribute substantially to traffic congestion at affected intersections such that local CO “hot spots” occur in exceedance of the CAAQS or NAAQS.

Beta Myrcene

Beta-myrcene is part of a class of terpene hydrocarbons that are commercially manufactured and occur naturally at high levels in a large variety of foods. Despite its long history of use as a flavoring substance and wide consumption via its natural occurrence in foods, the safety of beta-myrcene was reviewed by the FDA in 2018. FDA concluded that beta-myrcene was unlikely to induce tumors in humans and safe under its conditions of intended use as a flavoring (Safebridge Consultants 2025). Previous to this conclusion, in March 2015, the State of California, OEHHA added beta-myrcene to the list of chemicals known to the state to cause cancer, for the purposes of Safe Drinking Water and Toxic Enforcement Act of 1986, Health and Safety Code section 25249.5 et

seq. (i.e., California Proposition 65). Beta-myrcene remains listed under California Proposition 65 at the time of the writing of this analysis.

Generally, a person may be exposed to chemicals via inhalation, ingestion, or skin contact. The route of exposure determines where/how the substance first contacts the body, how it is absorbed, distributed throughout the body, broken down, and eliminated from the body. Some substances cause toxic effects where they are absorbed (lungs damaged by breathing wildfire smoke), while others need to be absorbed and distributed to distant sites throughout the body to exert toxic effects (the liver is damaged after repeatedly ingesting alcohol). Because of its long-standing use as a flavoring, the majority of beta-myrcene data was based on oral intake; however, EPA has provided specific guidance to allow for consideration of other exposure routes. Thus, data generated using an oral route can be applied to an inhalation route by considering both physicochemical properties of beta-myrcene and use of conservative conversion factors.

In preparation of the Sonoma County Comprehensive Cannabis Program Update Draft EIR (Sonoma County 2025), Sonoma County commissioned Trinity Consultants to evaluate the potential for toxics risk and community exposure of beta-myrcene related to commercial cannabis cultivation under the Cannabis Program Update (Trinity Consultants 2020). The study included the development of an occupation exposure level (OEL), with the intent of determining the potential to adversely affect members of the public with proximity to commercial cannabis cultivation. Based on a review of readily available clinical and nonclinical data an OEL of 5 milligrams per cubic meter (mg/m³) as an 8-hour time-weighted average was recommended. The OEL provides a threshold at which no pharmacological and other adverse effects (e.g., sneezing, itching, nasal congestion and irritation, drowsiness, moderate skin and eye irritations), as well as nonclinical effects (reproductive and developmental effects at extremely high doses [$>145,000$ times higher than human exposures] irrelevant to human exposures) may affect an exposed worker (i.e., somebody within proximity to the chemical in question for the duration of a normal work schedule: 8 hours per day). To address public exposure, the OEL was lowered by a factor of 10 to develop the chronic risk exposure level (REL) (i.e., exposure 24 hours per day, 7 days per year, year-round). The REL reflects the exposure threshold for which the general public would experience pharmacological and nonclinical effects. Thus, this analysis assumed an REL of 0.5 mg/m³ or less would not present an adverse effect.

To determine the potential for exposure on the general public, air dispersion modeling was completed to estimate ground-level beta myrcene concentrations at a distance of 100 feet for two hypothetical outdoor commercial cannabis growing operations: a 1-acre facility and a 10-acre facility. These scenarios were modeled to estimate the ground-level concentration of beta-myrcene from a commercial cannabis growing area at various distances using the US EPA regulatory model, AERSCREEN. In an effort to be conservative (i.e., more protective of public health), the analysis assumes that all of the cannabis plants are emitting beta-myrcene at the highest possible rate all of the time, which presents a worst-case analysis of actual ground-level concentration.

The results showed that the maximum concentration of airborne beta-myrcene generated by 1-acre and 10-acre cannabis fields would be 0.1 mg/m³ (23 percent of REL) and 0.3 mg/m³ (64 percent of REL), respectively. Additionally, at a 600-foot setback, the study found that airborne concentrations of beta myrcene would be reduced to 0.04 mg/m³ for a 1-acre site and 0.1 mg/m³ for a 10-acre site. As stated in Section 3.3.2.5, "Sensitive Receptors," the nearest residence to the Proposed Project site is a residence approximately 600 feet east of the project site. The total grow area (based on canopy area) would be less than one acre. Thus, based on the findings of the toxics risk and community exposure study, the nearest receptor to the Proposed Project site would be

exposed to less than 23 percent of REL as a result of project implementation. As the established REL was developed by experts and relies on substantial evidence (i.e., scientific research), emissions of beta-myrcene would not be at a concentration high enough to cause the community harms related to pharmacological and other adverse effects (e.g., sneezing, itching, nasal congestion and irritation, drowsiness, moderate skin and eye irritations). Moreover, effects such as reproductive and developmental effects may occur at levels higher than 145,000 times higher than the REL. As stated above, the Proposed Project would expose the nearest receptor to less than 23 percent of the REL and would therefore not result in considerable risks regarding reproductive or developmental effects. Therefore, with reliance on data and analysis based on scientific evidence, the general public would not experience adverse health effects due to exposure of beta myrcene emissions from the Proposed Project.

Conclusion

For the reasons discussed above, the potential for exposure of sensitive receptors to substantial pollutant concentrations would be **less than significant**.

d. Result in other emissions affecting a substantial number of people (Less than Significant Impact)

As described in Section 3.3.2, “Environmental Setting,” the typical smell of cannabis originates from roughly 140 different terpenes (volatile, unsaturated hydrocarbon that is found in essential oils of plants, especially conifers and citrus trees). Some terpenes are identified explicitly in research (myrcene, pinene, limonene). The “skunk” odor attributable to cannabis is primarily volatile thiols. Commercial cannabis cultivation, processing, distribution, and the smoking of cannabis have the potential to generate nuisance odors.

The furthest distance cannabis odors from cultivation uses may be recognizable or detectable is approximately 2 miles, depending on topography and meteorology (Kern County 2017). However, recognition of an odor does not imply that the odor is a nuisance, only that it can be identified or detected as cannabis. Typically, the odor is detectable much closer to the source, such as adjacent to or on a commercial cannabis cultivation site. The distance for odor detection is site-specific and can be affected by many variables, including meteorology, topography, and stages of plant growth. In addition, human perception of cannabis plant odors may be influenced by personal views regarding cannabis. Whether the odor is acceptable and the level at which it should be defined as objectionable varies by the individual sensitive receptor depending on various strengths and distances.

Implementation of the Proposed Project would involve the growing and handling of cannabis. As identified above, cannabis plants are known to emit odors, most prominently during the final stages of the growing cycle (i.e., typically beginning in August and continuing through the harvest season, in September and October), which may be detectable at a distance of two miles or more depending on topography and meteorology.

Bay Area Air District Regulation 7, “Odorous Substances,” places general limitations on odorous substances as well as specific emissions limitations on odorous compounds within the Bay Area Air District’s jurisdictional boundaries. While the Proposed Project could generate nuisance odors perceptible to nearby receptors, BAAQMD Regulation 7-110.5 specifies that agricultural operations as described in the California Health and Safety Code, section 41705, are exempt from this regulation. California Health and Safety Code section 41705 subsection (a)(1) defines agricultural operations as “...operations necessary for the growing of crops or the raising of fowl or

animals.” As the Proposed Project would facilitate the growth of cannabis as a crop, Regulation 7 would not apply to the Proposed Project.

The Proposed Project would be required to comply with all County setback requirements to reduce exposure of receptors to odors. Specifically, County Code Section 26-88-254(f)(6) requires outdoor cultivation areas to be setback a minimum of 100 feet from property lines and a minimum of 300 feet from residences and business structures on surrounding properties. Section 26-88-254(f)(6) also requires outdoor cultivation sites to be setback a minimum of 1,000 feet from a school providing education to K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. Notably, the Proposed Project is not located within 1,000 feet of schools with K-12 grades, a public park, childcare centers, or an alcohol or drug treatment facility. Generally, odor perception tends to decrease with distance; thus, County setback requirements would place limits on odor perceptibility on parcels supporting sensitive land uses and residences. While cannabis odors are often attributed to cultivation activities, they are also associated with the handling of cannabis that has been harvested, is drying, and has been dried before packaging (e.g., stored in air-tight containers as flower or other product). As stated above, odor control systems are not feasible for outdoor commercial cannabis cultivation operations. Thus, odor emissions and the potential for offsite objectionable odor perception would be limited only through setback requirements for these uses.

As discussed above in Section 2.1, “Overview,” the project site is currently zoned for agricultural use and has been used for commercial cannabis cultivation operations since receiving its most recent provisional cultivation license from the State of California in 2021. During this time period, there have been no odor complaints associated with commercial cannabis cultivation on the project site (BAAQMD pers. comm., 2025). Under the Proposed Project, outdoor commercial cannabis cultivation would continue to operate similarly to the existing conditions. Thus, there would not be a substantial change in cannabis-related odor emissions associated with the site and implementation of the Proposed Project would not introduce substantial new odors to the project site and surrounding area. For these reasons, impacts related to odors would be **less than significant**.

3.4 Biological Resources

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
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 CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 DFG or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state HCP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.4.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S.C. § 1531 et seq.; 50 C.F.R. Parts 17 and 222) 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 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 U.S.C. § 1532). Section 7 of the ESA (16 U.S.C. § 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 provides a process by which non-federal 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 U.S.C., Chapter 7, Subchapter II) protects migratory birds. 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 Bald and Golden Eagle Protection Act (16 U.S.C. § 668; 50 C.F.R. Part 22) prohibits take of bald and golden eagles and their occupied and unoccupied nests. USFWS administers the Bald and Golden Eagle Protection Act.

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 C.F.R. § 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 C.F.R. 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 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 will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code (Fish & G. 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 (Fish & G. Code §§ 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 (Fish & G. Code §§ 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 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.

Fish and Game Code sections 3503 and 3513 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.

DCC Commercial Cannabis Business Regulations

The following DCC commercial cannabis regulations are applicable to the Proposed Project:

- California Business and Professions Code section 26060.1, subdivision (b)(3) requires all cultivators to comply with section 1602 of the Fish & Game Code or receive written verification from CDFW that a streambed alteration agreement is not required.
- DCC regulations implementing MAUCRSA include environmental protection measures requiring that all outdoor lighting be downward facing and shielded to minimize the visual effects of the presence of lighting (Cal. Code Regs., tit. 4, § 16304, subd. (a)(6)), and that lighting for mixed-light operations must be shielded between sunset and sunrise to minimize nighttime glare (Cal. Code Regs., tit. 4, § 16304, subd. (a)(7)).
- California Code of Regulations, title 4, section 16307, subdivision (a) requires all cultivators to comply with all California Department of Pesticide Regulation (CDPR) laws and regulations.
- California Code of Regulations, title 4, section 16307, subdivision (b) contains protocols to reduce potential effects from pesticide use including: comply with all label requirements, store chemicals in a secure building, contain leaks and spills, apply the minimum amount necessary to control the target pest, and prevent off-site drift.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(11) Biotic Resources. Proposed cultivation operations, including all associated structures, shall require a biotic assessment at the time of application that demonstrates that the project is not located within, and will not impact sensitive or special status species habitat, unless a use permit is obtained. Any proposed cultivation operation, including all associated structures, located within adopted federal critical habitat areas must have either all appropriate permits from the applicable state and federal agencies with

jurisdiction over the listed species, or a biotic assessment concluding that the project will not result in “take” of a protected wildlife species within the meaning of either the federal or California Endangered Species Acts. There shall be no tree removal or timber conversions to accommodate cultivation sites, unless a use permit is obtained. Outdoor cultivation areas and related processing structures shall be located outside the Riparian Corridor Stream Conservation Areas (RC combining zone) and outside any designated Biotic Habitat area (BH combining zone). Outdoor cultivation areas shall conform to the agricultural Riparian Corridor setback set forth in Section 26-65-040. Proposed cultivation operations shall comply with the wetland setbacks set forth in Section 11-16-150, unless a use permit is obtained.

Sonoma County Code section 26-88-254(f)(13). Property Setbacks - Riparian Corridor Stream Conservation Areas. Structures used for cultivation shall be located outside the Riparian Corridor Stream Conservation Areas (RC combining zone) and outside any designated Biotic Habitat area (BH combining zone). Outdoor cultivation areas shall conform to the agricultural Riparian Corridor setback set forth in Section 26-65-040. Outdoor cultivation areas shall conform to the wetland setback set forth in Section 36-16-120, unless a use permit is obtained.

Sonoma County Code section 26-88-254(f)(19). Lighting. All lighting shall be fully shielded, downward casting and not spill over onto structures, other properties or the night sky. All indoor and mixed light operations shall be fully contained so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise.

Sonoma County Code section 26-88-010(m). Tree Protection Ordinance. Projects shall be designed to minimize the destruction of protected trees. With development permits, a site plan shall be submitted that depicts the location of all protected trees greater than nine inches (9”) diameter at breast height (DBH), which is 4.5 feet about grade, and their protected perimeters in areas that will be impacted by the proposed development, such as the building envelopes, access roads, leach fields, etc. Projects are subject to construction standard established to prevent harm or removal of protected trees, including prohibitions on dumping harmful substances in proximity of protected trees, marking the location of roots prior to construction and other measures.

3.4.2 Environmental Setting

The Proposed Project site is located on 30-acre parcel at 8270 Petaluma Hill Road, Penngrove, in unincorporated Sonoma County, California. Proposed Project commercial cannabis cultivation activities would occur within an approximate 2-acre fenced area which includes 40,000 square feet of mature canopy. The Proposed Project is located within a low density rural residential area of Sonoma County. The project site area is visually defined by low density agricultural and residential buildings, open fields, trees, and mountains in the distance. Existing infrastructure includes a single-family residence, a 110,000 square foot greenhouse associated with a non-cannabis commercial nursery, a 10,000 square foot metal warehouse/shop building that houses a construction business and two mobile office buildings, two ponds, and other associated agricultural improvements (Sonoma County 2024). The project site area has been used for commercial cannabis cultivation since 2021, and the larger property is developed containing a large farm, roads, and crops (primarily flowers). The western third of the project site contains hoop houses with earthen foundations covered in tarps. The eastern third is comprised of dense poison hemlock (Sol Ecology 2020).

The primary habitat occurring within the project site is ruderal vegetation growing on fallow land. Two man-made ponds occur within the north area of the project site that have arroyo willow (*salix lasiolepis*), coyote brush (*Baccharis pilularis*), duckweed (*Lemna sp.*), Himalayan blackberry (*Rubus armeniacus*), and marsh pennywort (*Hydrocotyle ranunculoides*) (Sol Ecology 2020). These water features are located outside the Proposed Project site and would not be impacted by proposed commercial cannabis cultivation activities.

Special-status Species

Definitions and Methods of Assessment

For the purposes of this assessment, special-status plant and wildlife species refers to those species that meet one or more of the following criteria:

- Species that are listed as threatened or endangered under the ESA (50 C.F.R. Part 17.12 for listed plants, 50 C.F.R. Part 17.11 for listed animals);
- Species that are candidates for possible future listing as threatened or endangered under the ESA (76 Federal Register [Fed. Reg.] 66370);
- Species that are listed or proposed for listing by the State of California as threatened or endangered under CESA (Cal. Code Regs., tit. 14, § 670.5);
- Plants listed as rare under the California Native Plant Protection Act of 1977 (Fish & G. Code, § 1900 et seq.); California Rare Plant Rank (CRPR) List 1 and 2 species;
- Species that meet the definitions of rare or endangered under CEQA (CEQA Guidelines, § 15380); or
- Animals fully protected in California (Fish & G. Code, §§ 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

A reconnaissance-level Biological Assessment (Biological Assessment) to evaluate for Special-Status Species (Sol Ecology 2020) was prepared for the commercial cannabis cultivation activities for the Proposed Project. The Biological Assessment generated a list of 66 special-status plant species and 50 special-status wildlife species as known or having the potential to occur within the vicinity of the Proposed Project. (**Appendix A.**) Each of these species were assessed to determine the potential to occur on the Project site.

Special-status plant and animal species with the potential to occur in the project area were identified through a review of the following resources:

- USFWS list of federally listed endangered and threatened species that occur within the vicinity of the Proposed Project;
- California Natural Diversity Database (CNDDDB) queries for the U.S. Geological Survey (USGS) 7.5-minute quadrangle containing the project area and the quadrangles immediately adjacent to it: Cotati, Glenn Ellen, Kenwood, Santa Rosa, Sebastopol, Two Rock, Point Reyes NE, Petaluma, and Petaluma; and
- California Native Plant Society's (CNPS's) *Inventory of Rare and Endangered Plants of California* and CRPR listing.

The potential for special-status species to occur in areas affected by the Proposed Project was evaluated according to the following criteria:

None: indicates that the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.

Not Expected: indicates situations where suitable habitat or key habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.

Possible: indicates the presence of suitable habitat or key habitat elements that potentially support the species.

Present: indicates that either the target species was observed directly or its presence was confirmed by field investigations or in previous studies in the area.

Threatened, Endangered, and Special-status Species

Based on the review and site characteristics of the project site, no special-status plant species are anticipated to occur within the project site as it has been previously had significant alteration of the natural landscape, ruderal vegetation community, and the Proposed Project would take place on land which has been used for agricultural purposes. Similarly, no special-status reptiles, birds, fish, amphibians, or mammals are anticipated to occur at the project site.

The Biological Assessment (Sol Ecology 2020) (Appendix A) provides figures showing the California Natural Diversity Database occurrences of special-status plant species and special-status wildlife within a 5-mile radius of the project site. Wildlife species that are possible or known to be present, are discussed further below; species not expected and with no suitable habitat are not discussed further.

Table 3.4-1. Special-status Plant and Wildlife Species Known to Occur in or Near the Project Area

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project Area
Reptile			
<i>Ambystoma californiense</i> California tiger salamander (CTS)	FT / ST	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding. Average upland dispersal from breeding sites is 1,844 feet (562 meters) (Searcy and Shaffer 2011); maximum dispersal has been documented up to 1.3 miles (Orloff 2007)	Not Expected. Aquatic habitat occurs adjacent to the project site; however, the man-made ponds do not provide suitable breeding habitat for CTS. In addition, the project site is outside of Designated Critical Habitat for species. The nearest CNDDB occurrence from is from 1972 though the species is now presumed to be extirpated (CDFW 2020). The nearest extant breeding occurrence is more than 2 miles away from project site (Sol Ecology 2020). Lastly, the ruderal and farmed nature of the site precludes most burrowing animals that would provide upland habitat for tiger salamander. Based on this, there is no potential for CTS to occur on the project site (Sol Ecology 2020).
<i>Rana draytoni</i> California red-legged frog (CRLF)	FT / SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected. The nearest CNDDB occurrence (2020) is more than 2 miles from the site, and is beyond the known dispersal distance for the species. The adjacent man-made ponds may provide suitable aquatic habitat for CRLF. However, at the time of the survey conducted by Sol Ecology (2020), the pond surface was completely occluded by aquatic pennywort and duckweed eliminating any open water habitat required by this species. As such, CRLF could potentially be present seasonally during dieback (outside the period of operations) but is not likely to be present year-round or to utilize these features for breeding and thus, is unlikely to disperse into uplands within the project site (Sol Ecology 2020). Additionally, both ponds and their associated riparian habitat will be completely avoided by the Proposed Project. Lastly, the absence of available refugia from the ruderal and farmed nature of the site would exclude CRLF from the project site.

Source: Sol Ecology, Inc 2020.

* Abbreviations for federal and state species listing status: DL = Federal delisted; SE = State endangered; SSC = Species of special concern; FE = Federal endangered; ST = State threatened; SCE = State candidate endangered; FT = Federal threatened; SFP = State fully protected

Wetlands and Other Waters

Based on the Biological Assessment completed for the Proposed Project, no stream, rivers, potentially jurisdictional wetlands or waters features are present on or adjacent to the project site (Sol Ecology 2020).

3.4.3 Discussion of Checklist Responses

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species (No Impact)

Based on the results of the Biological Assessment that was completed for the project site, the Proposed Project does not have the potential to support special-status plant species. From its developed nature and having previous significant historical alteration of the natural landscape, the site lacks native habitat, with no natural vegetation or ecological features that would typically support special-status wildlife and plant species known to occur in the vicinity of the project site. Additionally, the project site does not have the potential to support special-status wildlife species due to the absence of suitable habitat elements as a result of historic farming which has eliminated most small mammal burrows and/or other refugia that would support protected species in this area. Nearby man-made ponds do not support breeding populations of listed amphibians due to the to the absence of open water habitat.

All site preparation and construction for the Proposed Project has already been completed. Based on the Biological Assessment completed for the Proposed Project and because the Proposed Project would not include any additional ground disturbance or any structural building modifications, the project conditions would be the same as existing conditions. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred if they cannot be mitigated. No substantial adverse effect to any special-status species or its habitat would occur. Therefore, there would be **no impact** to on special-status species.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community (No Impact)

Based on the Biological Assessment completed for the Proposed Project there is no sensitive natural community within the footprint of the Proposed Project, nor does the Proposed Project area contain any watercourses or riparian habitats within or the vicinity of the proposed commercial cannabis cultivation area. The Proposed Project does not include any ground disturbance or any structural building modifications, and the project conditions would be the same as existing conditions. Therefore, there would be **no impact** to on these resources.

c. Have substantial adverse effects on state or federally protected wetlands (No Impact)

Two man-made ponds occur within the north area of the project site; however, these water features are located outside the Proposed Project site and would not be impacted by proposed commercial cannabis cultivation activities. Proposed Project footprint does not contain any state or federally protected wetlands. Therefore, no state or federally protected wetlands would be impacted on the project site; therefore, there will would be **no impact** to on these resources.

d. Interfere substantially with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites (No Impact)

The project site is not located within an established wildlife corridor or a native wildlife nursery site. The project site is located within unincorporated Sonoma County, in a low density rural residential area. The project site area is visually defined by low density agricultural and residential buildings, open fields, trees, and mountains in the distance. Surrounding land uses are also zoned Diverse Agriculture (DA) and Ag and Residential (AR) and are predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential development (Sonoma County 2025). The closest residences, located on adjacent parcels, are approximately 600 feet to the east, 775 feet to the southwest, 774 feet to the south, and over 1,000 feet to the west of the commercial cannabis cultivation area.

The project site has already been developed and is currently operating as a commercial cannabis facility. Due to its developed nature, the project site limits native habitat with ecological features and lacks aquatic habitat that would typically support special-status wildlife and plant species known to occur in the vicinity of the project site. Based on the reconnaissance-level Biological Assessment completed for the Proposed Project and because the Proposed Project would not include new ground disturbance, new roads, additional vegetation removal, or any structural building modifications, the project conditions would not create new impacts. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred if they cannot be mitigated. Therefore, the Proposed Project would have **no impact** associated with the movement of native resident or migratory wildlife species, or wildlife corridors.

e. Conflict with local policies or ordinances protecting biological resources (No Impact)

The Proposed Project does not involve the removal protected or heritage trees, nor are there any substantial conflicts with the County's local policies and ordinances pertaining to biological resources. Therefore, there would be **no impact**.

f. Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP (No Impact)

The project site is not within the covered plan area of any adopted HCP or natural community conservation plan. There would be **no impact** related to conflicts with an adopted HCP or or natural community conservation plan.

3.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.5.1 Regulatory Setting

Federal Laws, Regulations, and Policies

The Proposed Project does not require any federal permits, and it is not located on federal lands; therefore, federal laws do not apply to the Proposed Project. The following laws are provided for context only.

National Historic Preservation Act

Projects that require federal permits, receive federal funding, or are located on federal lands must comply with 54 U.S. Code section 306108, formally and more commonly known as Section 106 of the National Historic Preservation Act (NHPA). To comply with Section 106, a federal agency must “take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places [NRHP].” The implementing regulations for Section 106 are found in 36 C.F.R. Part 800, as amended (2004).

The implementing regulations of the NHPA require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking or project. To determine if a site, district, structure, object, and/or building is significant, the NRHP Criteria for Evaluation are applied. A resource is significant and considered a historic property when it:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Is associated with the lives of persons significant in our past; or
- C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- D. Yields, or may be likely to yield, information important in prehistory or history.

In addition, 36 C.F.R. section 60.4 requires that, to be considered significant and historic, resources must also exhibit the quality of significance in American history, architecture, archaeology, engineering, or culture and must possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Other “criteria considerations” need to be applied to religious properties, properties that are less than 50 years old, a resource no longer situated in its original location, a birthplace or grave of a historical figure, a cemetery, a reconstructed building, and commemorative properties. These types of properties are typically not eligible for NRHP inclusion unless the criteria for evaluation and criteria considerations are met.

For archaeological sites evaluated under criterion D, “integrity” requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Tribal cultural properties (TCPs) are locations of cultural value that are historic properties. A place of cultural value is eligible as a TCP “because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1990, rev. 1998). A TCP must be a tangible property, meaning that it must be a place with a referenced location, and it must have been continually a part of the community’s cultural practices and beliefs for the past 50 years or more.

State Laws, Regulations, and Policies

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA 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.
-
- Although not specifically inclusive of paleontological resources, these criteria may also help to define “a unique paleontological resource or site.” (Pub. Resources Code, § 21083.2.)
 - Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA section 21083.2. (Pub. Resources Code, § 21083.2.)

Section 15064.5 of the 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.

Historical resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Pub. Resources Code, § 5024.1, subd. (e));
- included in a local register of historic resources (Pub. Resources Code, § 5020.1, subd. (k)) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code, § 5024.1, subd. (g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines section 15064.5 also prescribes the processes and procedures found under Health and Safety Code section 7050.5 and Public Resources Code 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.

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.

The 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 and historical resource management is also addressed in Public Resources Code 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.

California Register of Historical Resources

Public Resources Code section 5024.1 establishes the CRHR. The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the NRHP, including properties evaluated under section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of persons important in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(14) Cultural and Historic Resources. Cultivation sites shall avoid impacts to significant cultural and historic resources by complying with the following standards. Sites located within a historic district shall be subject to review by the landmarks commission, unless otherwise exempt, consistent with Section 26-68-020 and shall be required to obtain a use permit. Cultivation operations involving ground disturbing activities, including but not limited to, new structures, roads, water storage, trenching for utilities, water, wastewater, or drainage systems shall be subject to design standards and referral to the Northwest Information Center and local tribes. A use permit will be required if mitigation is recommended by the cultural resource survey or local tribe.

The following minimum standards shall apply to cultivation permits involving ground disturbance. All grading and building permits shall include the following notes on the plans:

- If paleontological resources or prehistoric, historic-period or tribal cultural resources are encountered during ground-disturbing work at the project location, all work in the immediate vicinity shall be halted and the operator must immediately notify the agency having jurisdiction of the find. The operator shall be responsible for the cost to have a qualified paleontologist, archaeologist and tribal cultural resource specialist under contract to evaluate the find and make recommendations in a report to the agency having jurisdiction.
- Paleontological resources include fossils of animals, plants or other organisms. Historic-period resources include backfilled privies, wells, and refuse pits; concrete, stone, or wood structural elements or foundations; and concentrations of metal, glass, and ceramic refuse. Prehistoric and tribal cultural resources include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), midden (culturally darkened soil containing heat-affected rock, artifacts, animal bone, or shellfish remains), stone milling equipment, such as mortars and pestles, and certain sites features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe.
- If human remains are encountered, work in the immediate vicinity will stop and the operator shall notify the agency having jurisdiction and the Sonoma County Coroner immediately. At the same time, the operator shall be responsible for the cost to have a qualified archaeologist under contract to evaluate the discovery. If the human remains are determined to be of Native American origin, the Coroner must notify the Native American Heritage Commission within twenty-four (24) hours of this identification.

3.5.2 Environmental Setting

Pre-Contact

The pre-contact (or prehistoric) era of the project area reflects information known about the indigenous population from the time the region was first populated with humans until the arrival of the first Europeans, who visited and recorded their journeys through the written record. The pre-contact record is derived from over a century of archaeological research, and while much has been gleaned from these studies, large gaps in the data record remain. The following pre-contact culture sequence, derived from Milliken et al. (2007:114-118) and

Milliken et al. (2009:70-74), briefly outlines the pre-contact chronology of the North Bay region of the San Francisco Bay Area.

The Early Holocene (Lower Archaic; 9950 to 5450 Before Present⁴ (B.P.)) is considered a time when populations continued to be very mobile as they practiced a foraging subsistence pattern around the region. Artifacts that characterize this period include the milling slab and handstone to process seeds, as well as large wide-stemmed and leaf-shaped projectile points. These artifacts are associated with the Borax Lake Pattern, of which the local Sonoma County variation is represented in the Spring Lake Aspect. CA-SON-20 is the type-site of the Spring Lake Aspect and has yielded millingslabs, flaked stone tools, and large wide-stemmed projectile points, the majority of which are made from Borax Lake obsidian. The Spring Lake Aspect is thought to represent a mobile forager economic pattern in Sonoma County.

The Early Period (Middle Archaic; 5450 to 2450 B.P.) is marked by the appearance of cut shell beads in the archaeological record, as well as the presence of the mortar and pestle for processing acorns. House floors with postholes indicate substantial living structures, which suggests a move toward establishing a more sedentary lifestyle and an increasing population. The Berkeley Pattern emerged in the San Francisco Bay Area at approximately 4950 B.P., and later spread into surrounding coastal and interior areas. The Berkeley Pattern is characterized by abundant stone mortars and pestles, flexed burials, and a highly developed bone tool industry. In the North Bay, forager economies persisted for much of the Early Period and lowland sedentary collectors lived side by side with upland mobile foragers. The Berkeley Pattern spread to the Santa Rosa area by 2950 B.P.

The Middle Period, which includes the Lower Middle Period (Initial Upper Archaic; 2450-1520 B.P.) and Upper Middle Period (Late Upper Archaic; 1520-900 B.P.), appears to be a time when geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens are recorded from the Early/Middle Period Transition sites. The Berkeley Pattern continued through the San Francisco Bay Area during the Middle Period but became increasingly complex. The addition of milling tools, obsidian and chert concave-base projectile points, and the occurrence of sites in a wider range of environments suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages. Around 1520 B.P. a “dramatic cultural disruption” occurred, as evidenced by the sudden collapse of the Olivella saucer bead trade network.

The Initial Late Period (Lower Emergent; 900 to 400 B.P.) reflects a social complexity that had developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. A major cultural shift, or the Middle/Late Period Transition, began in the San Francisco Bay Area around 950 B.P. A majority of bone tool and ornament types from the Middle Period disappeared, and several new shell bead types emerge. By around 700 years ago the San Francisco Bay Area had transitioned to the Augustine Pattern. Artifacts associated with this pattern include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments. Increased social stratification, complex exchange systems, and elaborate ceremonialism are also characteristic of the Augustine Pattern.

The Terminal Late Period (Upper Emergent; 400 to 200 years B.P.) generally represents the indigenous cultures that were encountered by the Spanish when they first arrived in San Francisco Bay. A shift in the Augustine Pattern

⁴ B.P. = 1950+B.C. or 1950-A.D., where 1950 represents the “present” in terms of radiocarbon dating development.

occurred soon after 450 B.P. (A.D. 1500). Clam shell beads, potentially representing a form of currency, and widespread cremations are characteristic markers of the later phase of the Augustine Pattern. The artifacts found at contact-era sites, including clamshell beads, abalone pendants, flanged steatite pipes, etched bone whistles and tubes, flowerpot mortars, and basketry awls – reflect the complexity of indigenous culture at the time of Spanish arrival.

Sometime around 450 to 400 years B.P. (calendar year A.D. 1500 to 1550), the North Bay became the seat of innovation in the Bay Area. The first appearances of the toggle harpoon, hopper mortar, corner-notched arrow projectile points, clamshell disk beads, and secondary cremation are observed in the North Bay. The production of clam shell disk beads, which are believed to represent a form of standardized currency, also appears to have centered around the Santa Rosa Plain and Napa Valley during this period.

Ethnography

The Coast Miwok were one of the California Penutian Language speaking groups and closely related to the Lake Miwok (Kelly 1978:414). The Coast Miwok occupied the northwest coast of California from the mouth of the Golden Gate in the south, to approximately 5 miles north of Bodega Bay in the north, to approximately 4 miles east of Sonoma Creek (Barrett 1908; Kelly 1978). Barrett (1908) divides Coast Miwok speakers into two distinct dialects: Western/Bodega and Southern/Marin.

There were historically 44 recorded villages within the Coast Miwok territory, many of which provide present place names (Kelly 1978:415). Ethnographic accounts indicate that the Coast Miwok resided in large villages, each of which had a headman, but cannot be said to have a universal tribal organization. According to informant Tom Smith, a headman (hóypuh), a “woman chief” (hóypuh kulé(·)yih) and a third female leader (máien) split responsibilities of tending to people and organizing religious ceremonies (Kelly 1978:419).

The Coast Miwok were among the first California Native peoples to encounter Euro-Americans, greeting Sir Francis Drake in 1579. During the late eighteenth and early nineteenth century, many Coast Miwoks were subjected to missionization at San Francisco, San Rafael, and Sonoma, as well as labor at Fort Ross under the Russians. In 1850, a year after the end of the American conquest of California, the Coast Miwok population was estimated at 250 (Kelly 1978:414).

The Coast Miwok followed a cyclical pattern of subsistence, exploiting resources that were available on a seasonal basis. The Coast Miwok had a diversified subsistence economy based on fishing, hunting and gathering with a particular dependence on acorns. Important marine resources included fish, eels, clams, mussels, and seaweed, while terrestrial resources included acorns, bear, deer, elk, and small game (Kelly 1978:416). The Coast Miwok had a rich culture of religion, ritual and dance, with music and games being a large part of their cultural expression.

The Project area is located in the vicinity of two different groups, who are referred to as the Bloomfield/Cotati and Petaluma communities by Milliken (2009). Milliken (2009) suggests that the Petaluma region “included the middle stretch of the Petaluma River from Lynch Creek south to Adobe Creek, as well as the Willow Creek, Lynch Creek, and Adobe Creek watersheds.” According to early nineteenth century ethnographic sources, the village site of Petaluma was located on Lynch Creek (Milliken 2009). The estimated pre-Hispanic population of the Petaluma community was about 408 people.

The Bloomfield/Cotati region contains four closely related communities - Licatiut, Geluayomi, Tamalsimela, and Yoleyomi. Each community likely operated as a village group or mobile band, as each one had a population count

of less than 60 people. Both the Licatiut and Tamalsimela groups had links to the Petaluma people. Tamalsimela was the closest community to the project area, with Milliken (2009) suggesting that the group occupied the small valleys southwest of Penngrove. The estimated population of the Bloomfield/Cotati region at the time of contact was about 256 people.

History

The first encounter between the Coast Miwok and Europeans appears to have occurred in 1579 when Sir Francis Drake landed somewhere in the Point Reyes Peninsula. The next known contact occurs sixteen years later in 1595, when Sebastian Cermeno anchored in Drake's Bay. The Spanish later returned in 1603, at which point Sebastian Vizcaino landed in Tomales Bay (National Park Service 2020). There appears to be no further European contact until the arrival of Spanish explorers in the late 1760s and 1770s, which traditionally marks the beginning of the historic era in the San Francisco Bay Area.

Members of the Portola expedition were the first to arrive in present-day San Francisco Bay Area after following the coast from San Diego. Multiple Spanish expeditions followed, including Juan de Ayala's landing in the San Francisco Bay in 1775. By 1793, the area encompassing the northern and central peninsula was no longer inhabited by tribal villages and the local San Francisco Bay Costanoan-speaking local tribes of the area had been absorbed into Mission Dolores, which had been established in present-day San Francisco in 1776 (Milliken et al. 2009).

While conversion efforts at Mission Dolores first focused on the indigenous people of the San Francisco Peninsula and the East Bay, the percentage of Coast Miwok speakers rose from 7.9% of the mission population to 45% at the end of 1808. Coast Miwok speakers were also sent to Mission San Jose, Mission San Rafael, and Mission San Francisco Solano (Milliken et al. 2009).

In 1812, the Russian-American Fur Company, which represented Russia's interest in the Pacific fur trade, founded Fort Ross twelve miles north of the mouth of the Russian River. Fort Ross operated as the base of Russia's sea otter and fur seal hunting operations and also became a prosperous agricultural community. The Russians recruited Coast Miwok, Kashaya Pomo, and Southern Pomo peoples to work at Fort Ross. The smallpox epidemic of 1837 is believed to have originated from a Russian ship docked at Fort Ross. This epidemic, which lasted until 1839, decimated the indigenous population of the Sonoma-Napa region. Fort Ross was disbanded in 1841 after it was purchased by John Sutter (Kyle et al. 2002, Lightfoot et al. n.d.).

Mexico, including California, became independent from Spain in 1822, and after that time, the government began to issue grants of land to favored citizens. The Mexican government secularized the mission system in 1834, after which mission lands were also redistributed as land grants, or Ranchos. The Project area is located within the 17,234-acre Rancho Cotate land grant, which was originally given to Captain Juan Castaneda in 1844 for his service in the Mexican army. The rancho was eventually sold to Dr. Thomas Stokes Page in 1849, who later subdivided the land and sold parcels to settlers (Menefee 1873; Tuomey 1926, as cited in Evans and DeShazo, LLC, 2020).

The project site is located in Penngrove, which was first settled by David Wharff, W.J. Hardin and J.M. Palmer in 1852. The town experienced significant growth after the Northwestern Pacific Railroad was extended through the area in 1870. Penngrove's early economy was based on agriculture and the town became one of the major centers of the poultry industry during the twentieth century (Penngrove Cares 2025, Visit Penngrove 2025).

Cultural Resources Studies

Archival Search

A record search was requested at the Northwest Information Center to determine whether any portions of the project area had been previously surveyed for cultural resources and to identify the presence of any previously recorded cultural resources within the project area, as well as a 0.25-mile buffer (the search radius). The records search was received on February 26, 2025 (NWIC File No. 24-1145).

Other sources of information reviewed included, but were not limited to, the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, California Points of Historical Interest, as listed in the Office of Historic Preservation's (OHP's) Historic Property Directory, and the Built Environment Resource Directory (BERD) for Sonoma County.

No resources have been previously recorded within the project area or within the 0.25-mile search radius.

According to the record search results, the boundaries of one previous study, S-022664, intersects with the project area and the boundaries of four previous studies intersect with the search radius. The cultural resource investigation (S-022664) covered the entire project area (APN 047-101-019) and was conducted preceding the proposed subdivision of the parcel at that time (Evans 2000). While not formally recorded or evaluated at the time of the survey, one isolated obsidian flake and the remnants of two structures built between 1915-1954 and 1954-1973 were identified within the boundaries of the survey area conducted for the purposes of this study (Evans 2000).

Native American Communication

An email request was made to the Native American Heritage Commission (NAHC) on February 3, 2025, to review its files for the presence of recorded sacred sites on the project area. The NAHC responded on February 6, 2025. The results of the Sacred Lands database review were negative for any sacred sites within the Project area.

On April 24 and May 1, 2025, letters were sent to the 6 tribal contacts provided by the NAHC. The letters requested any additional information regarding tribal resources and to notify DCC if they wished to initiate consultation regarding the project actions. DCC received a response from Lytton Rancheria, who stated that the Tribe is not requesting further consultation based on the information provided by DCC. DCC received a response from the Federated Indians of Graton Rancheria (FIGR) on June 5, 2025, requesting consultation regarding the Proposed Project. DCC sent responses to FIGR via e-mail on July 14, August 4, August 15, August 27, and September 8, 2025, and called FIGR on September 4, 2025, to provide additional information about the Proposed Project and schedule a consultation. FIGR responded on September 8, 2025 to schedule a consultation for October 1, 2025. As planning proceeds, DCC will continue to consult with FIGR and any other interested tribal representatives regarding the Proposed Project and incorporate their concerns into project planning and mitigation as warranted.

Archaeological Survey and Results

As discussed above, the entire 30-acre parcel that constitutes the project area was surveyed in 2000. (Evans 2000). A subsequent cultural resource investigation of the commercial cannabis cultivation canopy area (totaling about 1-acre) comprising the project area was conducted by Evans & De Shazo, LLC, on June 26, 2020. **(Appendix B.)** The field survey did not identify any cultural resources or archaeological deposits within the project area. The

previously observed obsidian flake and structures were also not observed during the pedestrian survey (Evans and DeShazo 2020).

3.5.3 Discussion of Checklist Responses

a. Cause a substantial adverse change in the significance of a historical resource (No Impact)

A cultural resource review was conducted to address the responsibilities of CEQA, as codified in Public Resource Code sections 5097 and CEQA Guidelines sections 21082 and 21083.2. As stated above, no historical resources were identified within the project area or the search radius. All construction activities are complete and were performed in accordance with local approval by Sonoma County and issuance of a provisional license by DCC and all commercial cannabis cultivation operations would be occurring above ground. As such, no historical resources that are archaeological in nature would be discovered. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred if they cannot be mitigated. Therefore, the Proposed Project would have **no impact** on historic resources (built environment).

b. Cause a substantial adverse change in the significance of an archaeological resource (No Impact)

No archaeological resources, as defined in section 15064.5 of the CEQA Guidelines, have been identified within the project area. As such, no significant impacts to known archaeological resources would be expected to occur as a result of the Proposed Project. Additionally, all construction activities are complete and were performed in accordance with local approval by Sonoma County and issuance of a provisional license by DCC and all commercial cannabis cultivation operations would be occurring above ground. Therefore, no archaeological resources would be discovered. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated. Therefore, the Proposed Project would have **no impact** on archaeological resources.

c. Disturb any human remains, including those interred outside of dedicated cemeteries (No Impact)

Given that no further ground disturbance or construction is expected to occur as a result of the project's actions, the discovery of human remains is not anticipated during the implementation of the Proposed Project. All construction activities were performed in accordance with local approval by Sonoma County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated. Therefore, the Proposed Project would have **no impact** on human remains.

3.6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.6.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this act, the National Highway Traffic and Safety Administration, part of the US Department of Transportation (DOT), is responsible for revising fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturers' compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. The US Environmental Protection Agency calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. Based on information generated under the CAFE program, DOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992 and 2005

The Energy Policy Act (EPAAct) of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas¹. EPAAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs. The EPAAct of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

State Laws, Regulations, and Policies

Warren-Alquist Act

The 1975 Warren-Alquist Act (Pub. Resources Code § 25000 et seq.), established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

State of California Energy Action Plan

California Public Utilities Commission, California Energy Commission is responsible for preparing the state energy plan, which identifies emerging trends related to energy supply, demand, and conservation; public health and safety; and the maintenance of a healthy economy (CPUC and CEC 2008). The current plan is the 2003 California Energy Action Plan (2008 update). The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs, as well as the encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access.

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the California Air Resources Board (CARB) prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC and CARB 2003). A performance-based goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand by 2030.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required CEC to "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (Pub. Resources Code, § 25301, subd. (a).) This work culminated in the Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every 2 years and an update every other year. The 2023 IEPR is the most recent IEPR. The 2023 IEPR provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the state's goal of ensuring reliable, affordable, and environmentally responsible energy sources. The report contains an assessment of major energy trends and issues in California's electricity, natural gas, and transportation fuel sectors. The report provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety. Topics covered in the 2023 IEPR include building decarbonization, coordination between state energy agencies, decarbonizing the state's natural gas system, increasing transportation

efficiencies, and improving energy reliability. The IEPR also presents an assessment of the California Energy Demand Forecast (CEC 2023).

Renewables Portfolio Standard

The state passed legislation referred to as the Renewables Portfolio Standard (RPS), which requires increasing the use of renewable energy to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2, Chapter 1, Statutes of 2011), 52 percent by 2027 (SB 100, Chapter 312, Statutes of 2018), 60 percent by 2030 (also SB 100, Chapter 312, Statutes of 2018), and 100 percent by 2045 (also SB 100, Chapter 312, Statutes of 2018). On September 16, 2022, SB 1020 (Chapter 361, Statutes of 2022) was signed into law. This bill supersedes the goals of SB 100 by requiring that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent by December 31, 2040; and 100 percent by December 31, 2045, and supply 100 percent of electricity procured to serve all state agencies by December 31, 2035.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350, Chapter 547, Statutes of 2015)) requires that the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by December 31, 2030. It also establishes energy efficiency targets that achieve statewide, cumulative doubling of the energy efficiency savings in electricity and natural gas end uses by the end of 2030.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statutes of 2005) required CEC to prepare a state plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan in partnership with CARB and in consultation with other state, federal, and local agencies. The plan presents strategies and actions California must take to increase the use of alternative nonpetroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce greenhouse gas (GHG) emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

California Building Energy Efficiency Standards (Title 24, Part 6 and Part 11)

The energy consumption of new residential and non-residential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). CEC updates the California Energy Code every three years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The current California Energy Code will require builders to use more energy efficient building technologies for compliance with increased restrictions on allowable energy use. The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into on-site generation by requiring solar photovoltaic (PV) systems on new homes, providing significant GHG savings. The 2022 California Energy Code, the most recent version advances the on-site energy generation progress started in the 2019 California Energy Code by encouraging electric heat pump technology and use, establishing electric-ready requirements when natural gas is installed, expanding solar PV system and battery storage standards, and strengthening ventilation standards to improve indoor air quality. CEC estimates that the 2022 California Energy

Code will save consumers \$1.5 billion and reduce GHG emissions by 10 million metric tons of carbon dioxide-equivalent emissions over the next 30 years.

The California Green Building Standards Code, known as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code. It became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The current version is the 2022 CALGreen Code, which took effect on January 1, 2023. As compared to the 2019 CALGreen Code, the 2022 CALGreen Code strengthened sections pertaining to electric vehicle and bicycle parking, water efficiency and conservation, and material conservation and resource efficiency, among other sections of the CALGreen Code. The CALGreen Code sets design requirements equivalent to or more stringent than those of the California Energy Code for energy efficiency, water efficiency, waste diversion, and indoor air quality. These codes are adopted by local agencies that enforce building codes and used as guidelines by state agencies for meeting the requirements of Executive Order B-18-12.

AB 1279 and 2022: Scoping Plan for Achieving Carbon Neutrality

On September 16, 2022, the state legislature passed AB 1279 (Chapter 337, Statutes of 2022), which codified the stringent emission targets for the state of achieving carbon neutrality and an 85 percent reduction in 1990 emissions level by 2045. CARB released the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on November 16, 2022, as also directed by AB 1279 (CARB 2022). The 2022 Scoping Plan traces the pathway for the state to achieve its carbon neutrality goal and an 85-percent reduction in 1990 emissions goal by 2045. CARB adopted the 2022 Scoping Plan on December 16, 2022.

California Energy Efficiency Action Plan

The 2019 California Energy Efficiency Action Plan (CEC 2019) has three primary goals for the state: double energy efficiency savings by 2030 relative to a 2015 base year (per SB 350, Chapter 547, Statutes of 2015), expand energy efficiency in low-income and disadvantaged communities, and reduce GHG emissions from buildings. This plan provides guiding principles and recommendations related to how the state would achieve those goals. These recommendations include:

- Identifying funding sources that support energy efficiency programs,
- Identifying opportunities to improve energy efficiency through data analysis,
- Using program designs to encourage increased energy efficiency on the consumer end,
- Improving energy efficiency through workforce education and training, and
- Supporting rulemaking and programs that incorporate energy demand flexibility and building decarbonization.

The 2021 Energy Efficiency Action Plan, the most recent version, was covered in two documents: The 2021 California Building Decarbonization Assessment (CEC 2021); and the Final 2021 Integrated Energy Policy Report Volume I Building Decarbonization (CEC 2022).

DCC Commercial Cannabis Business Regulations

DCC regulations include the following requirements regarding energy use for commercial cannabis businesses.

Section 16305: Renewable Energy Requirements

(a) Beginning January 1, 2023, all holders of indoor, tier 2 mixed-light license types of any size, and all holders of nursery licenses using indoor or tier 2 mixed-light techniques shall ensure that electrical power used for commercial cannabis activity meets the average electricity greenhouse gas emissions intensity required by their local utility provider pursuant to the California Renewables Portfolio Standard Program in division 1, part 1, chapter 2.3, article 16 (commencing with section 399.11) of the Public Utilities Code.

(b) If a licensed cultivator's average weighted greenhouse gas emission intensity, as calculated and reported upon license renewal pursuant to section 15020, is greater than the local utility provider's greenhouse gas emission intensity, the licensee shall obtain carbon offsets to cover the excess in carbon emissions from the previous annual licensed period. The carbon offsets shall be purchased from one or more of the following recognized voluntary carbon registries:

- (1) American Carbon Registry;
- (2) Climate Action Reserve; or
- (3) Verified Carbon Standard.

Section 16306: Generator Requirements

(a) For the purposes of this section, "generator" means a stationary or portable compression ignition engine, also known as a diesel engine, as defined in Title 17, California Code of Regulations, section 93115.4.

(b) Licensed cultivators using generators rated at fifty (50) horsepower and greater shall demonstrate compliance with the Airborne Toxic Control Measure for stationary or portable engines, as applicable, established in title 17, California Code of Regulations, sections 93115-93116.5. Compliance shall be demonstrated by providing a copy of one of the following to the Department upon request:

- (1) For portable engines, a Portable Equipment Registration Certificate provided by the California Air Resources Board; or
- (2) For portable or stationary engines, a Permit to Operate or other proof of engine registration, obtained from the Local Air District with jurisdiction over the licensed premises.

(c) Licensed cultivators using generators rated below fifty (50) horsepower shall comply with the following by 2023:

- (1) Either subsection (1)(A) or (1)(B):
 - (A) Meet the "emergency" definition for portable engines in title 17, California Code of Regulations, section 93116.2(a)(12), or the "emergency use" definition for stationary engines in title 17, California Code of Regulations, section 93115.4(a)(30); or
 - (B) Operate eighty (80) hours or less in a calendar year; and
- (2) Either subsection (2)(A) or (2)(B):
 - (A) Meet Tier 3 with Level 3 diesel particulate filter requirements in title 13, California Code of Regulations, sections 2700-2711; or
 - (B) Meet Tier 4 requirements, or current engine requirements if more stringent, in title 40, Code of Federal Regulations, chapter I, subchapter U, part 1039, subpart B, section 1039.101.

(d) All generators used by licensed cultivators shall be equipped with non-resettable hour-meters. If a generator does not come equipped with a non-resettable hour-meter, an aftermarket non-resettable hour-meter shall be installed.

3.6.1.1 Local Laws, Regulations, and Policies

No local laws, regulations, or policies are applicable to the Proposed Project.

3.6.2 Environmental Setting

The Proposed Project is not connected to the utility grid and does not utilize emergency generators.

3.6.3 Discussion of Checklist Responses

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources (Less than Significant Impact)

The Proposed Project is not connected to the utility grid and does not require any additional energy sources for project operations. The Proposed Project would utilize solar and/or battery-powered motion-sensor security lights and cameras for security.

Commercial cannabis cultivation activities would include the use of vehicles for occasional deliveries of products to and from the site, which would require electricity and/or gasoline to operate. Materials delivery for commercial cannabis cultivation operations would include only 2 round trip vehicle trips per day during the growing season, with up to 12 round trips per day during short periods of time for site preparation and harvesting activities. In addition, state laws requiring vehicle fuel efficiency would help to minimize impacts.

Compliance with state requirements would ensure that the Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with applicable energy policies. Therefore, impacts would be **less than significant**.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency (No Impact)

The Proposed Project is not connected to the utility grid and has limited needs for energy. Vehicle transportation to and from the site would be minimal. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and there would be **no impact**.

3.7 Geology, Soils, and Seismicity

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.7.1 Regulatory Setting

Federal Laws, Regulations, and Policies

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) established the National Earthquake Hazards Reduction Program (NEHRP), which is 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:

1. USGS;
2. National Science Foundation (NSF);
3. Federal Emergency Management Agency (FEMA); and
4. National Institute of Standards and Technology.

Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. Nevertheless, the four basic NEHRP goals remain unchanged (NEHRP 2021):

1. Develop effective practices and policies for earthquake loss reduction and accelerate their implementation;
2. Improve techniques for reducing earthquake vulnerabilities of facilities and systems;
3. Improve earthquake hazards identification and risk assessment methods, and their use; and
4. Improve the understanding of earthquakes and their effects.

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 (Alquist–Priolo Act) (Pub. Resources Code, § 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 situated 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 require completion of a geologic investigation to demonstrate that the proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Pub. Resources Code, §§ 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act 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; 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. Under the Seismic Hazards Mapping Act, 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 of the California Code of Regulations, 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

Paleontological resources are classified as non-renewable scientific resources and are protected by state statute. (Pub. Resources Code, § 5097.5.) No state or local agencies have specific jurisdiction over paleontological resources. No state or local agency requires a paleontological collecting permit to allow for the recovery of fossil remains discovered as a result of construction-related earthmoving on state or private land on a project site.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-250(c)(2). Limitations on Use. Commercial cannabis activities shall only be allowed in compliance with all applicable county codes, including but not limited to, grading, building, plumbing, septic, electrical, fire, hazardous materials, and public health and safety.

Sonoma County Code section 26-88-250(c)(3). Limitations on Use. The permit holder shall comply with all laws and regulations applicable to the type of use and shall comply with all permits, license, approval, inspection, reporting and operational requirements of other local, state, or other agencies having jurisdiction over the type of operation. The permit holder shall provide copies of other agency and department permits, licenses, or certificates to the review authority to serve as verification for such compliance.

Sonoma County Code section 26-88-254(f)(17). Grading and Access. Cultivation sites shall be prohibited on natural slopes steeper than fifteen percent (15%), as defined by Section 11-22-020, unless a use permit is obtained. Grading shall be subject to a grading permit in compliance with Chapter 11 of the county code.

3.7.2 Environmental Setting

Geology

The project area is located in the North Coast Ranges geomorphic province of California. The North Coast Ranges are part of the larger Coast Range Geomorphic Province. The Coast Ranges are northwest-trending mountain ranges, varying from 2,000 to 4,000 above sea level and occasionally 6,000 feet elevation above sea level, and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault (DOC 2002).

The project area is situated within the Petaluma Valley, which is a structural depression within the Coast Ranges, bounded by the Santa Rosa Plain Basin to the north, the San Pablo Bay to the south, the Sonoma Mountains to the east, and the low-lying hills of the Mendocino Range to the west. The Petaluma Valley area exhibits a variety of geomorphic features, including the Petaluma Formation, a Pliocene-age sedimentary formation; rolling hills and valleys within the Coast Ranges; and the impacts of the San Andreas Fault. The area also includes the Petaluma Marsh Wildlife Area, a historic tidal marsh that has been modified through diking and filling (Sonoma County Water Agency 2021).

Soils

Sonoma County has a diverse range of soil types, ranging from volcanic ash, sand to clay, and gravel due to its varied topography, geology, and climate. The project site is primarily underlain by fine sandy loam (Cotati fine sandy loam, 2 to 9 percent slopes, CtC) and clay (Diablo clay, 2 to 9 percent slopes, Dbc) (NRCS 2025). According to the Natural Resources Conservation Service (NRCS), Diablo clay, 2 to 9 percent slopes (Dbc) is classified as an expansive soil. CtC soils are considered farmland of statewide importance and Dbc soils are considered prime farmland (DOC 2025).

Seismicity

Similar to most of California, Sonoma County is a seismically active region. According to the Sonoma County General Plan, Public Safety Element (Public Safety Element Figure PS-1b), The project site is not located within an Alquist-Priolo Earthquake Fault Zone; however, the Rodgers Creek Fault, which is delineated as an Alquist-Priolo Fault Zone, is located approximately 3.5 miles to the east of the project site and the San Andres Fault is delineated as an Alquist-Priolo Fault Zone and is located approximately 15 miles to the west of the project site (Sonoma County 2014).

Ground Shaking

Ground shaking from earthquakes affects the most people and can cause the most damage of any geologic hazard. The intensity of the seismic shaking during an earthquake would depend on the distance to the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the area. Earthquakes occurring on faults closest to the project area would have the potential to generate the largest

ground motions. Figure PS-1a in the General Plan Public Safety Element illustrates the expected relative intensity of ground shaking and damage in Sonoma County from potential future earthquakes. As shown on Figure PS-1a, the project site could be subject to “violent” ground shaking as designated on the Modified Mercalli Intensity Scale (IX – Violent) (Sonoma County 2014).

Liquefaction and Differential Settlement

Damage from ground shaking can be increased by ground failure due to liquefaction. Liquefaction changes water saturated soil to a semi-liquid state, removing support from foundations and causing buildings and utilities to shift or subside. Areas in the County most prone to liquefaction are valleys and tidal marshes with high water tables and sandy soils (Sonoma County 2014). Areas of the county subject to liquefaction hazards are shown on Figure PS-1c. According to the General Plan Public Safety Element, the project area is not located in an area susceptible to liquefaction hazards (Sonoma County 2014). According to the Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG’s) Hazard Viewer Map, the project site is in a liquefaction susceptibility area designated as “very low.” (MTC/ABAG 2025).

Landslide, Slope Failure, and Lateral Spreading

Strong ground shaking can destabilize slopes resulting in landslides. According to the Sonoma General Plan the most common type of ground failure in Sonoma County is landslides, which could occur in areas of weak rock and in increase in saturated soils. Extensive land areas of the County are subject to this hazard. Landslide risk is greatest in areas of weak soil and rock and on steep slopes.

There are some small areas on and around the project site, which have been observed to have a susceptibility to deep-seated landslides. However, the topography of the site is relatively flat with minor elevation changes on-site and in the vicinity. According to the General Plan Public Safety Element, Deep-seated Landslide Hazard Areas Figure PS-1c, the project site is not located in area in an area susceptible to deep-seated landslides (Sonoma County 2014). According to the Association of Bay Area Government’s Hazard Viewer Map, the project site is in an area designated as “few landslides.” (MTC/ABAG 2025).

Paleontological Resources

The Proposed Project consists of an outdoor commercial cannabis cultivation operation; however, all construction activities are complete. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated.

3.7.3 Discussion of Checklist Responses

a. Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:

i. Seismic-related rupture of a known earthquake fault (No Impact)

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The project site is not located within a fault hazard zone as defined by the Alquist-Priolo fault maps. The nearest fault hazard zone is the Rodgers Creek Fault, delineated as an Alquist-Priolo Fault Zone, is located approximately 3.5 miles to the east of the project site. In addition, the Proposed Project

consists of an outdoor commercial cannabis cultivation operation. No construction of new buildings or structures are included as part of the Proposed Project. Therefore, there would be **no impact** related to fault rupture.

ii. Strong seismic ground shaking (No Impact)

As with most of California, the project site is in a seismically active region. As shown on the County's Public Facilities Map, PS-1a, Sonoma County is subject to seismic shaking resulting from earthquakes along the San Andreas, Rodgers Creek, and other faults. The intensity of ground shaking and damage from potential earthquakes in the project area is categorized as 'violent' according to the County's General Plan Public Safety Element. While the project area could experience violent motion resulting in considerable damage to buildings and structures, shifting buildings off foundations and potentially partial collapse (USGS 2025), the outdoor cannabis operation would not include any new buildings or structures on-site. Since project conditions at full build out would be the same as existing conditions and no new buildings or structures would be constructed, the Proposed Project would not exacerbate conditions related to ground shaking at the site and would not represent a significant new hazard to people. There would be **no impact**.

iii. Seismic-related ground failure, including liquefaction (No Impact)

Liquefaction is the process in which soils and sediments lose shear strength and fail during seismic ground shaking. Strong ground shaking along faults in the project area could result seismic-related ground failure, including liquefaction. The project site is not located within a high liquefaction hazard area according to the Sonoma County General Plan Public Safety Element. In addition, the MTC/ABAG designates the site's liquefaction susceptibility as "very low." Since project conditions at full build out would be the same as existing conditions and no new buildings or structures would be constructed, the Proposed Project would not exacerbate conditions related to ground failure including liquefaction at the site and would not represent a significant new hazard to people. There would be **no impact**.

iv. Landslides (No Impact)

The topography of the site and surrounding area is characterized by rolling hills and is relatively flat with minor elevation changes and does not contain any steep slopes or other features that could result in landslide potential. According to the General Plan Public Safety Element, the project site is not located in area in an area susceptible to deep-seated landslides. In addition, the site is designated as "very low" risk for landslides by MTC/ABAG. As such, the project site is considered unlikely to be susceptible to landslides. Since project conditions at full build out would be the same as existing conditions and no new buildings or structures would be constructed, the Proposed Project would not expose people or structures to substantial adverse effects involving landslides. There would be **no impact**.

b. Result in substantial soil erosion or the loss of topsoil (Less than Significant Impact)

No construction activities would occur; therefore, the Proposed Project would not result in soil erosion or the loss of topsoil. Because no further ground disturbing construction activities would be required, the Proposed Project would have **no impact** related to soil erosion or loss of topsoil.

Operation of the Proposed Project is not expected to result in substantial soil erosion or the loss of topsoil; however, operation and maintenance of the commercial cannabis cultivation facility would comply the SWRCB's *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities*, Order WQ 2023-0102-DWQ and requirements of the *Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation* (SWRCB 2023). The Proposed Project would implement BMPs and erosion control measures designed to cover areas of exposed soil in the event of storms which could produce runoff. With adherence to the commercial cannabis cultivation policy and requirements, impacts related to soil erosion would be **less than significant**.

c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Proposed Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse (No Impact)

The project site is not located in an area subject to on- or off-site landslides or liquefaction. In addition, project conditions at full build out would be the same as existing conditions and no new buildings or structures would be constructed. The Proposed Project does not include operational features that have the potential to result in unstable soil conditions. There would be **no impact**.

d. Be located on expansive soil, creating substantial direct or indirect risks to life or property (Less than Significant Impact)

Expansive soils are usually associated with a high clay content and are prone to large volume changes, they expand when there is a high-water content and shrink when the water evaporates or is dried out (swelling and shrinking). Expansive soil is generally a concern when designing building foundations and the installation of underground infrastructure. Expansive soils occur in the county; the project site may be underlain by sandy loam and clay soils. Clay soils present a potential for expansion (NRCS 2025). Project conditions at full build out would be the same as existing conditions and no new buildings or structures would be constructed. The Proposed Project would not exacerbate conditions related to expansive soils at the site and would not represent a significant new hazard to people. In addition, the CBC requirements applicable to the Proposed Project ensures that no substantial risks to life or property would result related to expansive soils, and therefore, the impact would be **less than significant**.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater (No Impact)

Existing facilities on the project parcel are connected to an existing septic system. However, no wastewater treatment facilities would be required for the commercial cannabis cultivation activities. A portable toilet with a handwashing station would be provided and would be serviced weekly. No changes or modifications to the existing septic system would be required for the Proposed Project. Therefore, the Proposed Project would have **no impact** related to soil adequacy for sewage

f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature (No Impact)

All construction activities are complete. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated. The Proposed Project is the operation of a outdoor commercial cannabis cultivation operation and would not result in the destruction of a unique paleontological resource or site or unique geological feature. Therefore, the Proposed Project would have **no impact** on paleontological resources or unique geological features.

3.8 Greenhouse Gas Emissions

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.8.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Massachusetts v. Environmental Protection Agency

The US Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S. Ct. 1438 (2007), that carbon dioxide (CO₂) and other greenhouse gases (GHGs) are pollutants under the federal Clean Air Act (CCA), which the US Environmental Protection Agency (EPA) must regulate if it determines those GHGs pose an endangerment to public health or welfare.

Fuel Economy Standards

The National Highway Traffic Safety Administration (NHTSA) regulates vehicle emissions through the Corporate Average Fuel Economy (CAFE) Standards. On June 24, 2024, NHTSA, on behalf of the US Department of Transportation (DOT), announced it was finalizing CAFE standards for passenger cars and light trucks that increase at a rate of 2 percent per year for passenger cars in model years 2027-31, 0 percent per year for light trucks in model years 2027-28, and 2 percent per year for light trucks in model years 2029-31. NHTSA also announced that it was finalizing fuel efficiency standards for heavy-duty pickup trucks and vans (HDPUVs) for model years 2030-2032 that increase at a rate of 10 percent per year and model years 2033-2035 that increase at a rate of 8 percent per year. These new standards went into effect on August 23, 2024. The CAFE Standards apply to all on-road vehicle use.

EPA and NHTSA have set fuel economy and GHG emission standards for medium- and heavy-duty vehicles. In 2011, EPA and NHTSA finalized a joint rule that established a national program to reduce GHG emissions and improve the fuel economy for new medium- and heavy-duty vehicles manufactured in model years 2014 through 2018. In 2016, EPA and NHTSA finalized Phase 2 standards, which require fuel efficiency improvements and pollution reduction for medium- and heavy-duty vehicles for model years 2019 through 2027. On March 29, 2024, a final rule was issued to revise existing standards to reduce GHG emissions from heavy-duty vehicles in model year 2027 and set new, more stringent standards for model years 2028 through 2032 (EPA 2024).

EPA established a series of increasingly strict emission standards for new non-road diesel engines. Tier 1 standards were phased in on newly manufactured equipment from 1996 through 2000, depending on the engine horsepower category. Tier 2 standards were phased in on newly manufactured equipment from 2001 through 2006. Tier 3 standards were phased in on newly manufactured equipment from 2006 through 2008. Tier 4 standards, which require advanced emission control technology to attain them, were phased in between 2008 and 2015 (EPA 2025).

Heavy-Duty Vehicle Program

EPA and NHTSA also set fuel efficiency and GHG standards for medium- and heavy-duty trucks. In 2011, EPA and NHTSA finalized a joint rule that established a national program to reduce GHG emissions and improve fuel economy for new medium- and heavy-duty engines and vehicles. This rule—called the Phase 1 standards—requires fuel efficiency standards for engines in model years 2014 through 2018. In 2016, EPA and NHTSA adopted the Phase 2 standards, which require fuel efficiency standards for engines in model years 2018 through 2027 (EPA 2016b).

State Laws, Regulations, and Policies

The State has adopted various laws addressing various aspects of climate change, GHG mitigation, energy efficiency, and renewable energy. Much of this establishes a broad framework for the State's long-term GHG and energy reduction goals and climate change adaptation program. Governors have also issued several EOs related to the State's evolving climate change policy. A summary of key laws, regulations, plans, and policies relevant to the proposed plan is provided below, organized by general categories.

Executive Orders

There are four primary executive orders (EOs) related to the State's GHG reduction efforts. In general, EOs provide direction to State government agencies but do not place mandates on regional or local governments or the private sector.

EO S-03-05:

Issued by Governor Arnold Schwarzenegger on June 1, 2005, California Governor's EO S-3-05 set intermittent emissions reduction targets intended to provide incremental progress toward Assembly Bill (AB) 32's GHG emissions reduction target of reducing emissions to 1990 levels by 2020. EO S-3-05 set forth the following GHG reduction targets:

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

EO S-30-15:

On April 15, 2015, Governor Edmund G. Brown Jr. issued EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. EO B-30-15 was issued to align California's GHG emissions reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference

in Paris, held in 2015. The emissions reduction target of 40 percent below 1990 levels by 2030 is intended to keep California on track to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050.

EO B-55-18:

This EO established a new statewide goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” It directs the California Air Resources Board (CARB) to ensure future Climate Change Scoping Plans (discussed below) identify and recommend measures to achieve the carbon neutrality goal.

EO N-19-19:

Among other things, this EO required the Department of Finance to create a Climate Investment Framework; and required the State Transportation Agency to align transportation spending with achieving objectives of the Climate Change Scoping Plan, and to reduce vehicle miles traveled (VMT) through strategic discretionary investments. In July 2021, the California State Transportation Agency adopted the Climate Action Plan for Transportation Infrastructure (CAPTI). The CAPTI was prepared in the wake of EO N-19-19 and serves an integrated climate change infrastructure plan (CalSTA 2021).

Legislative GHG Reduction Targets

State law sets forth the following requirements for reducing Statewide levels of GHG emissions by 2020 and 2030.

Assembly Bill 32, Health & Safety Code Section 38500 et seq.

AB 32 required CARB to develop a Scoping Plan that describes California’s strategy for achieving the 2020 target and to update it every 5 years.

Senate Bill 32, Health & Safety Code Section 38566.

Adopted in tandem with Senate Bill (SB) 32, AB 197 of 2016 (Chapter 250, Statutes of 2016) required CARB, in implementing SB 32’s 2030 GHG reduction target, to (1) prioritize emissions reductions to consider the “social costs” of GHG emissions and (2) prioritize “direct emission reductions” at large stationary sources and at mobile sources.

AB 1279, Health and Safety Code Section 38562.2.

On September 16, 2022, the California Legislature enacted AB 1279, which codified stringent emissions targets for the State of achieving carbon neutrality no later than 2045 and negative emissions thereafter, and an 85 percent reduction in 1990 emissions level by 2045. (This superseded the previous GHG emissions reduction target set forth by EO S-3-05.)

Scoping Plan

Adopted in 2008 and updated in 2014, the initial Scoping Plan and First Update recommended measures to reduce emissions from a variety of activities and sources, including on-road transportation, electricity generation, building energy use, and uses of high global warming potential (GWP) gases. It also recommended that local governments set goals to reduce their municipal and communitywide emissions to 15 percent below existing (at the time of

scoping plan adoption) levels by 2020 to match the State's 2020 reduction target (CARB 2008). The initial Scoping Plan and its First Update were replaced by the 2017 Scoping Plan, which was approved by CARB in 2017. The 2017 Scoping Plan identifies measures for how California can achieve the 2030 target set forth in SB 32 and substantially advance toward the 2050 reduction goal identified in EO-S-3-05.

After AB 1279 was enacted, CARB released the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) on November 16, 2022, as also directed by AB 1279 (CARB 2022). The 2022 Scoping Plan traces the pathway for the State to achieve its carbon neutrality and an 85 percent reduction in 1990 emissions goal by 2045, as well as the short-term GHG reduction goal of 40 percent below 1990 emissions by 2030 pursuant to SB 32. Notably, the 2022 Scoping Plan pathway to carbon neutrality by 2045 demonstrates that the State would need to achieve a 48 percent reduction in statewide emissions by 2030 to meet this ambitious target by 2045. CARB adopted the 2022 Scoping Plan on December 16, 2022.

Transportation Refrigeration Units Regulation

CARB's 2022 amendments to the 2004 Transportation Refrigeration Unit (TRU) Airborne Toxic Control Measure increases the stringency of TRU fine particulate matter (PM_{2.5}) regulations and require the electrification of diesel-powered TRU trucks by 2029. While the regulation targets emissions of PM_{2.5}, the regulation would have the co-benefit of reducing GHG emissions by increasing utilization of electric TRUs and, thereby, reducing fossil fuel consumption. On January 3, 2025, EPA granted California Clean Air Act authorization of elements of its TRU Regulation. However, in its action, EPA did not act on the zero-emission elements of the TRU Regulation regarding requirements for the turnover of at least 15 percent of the diesel-fueled truck TRU fleet to zero-emission TRU by December 31, 2023, (and each year thereafter). On January 13, 2025, CARB withdrew its request for authorization of these zero-emission TRU requirements (CARB 2025).

Mobile Source Strategy

Developed by CARB to provide an integrated planning perspective and common vision for transforming the mobile sector to achieve air quality and climate change goals, this strategy uses conceptual scenarios to illustrate the emissions reduction potential of different vehicle technology mixes and VMT reductions to inform State policy development (CARB 2016a). The Mobile Source Strategy addresses on-road vehicles including passenger cars and light duty trucks, medium and heavy-duty trucks, buses, as well as off-road vehicles and equipment, including locomotives, cargo handling equipment, and construction equipment. It supports multiple planning efforts, including the State Implementation Plans for criteria air pollutants, the Scoping Plan, the Short-Lived Climate Pollution (SLCP) Reduction Strategy (discussed below), and the Sustainable Freight Action Plan (discussed below). The 2020 Mobile Source Strategy was approved by CARB and released on October 28, 2021, and will be updated every 5 years. Notably, CARB has rescinded its waiver request for some regulations concerning mobile-source emissions, either partially or in their entirety. This includes the Advanced Clean Fleets (ACF) Regulation and TRU Regulation. Because the ACF Regulation was not granted a waiver authorizing its addition to CARB's emissions control program, potential reductions in mobile source emissions related to implementation of the ACF Regulation would not be realized as assumed in the 2020 Mobile Source Strategy. Similarly, EPA did not grant California Clean Air Act authorization for some elements of the TRU Regulation until January 2025 (discussed below). Thus, the 2020 Mobile Source Strategy, which relied on emissions reductions from these regulations, may not be capable of meeting its ultimate targets. It is foreseeable that future iterations of the Mobile Source Strategy would not

include emissions reductions estimates related to regulations/rules or portions of regulations/rules for which CARB's waiver request has been rescinded, or would include other regulatory mechanisms to reduce mobile source emissions.

Short-Lived Climate Pollutant Strategy

SB 1383 (Chapter 395, Statutes of 2016) requires CARB to develop and implement a SLCP Strategy with the following reductions in emissions by 2030 compared to 2013 levels: methane by 40 percent, HFCs by 40 percent, and black carbon (non-forest) by 50 percent. The bill also specifies targets for reducing organic waste in landfills. SB 1383 also requires CARB to adopt regulations to be implemented on or after January 1, 2024, specific to the dairy and livestock industry, requiring a 40 percent reduction in methane emissions below 2013 levels by 2030, if certain conditions are met. Lastly, the bill requires CalRecycle to adopt regulations to take effect on or after January 1, 2022, to achieve specified targets for reducing organic waste in landfills.

Per its directive, CARB adopted the SLCP Strategy in 2017, establishing a path to decrease SLCPs from various sectors of the economy. Strategies span from wastewater and landfill practices and methane recovery to reducing natural gas leaks and consumption. The SLCP strategy also identifies measures that can reduce HFC emissions through incentive programs and limitations on the use of high-GWP refrigerants in new refrigeration and air-conditioning equipment (CARB 2017b).

Advanced Clean Cars Program (Passenger Vehicles)

AB 1493 of 2002 (known as Pavley I, Chapter 200, Statutes of 2002) provided the nation's first GHG standards for automobiles. AB 1493 required CARB to adopt vehicle standards that lowered GHG emissions from new light-duty autos to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards referred to as the Advanced Clean Cars (ACC) Program's Low Emission Vehicle (LEV) III Regulation was adopted for vehicle model years 2017–2025 in 2012 (13 California Code of Regulations [CCR] Section 1900 et seq.).

The ACC Program also includes the Zero Emission Vehicle Program and the Clean Fuels Outlet Regulation. The Zero Emission Vehicle Program is designed to achieve California's long-term emission reduction goals by requiring manufacturers to offer for sale specific numbers of zero-emission vehicles (ZEVs), which include battery electric, fuel cell, and plug-in hybrid electric vehicles. The Clean Fuels Outlet regulation is intended to ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of new advanced technology vehicles as they come to market. The ACC II Program was adopted by CARB in August 2022, and provides the regulatory framework for ensuring the sales requirement goal of EO N-79-20 to ultimately reach 100 percent ZEV sales in the state by 2035.

The ACC II Program builds upon the existing ACC program and establishes more stringent ZEV sales requirements for future benchmark years. CARB also established more stringent GHG emission standards and fuel efficiency standards for fossil fuel-powered on-road vehicles than the US Environmental Protection Agency. In addition, the program's ZEV regulation requires battery, fuel cell, and plug-in hybrid EVs to account for up to 15 percent of California's new vehicle sales by 2025 (CARB 2018a). The ACC II Program also sets sales requirements to ultimately reach the goal of 100 percent ZEV sales in the state by 2035.

Low Carbon Fuel Standard

In September 2018, to help achieve SB 32's emission reduction target, the LCFS regulation was amended to increase the statewide goal to a 20 percent reduction in carbon intensity of California's transportation fuels by at least 2030. Note that the majority of the emissions benefits due to the LCFS come from the production cycle (upstream emissions) of the fuel rather than the combustion cycle (tailpipe) (CARB 2020e).

Medium- and Heavy-Duty Vehicles

In 2008, CARB approved the Phase 1 Tractor-Trailer Greenhouse Gas Regulation to reduce GHG emissions by requiring the use of aerodynamic tractors and trailers that are also equipped with low rolling resistance tires (13 CCR Section 2020 et seq.). The regulation applies to certain Class 8 tractors manufactured for use in California and is harmonized with the parallel EPA and NHTSA Phase 1 heavy-duty truck standards. CARB amended the Tractor-Trailer Greenhouse Gas Regulation in 2019 (Phase 2 standards) to align with EPA and NHTSA Phase 2 heavy-duty truck standards.

Zero Emission Trucks

CARB adopted the Advanced Clean Trucks (ACT) Regulation in June 2020, which aims to accelerate the sales of heavy-duty EVs. It consists of two parts, a manufacturer component and a fleet reporting component. Manufacturers are required to sell an increasing percentage of heavy-duty zero-emission vehicles between 2024 and 2035. By 2035, 40 percent of Class 8 truck purchases will be required to be zero emission. Fleets with 50 or more vehicles will be required to report on their fleet's composition and activities in order to help CARB craft new strategies to hasten the adoption of zero-emission vehicles (CARB 2020f).

Advanced Clean Fleets

CARB's 2022 ACF Regulation was developed to reduce diesel PM through the transition of medium- and heavy-duty trucks to become fully electric by 2045. At the time of the writing of this Draft EIR, California has withdrawn its request for a waiver and authorization for the addition of the ACF Regulation to its emissions control program (CARB 2025b). CARB is not enforcing the existing portions of the ACF Regulation that require a federal waiver or authorization, such as the portions of the ACF Regulation that apply to high priority and drayage fleets. However, not all elements of the Advanced Clean Fleets regulation require a federal waiver or authorization (CARB 2025c). The state and local government fleets portion of the ACF Regulation remains unaffected.

California Governor's Office of Land Use and Climate Innovation Technical Advisory

In December 2018, the California Governor's Office of Land use and Climate Innovation (LCI) (formerly the Governor's Office of Planning and Research or OPR) published the most recent version of the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), which provides guidance for VMT analysis. For office uses or other employment sites, the Technical Advisory recommends a threshold of at least 15 percent below the regional average VMT per employee. This would include most of the uses to which the Proposed Project would apply, including cultivation, processing, and distribution. The Technical Advisory also provides a screening threshold for small projects. According to the Technical Advisory, 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 (OPR 2018).

Local Laws, Regulations, and Policies

Sonoma County Climate Change Action Resolution

The Regional Climate Protection Authority (RCPA) coordinates countywide protection efforts among Sonoma County's nine cities and multiple agencies. In 2016, RCPA published the Climate Action 2020 Plan that sets forth GHG reduction targets to reduce countywide GHG emissions. Climate Action 2020 Plan included regional actions to reduce GHG emissions to 25 percent below 1990 levels by 2020 and provide local jurisdictions resources and guidance for implementing local GHG emission reducing actions. The Regional Climate Protection Authority certified an Environmental Impact Report and adopted the Climate Action Plan in 2016 and was subsequently litigated. The California Supreme Court (Court) found the Environmental Impact Report inadequate, and the Regional Climate Protection Authority declined to appeal. Unable to adopt the Climate Action 2020 Plan, the Sonoma County Board of Supervisors adopted the Climate Change Action Resolution. This Resolution is intended to help create countywide consistency and clear guidance about coordinated implementation of the GHG reduction measures.

Key components of the Resolution include the following:

- Sonoma County agrees to work towards the RCPA's countywide target to reduce greenhouse gas emissions by 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.
- Sonoma County adopts the following energy related goals to reduce greenhouse gas emissions, and will pursue local actions that support these goals:
 1. Increase building energy efficiency
 2. Increase renewable energy use
 3. Switch equipment from fossil fuel to electricity
 4. Reduce travel demand through focused growth
 5. Encourage a shift toward low-carbon transportation options
 6. Increase vehicle and equipment fuel efficiency
 7. Encourage a shift toward low-carbon fuels in vehicles and equipment
 8. Reduce idling
 9. Increase solid waste diversion
 10. Increase capture and use of methane from landfills
 11. Reduce water consumption
 12. Increase recycled water and graywater use
 13. Increase water and waste-water infrastructure efficiency
 14. Increase use of renewable energy in water and wastewater systems
 15. Reduce emissions from livestock operations
 16. Reduce emissions from fertilizer use

17. Protect and enhance the value of open and working lands
 18. Promote sustainable agriculture
 19. Increase carbon sequestration
 20. Reduce emissions from the consumption of goods and services
- Sonoma County will continue to work to increase the health and resilience of social, natural, and built resources to withstand the impacts of climate change; and
 - Sonoma County has the goal of increasing resilience by pursuing local actions that support the following goals:
 1. Promote healthy, safe communities
 2. Protect water resources
 3. Promote as sustainable, climate-resilient economy
 4. Mainstream the use of climate projections.

Sonoma County Transportation Authority

The Sonoma County Transportation Authority (SCTA) is a collaborative agency of the cities and County of Sonoma that provides comprehensive countywide transportation planning and programming. The SCTA coordinates the activities of local jurisdictions with regional, state, and federal entities. SCTA provides a VMT screening map to aid in assessing transportation-related impacts. The map depicts areas within Sonoma County where areawide VMT is 15 percent or more below the countywide average VMT per employee. Notably, Sonoma County has not adopted a VMT policy or thresholds of significance.

3.8.2 Environmental Setting

The Physical Scientific Basis of Greenhouse Gas Emissions and Climate Change

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth.

Prominent GHGs contributing to the greenhouse effect are CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. The likely range of human-induced warming in global-mean surface air temperature (GSAT) in 2010–2019 relative to 1850–1900 is 0.8°C–1.3°C, encompassing the observed warming of 0.9°C–1.2°C, while the change attributable to natural forcings is only –0.1°C to +0.1°C. It is very likely that human-induced GHG increases were the main driver of tropospheric warming since comprehensive satellite observations started in

1979, and virtually certain that human-induced GHG forcing is the primary driver of the observed changes in hot and cold extremes on the global scale (IPCC 2021).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO₂ emissions, approximately 56 percent are estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years, whereas the remaining 44 percent of human-caused CO₂ emissions remain stored in the atmosphere (IPCC 2023).

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is considered to be enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

Greenhouse Gas Emissions Sources and Sinks

Emissions of CO₂ are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices, landfills, and forest fires. N₂O is also largely attributable to agricultural practices and soil management. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution (CO₂ dissolving into the water) and are two of the most common processes for removing CO₂ from the atmosphere.

Effects of Climate Change on the Environment

The Intergovernmental Panel on Climate Change (IPCC) predicts that the global mean surface temperature increase by the end of the 21st century (2081–2100), relative to 1986–2005, could range from 0.5 to 8.7 degrees Fahrenheit. Additionally, IPCC projects that global mean sea level rise will continue during the 21st century, very likely at a faster rate than observed from 1901 to 2015. By 2100, the rise will likely range from 18 to 33 inches (0.48 to 0.84 meters) (IPCC 2019: 323-4).

According to IPCC, which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, global average temperature will increase by 3.7 to 4.8 °C (6.7 to 8.6 degrees Fahrenheit [°F]) by the end of the century unless additional efforts to reduce GHG emissions are made (IPCC 2014:10). According to California's Fourth Climate Change Assessment, with global GHGs reduced at a moderate rate California will experience average daily high temperatures that are warmer than the historic average by 2.5 °F from 2006 to 2039, by 4.4°F from 2040 to 2069, and by 5.6°F from 2070 to 2100; and if GHG emissions continue at current rates then California will experience average daily high temperatures that are warmer than the historic average by 2.7°F from 2006 to 2039, by 5.8°F from 2040 to 2069, and by 8.8°F from 2070 to 2100 (OPR et al. 2018).

Greenhouse Gas Emission Sources

In 2022, statewide emitting activities accounted for 371.1 million metric tons (MMT) of CO₂-equivalent (CO₂e) MMTCO₂e, which is 10.2 MMTCO₂e lower than 2021 levels and 59.9 MMTCO₂e below the 2020 GHG limit of 431 MMTCO₂e (CARB 2024). In 2014, statewide GHG emissions dropped below the 2020 GHG limit and have remained below the limit since that time. Overall trends in the *California Greenhouse Gas Emissions from 2000 to 2022: Trends of Emissions and Other Indicators* demonstrate that the CI of California's economy (the amount of carbon emissions per million dollars of gross state product [GSP]) is declining. From 2000 to 2022, the CI of California's economy decreased by 54.8 percent while the GSP increased by 77.5 percent. California's GSP increased 0.7 percent in 2022. Emissions per GSP declined by 3.1 percent from 2021 to 2022 (CARB 2024b). Overall trends in the AB 32 GHG Inventory also continue to demonstrate that the CI of California's economy is declining. The continuation of the downward GHG emissions trend from 2021 to 2022 indicates that the increase in emissions from 2020 to 2021 is likely an anomaly caused by broader economic trends related to the COVID-19 pandemic and associated recovery (CARB 2024b).

As discussed previously, GHG emissions are attributable in large part to human activities. **Table 3.8-1** summarizes the statewide GHG inventory for California; transportation, industry, and electricity generation are the largest GHG emission sectors.

Table 3.8-1. Statewide GHG Emissions by Economic Sector (2022)

Sector	Percent
Transportation	39
Industrial	23
Electricity generation (in state)	11
Electricity generation (imports)	5
Agriculture	8
Residential	8
Commercial	6
Not specified	<1

Source: CARB 2024.

Sonoma County GHG Emissions Inventory

As part of the preparation of the Climate Resilience Comprehensive Action Plan, Sonoma County conducted a GHG emissions inventory for the year 2022. **Table 3.8-2** below provides a summary of Sonoma County's GHG emissions by sector in 2022.

Table 3.8-2. Sonoma County GHG Emissions by Sector (2022)

Sector	MTCO ₂ e	Percent
Transportation	1,794,818	58
Buildings	732,091	24
Agriculture	392,185	13
Solid waste	176,877	6
Water	16,402	1

Sector	MTCO ₂ e	Percent
Total	3,112,373	100

Note: MTCO₂e = metric tons of carbon dioxide equivalent.

Source: Sonoma County 2024.

The largest source of GHG emissions in Sonoma County was from the transportation sector (58 percent), followed by the buildings sector (24 percent). Sonoma County GHG emissions have decreased over 20 percent from 1990 (Sonoma County 2024).

3.8.3 Discussion of Checklist Responses

a. Generate a net increase in greenhouse gas emissions which may have a significant impact on the environment (Less than Significant Impact)

No construction activities or site modifications such as site preparation or earthwork, grading, new roads, vegetation removal, or new drainage systems are proposed for the Proposed Project. There would be no demolition of existing structures and no construction of new buildings or structures as part of the Proposed Project.

The Bay Area Air District has not developed any thresholds regarding construction period GHG emissions. Due to the Proposed Project's size and lack of a construction threshold, potential project emissions have not been quantified. The Bay Area Air District recommends non-mandatory best management practices (BMPs) to ensure that construction emissions would be minimized (BAAQMD 2022a: Table 6-1). However, these measures are mostly applicable to large-scale projects with extensive construction phasing and heavy-duty equipment usage. As stated above, the Proposed Project would not involve any construction activities or site modifications.

There would be some increase in GHG emissions associated with the Proposed Project. Operation of the Proposed Project would generate GHG emissions above baseline conditions associated with worker commute trips (the Proposed Project would generate a maximum of 20 daily trips during harvesting operations), hauling trips (a maximum of four, one-way hauling trips per day over a five-day period would occur during harvesting season) landscaping and fertilizer use, water consumption, and waste and wastewater generation. No electricity would be consumed on-site. The water utility would use a small amount of energy to pump water from the utility to the project site. Any use of on-site off-road equipment, such as a utility vehicle (e.g., John Deere Gator) would also generate GHG emissions.

GHG emissions would also occur from outgoing cannabis product transportation during operations. As identified in Section 3.8.1.3, "Local Laws and Regulations," SCTA provides a pre-screening map to aid in identifying areas within the County whose areawide VMT is 15 percent below the regional average. This metric is based on LCI's guidance for employment projects within the Technical Advisory, which recommends a threshold of at least 15 percent below the regional average VMT per employee. The Proposed Project is located outside of the pre-screening areas identified in SCTA's screening map and thus is not screened from further analysis of transportation-related impacts. As Sonoma County has not adopted a VMT policy or thresholds of significance, this analysis utilizes the Technical Advisory's daily trip threshold, which states that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact (OPR 2018). As stated above, the Proposed Project would generate a maximum of 10 one-way trips per day associated

with commuting. Operation of the Proposed Project would also involve a maximum daily trip amount of 20 one-way trips per day for 2 days associated with product pickup during harvest operations. Thus, total daily vehicle trips (i.e., combined employee and product pick-up trips) would be below the 110 daily trip threshold recommended in the Technical Advisory. The Bay Area Air District recommends land use development projects incorporate these project design features: no natural gas infrastructure, meeting the Tier 2 electric vehicle requirements of the CalGreen Code, and meeting the VMT reduction targets of SB 743. However, these design features are not applicable to the Proposed Project. Notably, the Proposed Project would not support any natural gas infrastructure, would not generate vehicle trips resulting in a transportation impact (see Impact criterion “b” in Section 3.17, “Transportation”), and would not introduce new parking and is, thus, not subject to the charging requirements of the CalGreen Code.

According to the BAAQMD CEQA Guide, projects which incorporate the design elements specified above would be considered to have done their “fair share” of implementing the goal of carbon neutrality by 2045. Project consistency with the emissions targets provided by AB 1279 (i.e., reducing statewide GHG emissions by 85 percent from a 1990 baseline inventory and achieving carbon neutrality by 2045) would result in consistency with emissions targets provided by SB 32 and AB 32, which are less stringent. The 2022 Scoping Plan details the framework for achieving the 85 percent reduction in 1990 emissions goal by 2045 and progress toward additional reductions. Appendix D of the 2022 Scoping Plan includes detailed GHG reduction measures and local actions that land use development projects can implement to support the Statewide goal. Appendix D identifies three sectors that local jurisdictions can address: 1) building carbonization (i.e., the prohibition of onsite natural gas infrastructure, 2) VMT reductions, and 3) the electrification of the mobile sector. The Proposed Project would not introduce any new natural gas infrastructure, would not contribute additional VMT that would conflict with OPR’s requirements under SB 743 (see Section 3.17, “Transportation”), and would not introduce new parking spaces subject to the EV charging requirements of the CalGreen Code. Therefore, the Proposed Project would be consistent with the 2022 Scoping Plan.

In addition to the 2022 Scoping Plan, Plan Bay Area 2050 satisfies CARB’s most recent SB 375 targets that require ABAG/MTC to achieve a 10 percent and a 19 percent per capita reduction by 2020 and 2035. The Proposed Project would not result in significant impacts related to VMT and would therefore not prevent ABAG/MTC from achieving its targets in Plan Bay Area 2050 as operation of the Proposed Project would not generate substantial new vehicle trips above existing conditions (see Impact criterion “b” in Section 3.17, “Transportation”).

Given the small size of the Proposed Project (approximately 1 acre), minor construction and operational activities, and compliance with BAAQMD’s project design features which ensure that the Proposed Project contributes its “fair share” toward carbon neutrality by 2045, the Proposed Project’s emissions of GHGs would not have a significant impact on the environment and the Proposed Project would not conflict with the 2022 Scoping Plan. Impacts would be **less than significant**.

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant Impact)

See the discussion under criterion a) above.

3.9 Hazards and Hazardous Materials

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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, create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Be 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 and result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.9.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act – Superfund Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC § 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 of 1976

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC § 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, transport, 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 was delegated authority to implement the RCRA program in August 1992. The California Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program in California, in addition to California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. § 136 et seq.) was enacted in 1947, but has since been amended by the Federal Environmental Pesticide Control Act of 1972 and the Food Quality Protection Act of 1996. In its current form, FIFRA mandates USEPA to regulate the use and sale of pesticides to protect human health and the environment. USEPA achieves this mandate by registering and labeling pesticides.

Currently, no pesticides are registered for use on cannabis. California Department of Pesticide Regulation (CDPR) has published guidance that commercial cultivators can legally apply pesticides to cannabis that are exempt from residue-tolerance requirements and are either: (1) registered and labeled for a use that is broad enough to include use on cannabis (e.g., unspecified green plants), or (2) exempt from registration requirements as a minimum-risk pesticide under FIFRA Section 25(b). See additional discussion of CDPR’s guidance with respect to cannabis under “State Laws, Regulations, and Policies” below.

Commercial cannabis cultivators using registered pesticides would be required to follow the label instructions developed pursuant to FIFRA. Under FIFRA, all new pesticides (with minor exceptions) must be registered by the Administrator of USEPA through a process in which appropriate crops and sites for use of the pesticide are identified and prescribed based on research data. Labeling requirements control when and under what conditions

pesticides can be applied, mixed, stored, loaded, or used; when a site can be re-entered after application; and when crops can be harvested.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 C.F.R. Part 112) applies to facilities that contain a single aboveground 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 types of facilities to prepare, amend, and implement SPCC plans.

Worker Safety Regulations

The Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. The agency sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). These standards, codified in 29 C.F.R. Part 1910, address issues that range in scope from walking and working surfaces, to exit routes and emergency planning, to hazardous materials and personal protective equipment (PPE). They include exposure limits for a wide range of hazardous materials, including pesticides, as well as requirements that employers provide PPE (i.e., protective equipment for eyes, face, or extremities; protective clothing; respiratory devices) to their employees wherever it is necessary (i.e., when required by the label instructions) (29 C.F.R. § 1910.132). OSHA also establishes criteria by which each state can implement its own health and safety program.

State Laws, Regulations, and Policies

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. Statewide, DTSC has primary regulatory responsibility for management of hazardous materials, and it works with other state agencies and delegates its authority to local jurisdictions that enter into agreements with the state. Local agencies administer these laws and regulations. DTSC, CalEPA, and other state agencies set the standards for their programs while local governments implement the standards. These local implementing agencies, the Certified Unified Program Agencies (CUPAs), regulate and oversee the following for each county:

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

California Health and Safety Code—Hazardous Waste and Hazardous Materials

Several sections of the California Health and Safety Code deal with hazardous waste and hazardous materials. Division 20, Chapter 6.5 addresses hazardous waste control and contains regulations on hazardous waste management plans, hazardous waste reduction, recycling and treatment, and hazardous waste transportation and hauling. Under Chapter 6.5, Article 6, persons generating hazardous wastes that are to be transported for off-site handling, treatment, storage, or disposal must complete a hazardous waste manifest before transport, indicating the facility to which the waste is being shipped for treatment, disposal, or other purposes.

Under Chapter 6.95, Article 1, areas and businesses that have a threshold amount of hazardous materials on site (55 gallons of liquid; 500 pounds of solid for businesses) must have plans in place for emergency response to an accidental release of materials. These Hazardous Materials Business Plans (HMBPs) and Hazardous Materials Area Plans (HMAPs) must include at least the following:

- A listing of the chemical name and common names of every hazardous substance or chemical product handled by the business;
- The category of waste, including the general chemical and mineral composition, of every hazardous waste handled by the business;
- The maximum amount of each hazardous material or mixture containing a hazardous material that is present on site;
- Sufficient information on how and where the hazardous materials are handled by the business to allow fire, safety, health, and other appropriate personnel to prepare adequate emergency responses to potential releases of the hazardous materials;
- Emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material; and
- Training for all new employees and annual training, including refresher courses, for all employees on safety procedures in the event of a release or threatened release of a hazardous material.

Under Chapter 6.95, Article 2, operators of stationary sources of hazardous materials are required (if they are deemed an accident risk) to prepare risk management plans (RMPs), detailing strategies to reduce the risk of accidental hazardous material release, and submit them to the California Emergency Management Agency.

California Accidental Release Prevention Program

First implemented in 1997, the California Accidental Release Prevention (CalARP) program was designed to prevent accidental releases of hazardous substances, minimize damage if releases occur, and satisfy community right-to-know laws. Like the chemical accident prevention provisions of the federal Clean Air Act, the CalARP program and implementing regulations. (Pub. Resources Code, § 5097.5.) require businesses that handle more than a threshold quantity of regulated substances to develop an RMP.

In most cases, the CUPA is the administering agency responsible for implementing the CalARP program. When no CUPA exists, the administering agency is designated by the Secretary for Environmental Protection or the Office of Emergency Services. The administering agency determines the level of detail in the RMPs, reviews the RMPs, conducts facility site inspections, and provides public access to most of the information provided by facilities.

California Fire Code—Hazardous Materials Management Plans and Hazardous Materials Inventory Statements

The California Fire Code (Cal. Code Regs., tit. 29, part 9) requires businesses that handle more than a threshold quantity of hazardous materials to prepare a Hazardous Materials Management Plan (HMMP) and a Hazardous Materials Inventory Statement (HMIS). HMMPs and HMISs are similar to the HMBPs and HMAPs required under Chapter 6.95 of the California Health and Safety Code. Like business and area plans, the HMMP/HMIS requirement is an element of the Unified Program; however, the CAL FIRE Office of the State Fire Marshall is responsible for implementing the HMMP and HMIS.

The HMMP must include a facility site plan containing information such as the location of emergency equipment, hazardous material storage tanks, and emergency exits. The HMIS must include information on the hazardous materials at the site, such as product name, chemical components, amount in storage, and hazard classification. As part of an application for a permit, owners or operators of facilities that handle hazardous materials also must submit an emergency response plan and an emergency response training plan.

California Emergency Services Act

The California Emergency Services Act (Gov. Code, Chapter 7) established the California Emergency Management Agency and created requirements for emergency response training and planning. Under this act, the State is required to develop a statewide toxic disaster contingency plan that can facilitate an effective, multi-agency response to a situation in which toxic substances are dispersed in the environment so as to cause, or potentially cause, injury or death to a substantial number of persons or substantial harm to the natural environment (Gov. Code, § 8574.18). The California Emergency Services Act also requires the agency to develop and manage the California Hazardous Substances Incident Response Training and Education Program, which provides classes in hazardous substance response (Gov. Code, § 8574.20). Under the California Emergency Services Act, the California Emergency Management Agency would have the ability to provide an effective response to a catastrophic hazardous materials release, such as from an accident at a chemical pesticide manufacturing plant.

Hazardous Waste Generator Program

The Hazardous Waste Generator Program is administered by CUPAs under the Unified Program with oversight and assistance from DTSC. Under the program, CUPAs conduct inspections at hazardous waste generator facilities. Inspectors check hazardous waste generators for compliance with such requirements as having a USEPA identification number, contingency plan information posted near a telephone, containers in good condition and properly labeled, and authorized waste transport vehicles. If generators fail to comply with regulations or permit requirements, CUPAs may assess penalties.

CUPAs also administer on-site, tiered permitting programs. Based on the type of waste they treat and the treatment processes they employ, businesses are required to obtain a permit for the appropriate tier. Permits may require businesses to clean equipment or alter processes to improve safety.

Pesticides and Pest Control Operations

Detailed implementing regulations for CDPR's pesticide regulatory program are codified in the California Code of Regulations, title 3, division 6. CDPR is the state agency with primary responsibility for regulating pesticide use in California. CDPR oversees state pesticide laws, including pesticide labeling, and is vested by USEPA to enforce

federal pesticide laws in California. CDPR also oversees the activities of the county agricultural commissioners related to enforcement of pesticide regulations and related environmental laws and regulations locally.

As identified in California Code of Regulations, title 3, division 6, CDPR evaluates proposed pesticide products and registers those pesticides that it determines can be used safely. In addition, CDPR's oversight includes:

- Licensing of pesticide professionals;
- Site-specific permits required before restricted-use pesticides may be used in agriculture;
- Strict rules to protect workers and consumers;
- Mandatory reporting of pesticide use by agricultural and pest control businesses;
- Environmental monitoring of water and air; and
- Testing of fresh produce for pesticide residues.

The regulations require that employers of pesticide workers provide protective clothing, eyewear, gloves, respirators, and any other required protection, and also requires employers to ensure that protective wear is worn according to product labels during application. The regulations also require that employers provide workers with adequate training in pesticide application and safety; communicate pesticide-related hazards to workers; ensure that emergency medical services are available to workers; and ensure adherence to restricted-entry intervals between pesticide treatments. (Cal. Code Regs., tit. 3, § 6764.)

CDPR Guidance on Pesticide Use in Commercial Cannabis Cultivation

In accordance with MAUCRSA, CDPR is required to develop guidelines for the use of pesticides in the cultivation of cannabis and residue in harvested cannabis (Bus. & Prof. Code, § 26060, subd. (d).) However, CDPR is pre-empted by federal law from registering a pesticide for sale and use that is not first registered by USEPA.

CDPR has advised CACs to issue a Unique Identifier (i.e., an operator identification data number) to any cannabis grower who submits a valid application, except in counties in which growing cannabis is prohibited by a local ordinance. The operator identification data would be used in the management of pesticide use data. CDPR has advised that the use of a pesticide for the cultivation of cannabis falls under the broad definition of "agricultural use" in the Food and Agricultural Code, even though the Food and Agricultural Code does not explicitly consider cannabis an agricultural commodity.

CDPR has also prepared guidance documents outlining the legal requirements for pesticide use on cannabis and providing guidance on legal pest management practices for California cannabis growers. Essentially, CDPR's guidance states that the only pesticide products allowable for use on cannabis are those that contain an active ingredient that is exempt from residue-tolerance requirements and are either (1) registered and labeled for a use that is broad enough to include use on cannabis (e.g., unspecified green plants), or (2) exempt from registration requirements as a minimum-risk pesticide under FIFRA section 25(b) and the California Code of Regulations, title 3, section 6147 (CDPR 2021).

Pesticide Contamination Prevention Act

The Pesticide Contamination Prevention Act (Food & Agr. Code, §§ 13145–13152) requires CDPR to:

- Obtain environmental fate and chemistry data for agricultural pesticides before they can be registered for use in California;

- Identify agricultural pesticides with the potential to pollute groundwater;
- Sample wells to determine the presence of agricultural pesticides in groundwater;
- Obtain, report, and analyze the results of well sampling for pesticides by public agencies;
- Formally review any detected pesticide to determine whether its use can be allowed; and
- Adopt use modifications to protect groundwater from pollution if formal review indicates that continued use can be allowed.

The act requires CDPR to develop numerical values for water solubility, soil adsorption coefficient, hydrolysis, aerobic and anaerobic soil metabolism, and field dissipation of pesticides to protect groundwater, based in part on data submitted by pesticide registrants.

The act also states that CDPR shall establish a list of pesticides that have the potential to pollute groundwater, called the Groundwater Protection List. Any person who uses a pesticide that is listed on the Groundwater Protection List is required to file a report with the CAC, and pesticide dealers are required to make quarterly reports to CDPR of all sales of pesticides on the list to persons not otherwise required to file a report. The Pesticide Contamination Prevention Act ensures that pesticides allowed for use in California, including those that may be used in commercial cannabis cultivation, will have been studied by CDPR for their potential to contaminate groundwater and the environment.

Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

The Safe Drinking Water and Toxic Enforcement Act, or Proposition 65, requires the Governor to maintain and publish a list of chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Once a chemical has been listed, businesses are responsible for providing a warning before knowingly or intentionally exposing their employees or the public to an amount of the chemical that poses a significant risk. The California Office of Environmental Health Hazard Assessment (OEHHA) is the lead agency responsible for implementing Proposition 65, with input from CDPR and other agencies so that the best scientific information is used in listing chemicals. In its current state, the Proposition 65 list contains a wide variety of chemicals, including various pesticides and cannabis smoke (OEHHA 2025).

California Division of Occupational Safety and Health Regulations

The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) regulations contain requirements for agricultural operations related to pesticide application. The regulations require that a notice be attached to all tanks larger than 100 gallons in capacity that are used for pesticides, providing precautionary instructions; controls on the tanks must be placed to minimize exposure to employees from ruptured or breaking lines (Cal. Code Regs., tit. 8, § 3453). Machines, applicators, and other equipment used for pesticide application must be decontaminated before they are overhauled or placed in storage (Cal. Code Regs., tit. 8, § 3451).

In addition, the Cal/OSHA regulations contain various provisions that require safe operation of equipment, safety instructions provided in a language that employees understand, and access to first aid.

California Fire Code

The California Fire Code (Cal. Code Regs., tit. 24, part 9) establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. The California Fire Code also contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials.

DCC Commercial Cannabis Business Regulations

Sections 15714 through 15724 of DCC's regulations require all cannabis products to be tested by a licensed cannabis testing laboratory prior to sale. These regulations ensure that the cannabis product consistently meets the established specifications for cannabinoids, moisture content and water reactivity, residual pesticides, residual solvents and processing chemicals, microbial impurities, mycotoxins, foreign material, heavy metals, and if applicable, terpenoids. Products that do not meet regulatory specifications must not be sold. In addition, DCC regulations ensure that cannabis products have been processed, manufactured, packaged, labeled, and held under conditions to prevent adulteration and misbranding as defined in Business and Professions Code sections 26039.5 and 26039.5.

Local Laws, Regulations, and Policies

The Sonoma County Fire Prevention and HazMat Division, Hazardous Materials Unit is the designated CUPA for Sonoma County. The Hazardous Materials (HazMat) Unit implements hazardous materials and hazardous wastes regulations in Sonoma County through the California Environmental Reporting System (CERS) and DTSC. In 1993, the Board of Supervisors designated the Agricultural department to inspect all agricultural facilities for compliance with hazardous materials and hazardous waste laws and regulations (County of Sonoma, Agricultural Division, 2024).

As the CUPA, the Fire Prevention and HazMat Division administers the following Unified Programs (County of Sonoma, Hazardous Materials Unit, 2024):

- Hazardous Materials Release Response Plans and Inventory (Business Plan) Program
- Underground Storage Tank Program
- Hazardous Waste Generator Program
- Aboveground Petroleum Storage Act Program

Leaking Underground Storage Tank- Local Oversight Program

As of July 1, 2021, the Sonoma County Local Oversight Program (LOP) ended. All remaining open LOP sites have been transferred to the appropriate Regional Water Board for continued LUST cleanup oversight. LUST sites are those undergoing cleanup due to an unauthorized release from an underground storage tank (UST) system. UST regulations apply to underground tanks and piping storing any type of hazardous substance, with some exemptions.

Sonoma County Multijurisdictional Hazard Mitigation Plan

Sonoma County's Hazard Mitigation Plan identifies potential hazards that a planning area is most vulnerable to, assesses risk to populations, property, and critical facilities, and includes a mitigation strategy to reduce risks. The existing 2016 Sonoma County Hazard Mitigation (HMP) was prepared for the County only. The planning process for updating the 2016 HMP leveraged a regional approach to prepare a Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) that comprises the hazard profiles, risk assessments, and mitigation strategies for multiple jurisdictions.

Sonoma County Community Wildfire Protection Plan

The Sonoma County Community Wildfire Protection Plan (CWPP) 2023 Update was signed by the Sonoma County Board of Supervisors on May 9, 2023. The CWPP Update reflects collaborative development with active public participation, identifies wildfire risks and mitigation measures across the County, and lists community-driven Risk Reduction Priorities and specific project recommendations that agencies and community groups can use to develop projects MJHMP recommendations are referenced in the CWPP.

Sonoma County Emergency Operations Plan

The Sonoma County Operational Area Emergency Operations Plan (EOP) is a guidebook for phases of an all-hazards emergency management process within the Operational Area (County). The phases of emergency management include preparedness, response, and recovery, and mitigation. The EOP is intended to facilitate coordination between agencies and jurisdictions within Sonoma County while ensuring the protection of life, property, and the environment during disasters. This Plan provides the framework for a coordinated effort among local community, county, city, special district, private sectors, regional, state, tribal, and federal partners.

Bay Area Air Quality Management District and Northern Sonoma County Air Pollution Control District

Regulates the stationary sources of air pollution such as residential wood burning and agricultural and industry emissions. Both air districts regulate renovation and demolition activities that may result in pollutants such as asbestos and lead being released to the environment.

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-250(f) Health and Safety. Commercial cannabis activity shall not create a public nuisance or adversely affect the health or safety of the nearby residents or businesses by creating dust, light, glare, heat, noise, noxious gasses, odor, smoke, traffic, vibration, unsafe conditions or other impacts, or be hazardous due to the use or storage of materials, processes, products, runoff or wastes.

Sonoma County Code section 26-88-254(f)(9). Airport Compatibility. All cannabis operations shall comply with the comprehensive airport land use plan.

Sonoma County Code section 26-88-254(f)(18). Hazardous Materials Sites. No commercial cannabis activity shall be sited on a parcel listed as a hazardous materials site compiled pursuant to Government Code Section 65962.5, unless a use permit is obtained.

Sonoma County Code section 26-88-254(g)(4) Hazardous Materials. All cultivation operations that utilize hazardous materials shall comply with applicable hazardous waste generator, underground storage tank, above ground storage tanks, and AB 185 (hazardous materials handling) requirements and maintain any applicable

permits for these programs from the fire prevention division, certified unified program agency (CUPA) of Sonoma County Fire and Emergency Services Department, or agricultural commissioner.

3.9.2 Environmental Setting

Existing Hazards and Hazardous Materials

There are no active hazardous materials cleanup sites listed on EnviroStor or Geotracker (DTSC 2025; SWRCB 2025) within 5,000 feet of the project site. Envirostor lists one Historical site at 6040 Old Redwood Highway that was referred to another agency in 1988 (DTSC 2025). Geotracker also lists six LUST Cleanup Sites within 5,000 feet of the project site, but all are classified as Completed – Case Closed (SWRCB 2025). The project area is not located on a site listed pursuant to Government Code section 65962.5 (also known as the Cortese List).

Airports

The nearest airport to the project site is the Petaluma Municipal Airport, which is located approximately 4.5 miles to the southeast. The Sonoma Valley Airport is located approximately 12.6 miles southeast of the project site and Gness Field Airport is approximately 13 miles southeast of the project site.

Wildfire Hazards

The project site is in a rural area of unincorporated Sonoma County. The Proposed Project includes a new outdoor commercial cannabis cultivation project on a less than two acres portion of a larger agricultural property. (Hurvitz Environmental Services 2020). Existing structures include a single-family residence, a greenhouse associated with a non-cannabis commercial nursery, and a metal warehouse/shop building that houses a construction business and two mobile office buildings. The area surrounding the project site is predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential development. Vegetation in the wider area largely consists of pasturelands, agricultural crops, and open grassy fields. (Fiasco Farms et. al. 2022).

Fire Hazard Severity Zones (FHSZ) are developed by the Office of the State Fire Marshal and determined based on risk factors such as slope, winds, and fuel loading, and are classified based on the severity of the risk (moderate, high, and very high). The Proposed Project is classified as being located within a moderate FHSZ – Local Responsibility Area (LRA) (Sonoma County 2025a).

The Proposed Project would be in an area in the jurisdiction of Rancho Adobe Fire Protection District (Sonoma County 2025b), located approximately 1 mile southwest of the site.

Sensitive Receptors

Sensitive receptors include facilities such as hospitals, schools, daycare facilities, elderly housing and convalescent facilities where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. The property is zoned Diverse Agricultural District (DA) (Hurvitz Environmental Services 2020). Penngrove Elementary School is the closest school, located approximately 0.7 miles southwest of the site. Also, to the southwest, Bright Skies Montessori is approximately 0.9 miles from the site. To the northwest, Credo High School is approximately 1.4 miles from the site, Monte Vista Elementary School is approximately 1.7 miles from the site, and University Elementary School is approximately 2 miles from the site. Sonoma State University is also approximately 2.1 miles to the northwest. Mendez Family Daycare is approximately 2 miles northwest from the site. The nearest church is Penngrove Community Church, located approximately 0.8 miles southwest of the site. Additionally, the Catholic Newman Club – SSU is located approximately 1.9 miles to the

northwest of the site. Penngrove Clubhouse recreation center is approximately 0.9 miles southwest of the site. Sunset House assisted living facility is approximately 1.2 miles west of the site and Wine Country Senior Living is approximately 1.3 miles to the northwest.

3.9.3 Discussion of Checklist Responses

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Less than Significant Impact)

As discussed in Section 2.6, construction associated with the Proposed Project is now complete, and in accordance with Section 1.5 the analysis of construction impacts is mooted.

Licensed commercial cannabis cultivation, such as the Proposed Project, must comply with local and state hazardous materials handling, use procedures and regulations, and are regularly inspected for compliance by both local and state departments. Regulations to reduce impacts to Hazards and Hazardous Materials from commercial cannabis cultivation operations that are enforced by the DCC include Sections 15011(10), 15714-15724, 16307, and 16310 of the DCC regulations. In addition, the Proposed Project must comply with Sonoma County Best Management Practices for Cannabis Cultivation and the operating standards for hazardous materials for commercial cannabis cultivation set forth in Section 26-88-254(g)(4) of the County Code. The Discharger of the Project has self-certified that the commercial cannabis cultivation activities are consistent with the requirements of the State Water Board Cannabis Cultivation Policy- Principles and Guidelines for Cannabis Cultivation (Policy) and General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, Order No. WQ 2019-0001-DWQ, and any subsequent amendments thereto. (SWRCB 2020).

This Proposed Project would not store hazardous materials onsite permanently. If the operator must bring flammable materials such as gasoline onto the site to support operations, the operator will remove the materials at the end of the working day. While onsite, all flammable materials will be properly stored in labeled containers, will comply with the riparian setback requirements, be in a location in compliance with label instructions, and be protected from accidental ignition, weather, and wildlife. All hazardous materials will be placed in appropriate secondary containment vessels, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage. Storage containers will be of suitable material and construction to be compatible with the substances stored and conditions of storage, such as pressure and temperature. (Fiasco Farms et al. 2022). Substances used for pest prevention and control within the commercial cannabis cultivation area would be stored within the commercial cannabis cultivation growing area in a pesticide storage container (Hurvitz Environmental Services 2020).

It is the policy of the Applicant to use only organic-certified pesticides or herbicides, as needed. The California Department of Pesticide Regulation's appropriate pesticide usage as described in Legal Pest Management Practices for Marijuana Growers in California will be followed. (Hurvitz Environmental Services 2020).

Organic farming and integrated pest management are considered Best Practicable Treatments and Controls (BPTCs) and would be used for this commercial cannabis cultivation operation as much as possible. Weed control using mechanical control methods is planned instead of use of herbicides. The following are the potential activities

and materials that may be used at a commercial cannabis cultivation operation and the corresponding pollutants (other than sediment):

- Vehicle and equipment lubrication and refueling (Petroleum hydrocarbons, volatile organic compounds (VOCs)),
- Road paving (Petroleum hydrocarbons, VOCs),
- Concrete pouring (Portland cement, masonry, and concrete products, muriatic acid),
- Road base and subbase material (Non-native specie seeds, toxic substances),
- Gardening materials and wastes (Pesticides, nitrates, phosphates, heavy metals),
- Treated lumber (materials and waste) (Arsenic, copper, other metals, creosote),
- Material packaging (General litter),
- Portable toilets & domestic waste (Septic waste, fecal bacteria, food waste). (Site Management Plan, 2020).

Several pest management methods would be employed to control pest and disease, including cultural, biological, and chemical control methods. Cultural methods focus on ensuring that the commercial cannabis cultivation area and equipment are routinely cleaned to prevent build up of dirt and debris, scouting for the presence of pests and disease, ensuring proper irrigation and fertilization, and monitoring the weather and environment. Biological control methods may be utilized as a preventative and reactive/curative method with the release of natural enemies (insect, arachnid, and/or nematode). Microbial pesticides may also be used prophylactically when pest and disease pressure is high and reactively under pre-infestation level pest and pathogen levels. Acceptable microbial insecticides active ingredients include *Bacillus thuringiensis* subsp. *Kurstaki*, *B. thuringiensis* subsp. *Israelensis*, *Beauveria bassiana*, *Burkholderia* spp., *Chromobacterium subtsugae*, and *Isaria fumosorosea*. Acceptable microbial fungicides and bactericides active ingredients include *Bacillus amyloliquefaciens*, *B. subtilis*, *Streptomyces lydicus*, and *Trichoderma harzianum*. (Pest Management Plan, 2020).

Chemical control methods include prophylactic pesticides and curative chemical control. Similar to microbial pesticides, many of the pesticides acceptable for use of cannabis in California are most effective when applied preventatively. Examples of acceptable chemical pesticides that can or must be used prophylactically are azadirachtin, neem oil, phosphorous acid, potassium silicate, Reynoutria sachalinensis extract, and sulfur. Chemicals to be applied at any Stage of Plant Growth include: Actinovate (*Streptomyces lydicus* WYEC 108), Ancora (*Isaria fumosorosea*), Azaguard (Azadirachtin), Azamax (Azadirachtin), Azasol (Azadirachtin), Azatin (Azadirachtin), Botanigard (*Beauveria bassiana*), Captiva Prime (Canola oil, capsicum oleoresins, garlic oil), Clonex (Indole – 3 butyric acid), Debug turgo (Azadirachtin, Neem oil), Defguard (*Bacillus amyloliquefaciens* strain D747), Dipel (*Bacillus thuringiensis* subsp. *kurstaki*), Double Nickel LC (*Bacillus amyloliquefaciens* strain D747), Gnatrol (*Bacillus thuringiensis* subsp. *Isrealensis*), Hormex (Indole – 3 butyric acid), LMS Stylet Oil (Horticultural oil), Microthiol Disperss (Sulfur), M-Pede (Potassium salts of fatty acids), Mycotrol O (*Beauveria bassiana*), Oxidate 2.0 (Hydrogen dioxide, peroxyacetic acid), Oxiphos (Hydrogen dioxide, peroxyacetic acid, potassium salts of phosphorous acid), PFR 97 (*Isaria fumosorosea*), PreFence (*Streptomyces* sp. strain K61), Prevasyn (Soybean oil, capsicum oleoresins, garlic oil), Procidic (Citric Acid), Pure Spray Green (Horticultural Oil), Regalia (Renoutria sachalinensis extract), Rootshield (*Trichoderma harzianum*), Rootshield Plus (*Trichoderma harzianum*,

Trichoderma virens), Safer Caterpillar Killer (*Bacillus thuringiensis* subsp. *kurstaki*), Serenade (*Bacillus subtilis*), Sil-Matrix (Potassium silicate), Suppress Herbicide ED (Caprylic acid, capric acid), Terro Ant Killer II (Sodium tetraborate decahydrate), Trilogy (Neem oil), Venerate (*Burkholderia* spp. strain A396), and Zeritol 2.0 (Hydrogen dioxide, peroxyacetic acid). (Petaluma Hill 2022).

Granular fertilizers consist primarily of 50-pound bags of organic soil amendments. Granular fertilizers and soil amendments will typically be mixed in with the soil at the beginning of the planting cycle. Liquid amendments consist primarily of 5-gallon buckets of fertilizer. Plastic tubing and driplines and pumps are used to feed the water, liquid fertilizer, and compost tea to the plants. Any pesticides or herbicides are applied by hand using a spray tank. (Hurvitz Environmental Services 2020).

The following amounts of chemicals may be stored onsite:

- Isopropyl Alcohol 70%, 67-63-0, 5 gallons stored, 4 gallons in case,
- Gasoline 100%, 86290-81-5, 5 gallons stored, 5 gallons in case,
- Diesel 100%, 68476-34-6, 5 gallons stored, 5 gallons in case,
- Liquid Propane Gas 100%, 74-96-6, 33.6 gallons stored, 33.5 pounds in case. (Site Management Plan, 2020).

During a typical growing season, the following amounts of chemicals/materials are used:

- Granular fertilizers/soil amendments
 - Jack's Cal Nit 15/0/0 – 80 lbs
 - Jack's Hydroponic 5/12/26 – 200 lbs
 - Epsom salt – 40 lbs
- Liquid fertilizers/soil amendments
 - Florablend – 10 gallons
 - Herculean Harvest – 30 gallons
 - Dirt MD – 35 gallons
 - Catalyst – 20 gallons
- Compost Tea
 - Seaweed extract – 22 gallons
 - Fish hydrolysate – 40 gallons
 - Mycorrhizae – 5 gallons
- Other Chemicals
 - Diesel – 15 gallons
 - Gasoline – 5 gallons
 - Alcohol – 10 gallons (Hurvitz Environmental Services 2020).

All watering would be done by hand or drip irrigation, thus the amount of runoff to the ground from this method would be negligible. Inputs of nutrient fertilizers would be minimized, as described in the Applicant's BPTCs. Measures would be implemented to prevent discharges from dust control activities and water supply equipment such as mulch, water application, and hydroseeding. Water application rates would be minimized as necessary to prevent runoff and ponding. (Hurvitz Environmental Services 2020).

The Proposed Project generates less than three cubic yards of solid waste annually. Solid waste would not be stored for more than seven calendar days and would be properly disposed of at a County transfer Station or County Landfill before the end of the seventh day. When growth mediums are stored onsite, tarps and sediment control devices (e.g., silt fences, straw wattles, etc.) would be used to prevent material from discharging in stormwater runoff. Cannabis waste would be composted onsite and reintroduced into the commercial cannabis cultivation site at the end of the growing season. No waste would be generated from processing activities (e.g., drying, trimming, etc.) since all cannabis material will be transferred offsite immediately after harvest. Hazardous waste would not be generated or stored onsite. (Fiasco Farms et al. 2022).

Non-cannabis waste bins and containers would be stored next to the outdoor commercial cannabis cultivation area. Spill kits would also be stored in this area. Other areas designated for compost and organic material destruction would be located to the south of the commercial cannabis cultivation areas and adjacent to the non-organic waste bins. This area would be demarcated for temporary storage prior to disposal at an approved waste management site. In addition to the BPTCs, the following material handling and waste management measures would be implemented at all times:

- Prevent or minimize handling of chemical/industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm event,
- Contain all stored non-solid chemical/industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with stormwater during handling,
- Cover waste disposal containers and material storage containers that contain chemical/industrial materials when not in use,
- Divert run-on and stormwater generated from within the site away from all stockpiled materials,
- Clean all spills of chemical/industrial materials or wastes that occur during handling in accordance with the spill response procedures),
- Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with chemical/industrial materials or wastes. (Hurvitz Environmental Services 2020).

No septic systems would be utilized onsite and therefore portable restrooms and hand washing stations would be provided by a licensed sanitation company (United Site Services) and will be serviced and maintained on at least a weekly basis (Fiasco Farms et al. 2022). The portable ADA bathrooms and handwash stations would be situated in one location onsite which is proximate to the employee parking area and commercial cannabis cultivation site (Hurvitz Environmental Services 2020).

The primary onsite source of pollutants would be from incidental drip from vehicles and other uses and structures incidental to vehicle traffic or project development. Pickup trucks and the occasional farm tractor would be the only mechanized equipment used on site. Should vehicle and equipment fueling or maintenance be performed in the project area, the Applicant would utilize BMPs. (Hurvitz Environmental Services 2020).

Employees would carpool from a central office in Santa Rosa to minimize vehicle traffic to and from the site. In addition to employee traffic, the Proposed Project anticipates up to four truck deliveries (one-way) during site preparation (five days), planting (two days), harvest (two days), and two truck trips (one-way) during site cleanup/winterization (five days). (Fiasco Farms et al. 2022).

Based on required compliance with existing state and County requirements and proposed practices, the Proposed Project would not result in significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, thus the impact would be **less than significant**.

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 (Less than Significant Impact)

As discussed in Section 2.6, construction associated with the Proposed Project is now complete, and in accordance with Section 1.5 the analysis of construction impacts is mooted.

The Proposed Project would not permanently store hazardous materials onsite. When they are onsite, all hazardous materials would be placed in appropriate secondary containment vessels, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage. The operator would routinely check products for leaks and spills. Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers would be maintained and stored in the onsite shed. Best Management Practices would be implemented to minimize storm water contact with waste materials and prevent waste discharges. The portable bathrooms and hand wash stations would be serviced weekly. Water equipment leaks would be repaired immediately, and the Applicant would conduct regular inspection of drip and irrigation lines to mitigate the potential for unplanned discharges of pollutants from irrigation lines and other water sources. (Hurvitz Environmental Services 2020).

The following spill and leak prevention and response measures would be implemented:

- The Applicant will establish procedures and/or controls to minimize spills and leaks,
- Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system,
- Spilled or leaked industrial materials will be cleaned promptly and disposed of properly,
- Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures.
- Identify and train appropriate spill and leak response personnel. (Hurvitz Environmental Services 2020).

Nutrients used in the commercial cannabis cultivation operation would be stored in a designated area inside the proposed storage shed located adjacent to the outdoor commercial cannabis cultivation areas and outfitted with

secondary containment system such as approved tub or metal basin, thus representing a low potential to escape confinement and pollute. Gasoline would be kept in approved containers during daytime use. Gasoline and other fuels would be placed in the proposed storage shed/container at the end of each day and kept in secondary containers when not in use. (Hurvitz Environmental Services 2020).

Based on required compliance with California Code of Regulations, title 22, division 4.5 to minimize the risk associated with the use of hazardous substances and the applicant's proposed practices, the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials, and potential impacts would be **less than significant**.

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (No Impact)

There are no schools located within 0.25 mile (1,320 feet) of the project site. The nearest school to the site is Penngrove Elementary School, located approximately 0.7 miles to the southwest of the project site. Therefore, the Proposed Project would have **no impact**.

d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, create a significant hazard to the public or the environment (No Impact)

The Proposed Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 (DTSC 2025). Therefore, the Proposed Project would not create a significant hazard to the public or the environment. There would be **no impact**.

e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a private airport or public airport and result in a safety hazard or excessive noise for people residing or working in the study area (No Impact)

There are no airports located within 2 miles of the project site. The nearest airport to the project site is the Petaluma Municipal Airport, which is located approximately 4.5 miles to the southeast. The Proposed Project would not construct any structures, create a safety hazard, or result in an increased use of areas near airports that would result in excessive noise for people working in the area. The Proposed Project would have **no impact**.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (Less Than Significant Impact)

The Proposed Project would not impair the implementation of, or physically interfere with the County's adopted emergency operations plan. There is no separate emergency evacuation plan for the County. The Proposed Project would not result in a significant change in existing circulation patterns, would not generate substantial new traffic, and would have no measurable effect on emergency response routes.

The Proposed Project site would be accessed via Petaluma Hill Road, a county-maintained road. Entry to the commercial cannabis cultivation area is located approximately 0.25 miles from the main entrance via a paved

driveway. (Hurvitz Environmental Services 2020). The project site is in Sonoma County evacuation zone SON-5J1 - Northeast of Penngrove (Sonoma County 2025c).

Typically, construction impacts would be assessed. However, as discussed in Section 2.6, construction associated with this Project is now complete, and in accordance with Section 1.5 the analysis of construction impacts is mooted.

During operations, there would be no physical changes to roadways and only a small increase in the volume of employee and delivery vehicles accessing the site that could impact emergency access. The limited amount of increased traffic generated by the Proposed Project would not significantly impact emergency access. Therefore, impacts would be **less than significant**.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires (Less than Significant Impact)

Typically, construction impacts would be assessed. However, as discussed in Section 2.6, construction associated with the Proposed Project is now complete, and in accordance with Section 1.5 the analysis of construction impacts is mooted.

The project site is in a rural area of unincorporated Sonoma County. The parcel is a larger agricultural property that includes the proposed outdoor commercial cannabis cultivation project in addition to a residence, construction business, a large farm with green houses, roads, and row crops (primarily flowers). (Hurvitz Environmental Services 2020). The area surrounding the project site is predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential development. Abutting land uses consist of pasture lands, an active dairy farm, and rural residential development. Nearby commercial operations include Alder Lane Farm and Opus Sporthorses' training and boarding facility. (Fiasco Farms et al 2022).

Fire Hazard Severity Zones (FHSZ) are developed by the Office of the State Fire Marshal and determined based on risk factors such as slope, winds, and fuel loading, and are classified based on the severity of the risk (moderate, high, and very high). The Project is classified as being located within a moderate FHSZ – Local Responsibility Area (LRA) (Sonoma County 2025a).

The Proposed Project would be in an area in the jurisdiction of Rancho Adobe Fire Protection District (Sonoma County 2025b). The nearest fire station is located approximately 1 mile southwest of the site.

During operation, the Proposed Project would not introduce new activities to the area which would significantly exacerbate wildfire risks, as the area would be used for agriculture, consistent with its zoning and the surrounding area. Therefore, the Project is not expected to significantly exacerbate existing risks of wildfire.

The Proposed Project is not expected to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, this impact would be **less than significant**.

3.10 Hydrology and Water Quality

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Proposed Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. 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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.10.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Clean Water Act and Associated Programs

The Federal Water Pollution Control Act of 1972, also known as the Clean Water Act (CWA), is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands (USEPA

2024a). The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” States, territories, and authorized Tribes establish water quality standards that describe the desired condition of a waterbody or the level of protection, which are then approved by USEPA; these standards form a legal basis for controlling pollution that enters the waters of the United States. Water quality standards consist of the designated beneficial uses of the waterbody, criteria to protect those designated uses, antidegradation requirements to protect existing uses and high-quality waters, and general policies regarding implementation (USEPA 2024b).

USEPA is responsible for implementing the CWA, although some sections are implemented by other federal agencies under USEPA’s oversight, such as Section 404 dealing with discharge of dredged and fill material into waters of the United States (which is implemented by USACE). USEPA also has the option to delegate implementation of certain programs to a State agency. In California, the State Water Resources Control Board (SWRCB) and its nine regional water quality control boards (RWQCBs) administer various sections of the CWA.

Section 401

CWA Section 401 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 United States. In California, USEPA has delegated to SWRCB and the RWQCBs the authority to issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and that region’s water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that might result in the discharge to waters of the United States must also obtain a Section 401 water quality certification to ensure that any such discharge would comply with the applicable provisions of the CWA.

Section 402

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES). Under Section 402, a permit is required for point-source discharges of pollutants into navigable waters of the United States (other than dredge or fill material, which are addressed under Section 404). In California, the NPDES permit program is also administered by the SWRCB. Permits contain specific water quality–based limits and establish pollutant monitoring and reporting requirements. Discharge limits in NPDES permits may be based on water quality criteria designed to protect designated beneficial uses of surface waters, such as recreation or supporting aquatic life. The various NPDES permits that may apply to the Proposed Program are discussed below.

General Construction Stormwater Permit

Most construction projects that disturb one acre or more of land are required to obtain coverage under the 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), in accordance with CWA Section 402. The general permit requires the applicant to file a public notice of intent to discharge stormwater and prepare and implement a stormwater pollution prevention plan (SWPPP). The 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 best management practices (BMPs) that will 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 conduct monitoring and reporting to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

The SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s), in accordance with Section 402 of the CWA, through its Municipal Storm Water Permitting Program. As described above, the MS4 permitting requirements were developed in two phases: Phase I and II. MS4 permits continue to be issued under Phase I or Phase II depending on the size of the MS4 seeking authorization. Phase I permits for medium and large MS4s require the discharger to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable, including identifying what BMPs will be used to address specific program areas.

Section 404

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 C.F.R. § 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 C.F.R. 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 CWA.

National Toxics Rule and California Toxics Rule

USEPA issued the National Toxics Rule (NTR) in 1992. The goal of the NTR is to establish numeric criteria for specific priority toxic pollutants, to ensure that all states comply with the requirements in CWA Section 303. A total of 126 priority toxic pollutants currently are specified in the NTR (USEPA 2024c).

In 2000, USEPA promulgated the California Toxics Rule (CTR), which contains additional numeric water quality criteria for priority toxic pollutants for waters in the state. The CTR fills a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. These federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA (USEPA 2024d).

The NTR and CTR include toxicity thresholds for freshwater and saltwater systems and human health for a number of chemicals which may be used for licensed or unlicensed commercial cannabis cultivation, including heavy metals (which may be found in fertilizers, irrigation water, soils, and other grow media), hydrocarbons (found in fuels and lubricants for powered equipment used in cultivation), and pesticides.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) is intended to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and groundwater wells that serve more than 25 individuals. The goal of the SDWA is to ensure that drinking water is safe for human consumption. Under the SDWA, USEPA has set drinking water standards for chemical, microbiological, radiological, and physical contaminants in its National Primary Drinking Water Regulations (40 C.F.R. Part 141). Runoff from commercial cannabis cultivation sites has potential to contain water quality constituents that are regulated under the SDWA, such as nutrients and hydrocarbons.

State Laws, Regulations, and Policies

Porter-Cologne Water Quality Control Act

Effective in January 1970, the Porter-Cologne Act (Wat. Code, division 7) created water quality regulation on the State level, establishing the SWRCB and dividing California into nine regions, each overseen by an RWQCB. The act establishes regulatory authority over waters of the State, defined as “any surface water or groundwater, including saline waters, within the boundaries of the state.” More specifically, the SWRCB and RWQCBs have jurisdiction over any surface water or groundwater to which a beneficial use may be assigned. Following enactment of the federal CWA in 1972, the Porter-Cologne Act assigned responsibility for implementing CWA Sections 303, 401, and 402 to the SWRCB and RWQCBs.

The Porter-Cologne Act requires the RWQCBs to adopt Basin Plans for the protection of surface water and groundwater quality. The act also authorizes the RWQCBs to issue waste discharge requirements (WDRs) for discharges to waters of the state, including NPDES permits. Any activity, discharge, or proposed activity or discharge from a property or business that could affect California’s surface water, coastal waters, or groundwater will (in most cases) be subject to a WDR. The California Water Code authorizes the SWRCB and RWQCBs to conditionally waive WDRs if this is in the public interest.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), passed in 2014, became law in 2015, and created a legal and policy framework to manage groundwater sustainably at a local level. SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental conditions and needs and establish new governance structures, known as groundwater sustainability agencies (GSAs) (DWR 2023). SGMA requires that a groundwater sustainability plan (GSP) be adopted for groundwater basins designated as high and medium priority under the California Statewide Groundwater Elevation Monitoring (CASGEM) program (described below) by 2020 for basins with critical overdraft of underground aquifers. GSPs are intended to facilitate the use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results. Undesirable results are defined as the following:

- Chronic lowering of groundwater levels (not including overdraft during a drought if a basin is otherwise managed);
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies;
- Significant and unreasonable land subsidence that substantially interferes with surface land uses; and
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

GSPs are required to include measurable objectives, as well as interim milestones in 5-year increments, to achieve the sustainability goal for the basin for the long-term beneficial uses of groundwater. The GSP may, but is not required to, address undesirable results that occurred before or that had not been corrected prior to the date that the SGMA went into effect. The GSA has the discretion to decide whether to set measurable objectives and the

timeframes for achieving any objectives for undesirable results that occurred before 2015. Additionally, GSPs are required to include components related to the monitoring and management of groundwater levels within the basin, mitigation of overdraft, and a description of surface water supply used or available for use for groundwater recharge or in-lieu use.

As with other local regulatory requirements, GSP requirements may apply to licensed cultivators located within the boundaries of a GSA and using groundwater as a source; the source could include on- or off-site wells, as well as supplies from water purveyors or water delivery services that have groundwater as some component of their supply.

State Water Resources Control Board Order WQ 2023-0102-DWQ – Cannabis General Order

The SWRCB Cannabis Cultivation Policy establishes principles and guidelines (requirements) for the diversion and use of water, land disturbances, and the activities related to cannabis cultivation to protect water quantity and quality. The requirements help to minimize the effects of cannabis cultivation on fisheries, wildlife, and water quality, maintain healthy riparian corridors, and protect springs, wetlands, and aquatic habitat. (SWRCB 2019.)

The *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities* (WQ 2023-0102-DWQ) implements the Cannabis Policy requirements; specifically, those requirements that address waste discharges associated with cannabis cultivation activities (SWRCB 2023). Waste discharges regulated by the Order may be from irrigation runoff, over fertilization, pond failure, road construction, grading activities, or domestic and cultivation related waste. The Statewide Cannabis General Order classifies outdoor cannabis cultivation operations into two different tiers based on size, and three different Risk levels based upon site characteristics and threats to water resources. Cannabis cultivators are required to comply with a series of Best Management Practices designed to prevent impacts to water resources.

DCC Commercial Cannabis Business Regulations

The following requirements contained in the DCC regulations are applicable to the Proposed Project:

- California Code of Regulations, title 4, section 16307, subdivision (a) requires all cultivators to comply with all CDPR laws and regulations.
- California Code of Regulations, title 4, section 16307, subdivision (b) contains cultivator protocols to reduce potential effects from pesticide use including: comply with all label requirements, store chemicals in a secure building, contain leaks and spills, apply the minimum amount necessary to control the target pest, and prevent off-site drift.
- California Code of Regulations, title 4, section 15011, subdivision (a)(3) requires that cultivator applicants provide proof of enrollment in or exemption from the applicable SWRCB or RWQCB program for water quality protection.
- California Code of Regulations, title 4, section 16311 requires cultivator applicants to identify all applicable water sources used for cultivation activities and the applicable supplemental information for each source.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(20). Runoff and Stormwater Control. Runoff containing sediment or other waste or by-products shall not be allowed to drain to the storm drain system, waterways, or adjacent lands. Prior to beginning grading or construction, the operator shall prepare and implement a storm water management plan and an erosion and sediment control plan, approved by the agency having jurisdiction. The plan must include best management practices for erosion control during and after construction and permanent drainage and erosion control measures pursuant to Chapter 11 of the county code. All cultivation operators shall comply with the best management practices for cannabis cultivation issued by the agricultural commissioner for management of wastes, water, erosion control and management of fertilizers and pesticides.

Sonoma County Code section 26-88-254(g)(9). Wastewater Discharge. A wastewater management plan shall be submitted identifying the amount of waste water, excess irrigation and domestic wastewater anticipated, as well as disposal. All cultivation operations shall comply with the best management practices issued by the agricultural commissioner and shall submit verification of compliance with the waste discharge requirements of the state water resource control board, or waiver thereof. Excess irrigation water or effluent from cultivation activities shall be directed to a sanitary sewer, septic, irrigation, graywater or bio-retention treatment systems. If discharging to a septic system, a system capacity evaluation by a qualified sanitary engineer shall be included in the management plan. All domestic waste for employees shall be disposed of in a permanent sanitary sewer or on-site septic system demonstrated to have adequate capacity.

Sonoma County Code section 26-88-254(g)(10). Water source. An on-site water supply source adequate to meet all on site uses on a sustainable basis shall be provided. Water use includes, but may not be limited to, irrigation water, and a permanent potable water supply for all employees. Trucked water shall not be allowed, except as provided below and for emergencies requiring immediate action as determined by the director. The onsite water supply shall be considered adequate with documentation of any one (1) of the following sources:

- a. Municipal Water: A municipal water supplier as defined in California Water Code Section 13575. The applicant shall provide documentation from the municipal water source that adequate supplies are available to serve the proposed use.
- b. Recycled Water: The use of recycled process wastewater or captured rainwater from an onsite use or connection to a municipal recycled water supply for non-potable use, provided that an adequate on-site water supply is available for employees and other uses.
- c. Surface Water: An existing legal water right and, if applicable, a Streambed Alteration Agreement issued by the California Department of Fish and Wildlife.
- d. Groundwater Well:
 1. The site is located in Groundwater Availability Zone 1 or 2, and not within an area for which a groundwater management plan has been adopted or within a high or medium priority basin as defined by the state department of water resources; or
 2. Within Groundwater Availability Zone 3 or 4, or an area for which a groundwater management plan has been adopted or designated high or medium priority basin, the proposed use would:
 - a. The proposed use would not result in a net increase in water use on site through implementation of water conservation measures, rainwater catchment or recycled

- water reuse system, water recharge project, or participation in a local groundwater management project; or
- b. Trucked recycled water may be considered for the cultivation area with a use permit, provided that adequate on-site water supplies are available for employees and other uses; or
 - c. A qualified professional prepares a hydro-geologic report providing supporting data and analysis and certifying that the onsite groundwater supply is adequate to meet the proposed uses and cumulative projected land uses in the area on a sustained basis, and that the operation will not:
 - 1. result in or exacerbate an overdraft condition in basin or aquifer;
 - 2. result in reduction of critical flow in nearby streams; or
 - 3. result in well interference at offsite wells.

Sonoma County Code section 26-88-254(g)(11). Groundwater Monitoring. Water wells used for cultivation shall be equipped with a meter and sounding tube or other water level sounding device and marked with a measuring reference point. Water meters shall be maintained in a calibrated state and documentation shall be submitted to the permit and resource management department at least once every five (5) years. Static water level and total quantity of water pumped shall be recorded quarterly and reported annually. Static water level is the depth from ground level to the well water level when the pump is not operating after being turned off. Static water level shall be measured by turning the pump off at the end of the working day and recording the water level at the beginning of the following day before turning the pump back on. Groundwater monitoring reports shall be submitted annually to the permit and resource management department by January 31 of each year. The annual report shall include water meter readings, the total quarterly quantities of water pumped from well(s) used in processing, and static water levels.

3.10.2 Environmental Setting

Topography and Climate

The topography of the site and surrounding area is characterized by rolling hills. The project site is relatively flat with minor elevation changes on site and in the vicinity. The project area is characterized by Mediterranean weather conditions consisting of hot, dry summers and cool, wet winters. The hilly terrain of the project area and the rugged Coast Ranges results in a variety of microclimates (Sonoma Water 2021).

Surface Water Hydrology and Quality

The project area is located within the San Francisco Bay Hydrologic Region. The San Francisco Bay Hydrologic Region covers approximately 2.88 million acres (4,500 square miles) and includes all of San Francisco and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. Significant geographic features include the Santa Clara, Napa, Sonoma, Petaluma, Suisun-Fairfield, and Livermore valleys; the Marin and San Francisco peninsulas; San Francisco, Suisun, and San Pablo bays; and the Santa Cruz Mountains, Diablo Range, Bolinas Ridge, and Vaca Mountains of the Coast Range (DWR 2003).

The water system of the San Francisco Bay Hydrologic Region is a complex network of surface water sources, including major rivers, smaller streams and creeks, as well as the San Francisco Bay. The Sacramento and San Joaquin Rivers, along with their tributaries, are the primary sources of freshwater inflow to the San Francisco Bay.

Groundwater is an important component of the hydrologic system in the Region because it supplies high quality water for drinking, irrigation, and industrial uses (California Water Board 2024).

The quality of surface water resources in the Bay Area Region varies considerably and is locally affected by point-source (i.e., emitted from a single point) and nonpoint-source (i.e., diffuse) discharges. Point sources, such as wastewater treatment effluent and industrial waste discharges, are often regulated and monitored to avoid adverse effects on water quality. The region also faces challenges from human activities such as urban runoff, industrial discharges, and agricultural activities that can introduce pollutants like mercury, bacteria, and nutrients into the water (California Water Board 2024).

The SWRCB and nine RWQCBs oversee the protection of water quality in California. The SWRCB sets statewide policy for the implementation of state and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The project site is located within the San Francisco Regional Water Quality Control Board, Region 2.

Stormwater

The project site is developed with an approximate two-acre outdoor commercial cannabis cultivation area located within the 30.84-acre parcel. Sediment control devices (e.g., silt fences, straw wattles, etc.) would be used to prevent material from discharging in stormwater runoff. The site has limited impervious cover, so stormwater percolates into the ground. The Proposed Project would include minimal changes to impervious surfaces.

Groundwater Levels, Flows, and Quality

The project site is located within the Petaluma Valley Groundwater Basin. The Petaluma Valley Groundwater Basin occupies a structural depression in California's Coast Ranges immediately north of San Pablo Bay. Surface area encompasses approximately 46,000 acres (72 square miles) and extends from San Pablo Bay northward to a series of low hills near the town of Penngrove. Groundwater elevations are relatively stable in the southern to central areas of Petaluma Valley, but in some areas of the northwest basin, groundwater levels have exhibited long-term declines. Groundwater flow is primarily from the hills surrounding the valley towards the valley, with some flow in a generally southern direction towards San Pablo Bay. Overall groundwater quality is good; however, there are areas with poor quality, including the western portion of the basin where nitrate levels are elevated, and areas in the south with saltwater intrusion (Sonoma Water 2021).

Penngrove Water Company serves the project site. Penngrove receives water from the Sonoma County Water Agency through a connection with the Petaluma Aqueduct which delivers water from the Russian River. The water for Canon Manor (subdivision) comes from two wells that are maintained by water operators (Penngrove Water Company 2023).

Floodplains and Tsunamis

The project area is located in the Petaluma River watershed which drains into San Pablo Bay. The Petaluma River watershed faces moderate to high flood risk; areas at greatest risks are in low-lying areas near the river and in the Petaluma downtown area (HDR 2024). The project site is in a FEMA Flood Zone X (FEMA 2023). FEMA's Flood Zone X is a designation on a flood map that indicates an area with moderate-to-low risk for flood. According to the California Department of Conservation Tsunami Hazard Area Map, the project site is not located with a tsunami

hazard area (DOC 2025). The project site is not located within a dam failure inundation area as delineated in the County's Hazard Mitigation Plan (Sonoma County 2011).

3.10.3 Discussion of Checklist Responses

a. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade water quality (Less than Significant Impact)

All construction activities are complete, no site modifications such as site preparation or earthwork, grading, new roads, vegetation removal, or new drainage systems are proposed for the Proposed Project. There would be no demolition of existing structures and no construction of new buildings or structures as part of the Proposed Project. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated. Because no further ground disturbing construction activities would be required, construction of the Proposed Project would have **no impact** on water quality.

Cannabis plants would be and planted in fabric pots that sit on top of the ground in the designated canopy areas. When plant materials are stored onsite, tarps and sediment control devices (e.g., silt fences, straw wattles, etc.) would be used to prevent material from discharging in stormwater runoff. No new drainage systems are proposed for and no change to the existing site is proposed as part of the Proposed Project. In addition, the irrigation system would utilize either hand watering and/or drip irrigation and automated irrigation controllers.

Further, the Proposed Project would be compliant with the applicable regulations set forth by the SWRCB *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities*, Order WQ 2023-0102-DWQ and requirements of the *Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation* (SWRCB 2023). Waste discharges regulated by the Order may be from irrigation runoff, over-fertilization, pond failure, road construction, grading activities, or domestic and commercial cannabis cultivation related waste. The Statewide Cannabis General Order classifies outdoor commercial cannabis cultivation operations into two different tiers based on size, and three different risk levels based upon site characteristics and threats to water resources. Commercial cannabis cultivators are required to comply with a series of Best Management Practices designed to prevent impacts to water resources. The Proposed Project is not expected to violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Impacts would be **less than significant**.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge, such that the project may impede sustainable groundwater management of the basin (Less than Significant Impact)

Water for irrigation is provided by the Penngrove Water Company. The Applicants received a Will Serve Letter dated June 1, 2020, which states that the water company is able to continue to serve water to the property with a 2-inch line and meter. (Petaluma Hill 2022.) The project parcel has historically been used for agricultural purposes; the land was used for grazing and various types of agriculture.

Irrigation would utilize a combination of hand watering and drip irrigation. Typically, irrigation would occur early in the day while temperatures are the coolest to minimize evaporation. Soil moisture meters would be used to ensure that overwatering does not occur. (Hurvitz Environmental Services 2020.)

The site is located within the Petaluma Valley groundwater basin; a medium priority basin. Currently, the basin is within its sustainable yield and groundwater levels remain stable. (Petaluma Valley GSA 2024.) Implementation of the Petaluma Valley Groundwater Sustainability Plan would ensure there would be water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be **less than significant**.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site (No Impact)

The site is relatively flat, with minimal elevation change across the site. All construction activities are complete; no additional grading or trenching would occur. There are no streams or other water bodies within the commercial cannabis cultivation area. Two man-made ponds are north of the commercial cannabis cultivation area; however, these are located outside of the fenced commercial cannabis cultivation site. Because no further ground disturbing construction activities would be required, the Proposed Project would have no impact with respect to erosion and siltation.

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite (Less Than Significant Impact)

See response to 3.1.3(c)(iv), below.

iii. 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 (Less Than Significant Impact)

See response to 3.1.3(c)(iv), below.

iv. impede or redirect flood flows (Less than Significant Impact)

All construction activities are complete. With respect to existing drainage patterns and the potential for the Proposed Project to generate stormwater pollutants, the site is relatively flat, with minimal elevation change across the site. The fenced commercial cannabis cultivation area does not contain any streams, rivers, or other water features. The project site would include erosion and sediment control measures to control stormwater during operations. The existing drainage is adequate and therefore runoff would not exceed the capacity of the existing storm drain system and runoff would continue to be conveyed to the existing storm drain system. The Proposed Project would not substantially alter stormwater runoff drainage patterns on-site or in the surrounding area nor would it result in an increase in the rate or amount of surface runoff in a manner which would result in flood on- or off-site or impede or redirect flood flows. The impact on flood flows would be **less than significant**.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation (No Impact)

The project site is designated Zone X on the recent FEMA Flood Insurance Rate Map, indicating an area of minimal flood hazard (FEMA 2025). According to the DOC Tsunami Hazard Area Map, the project site is not located with a tsunami hazard area (DOC 2025). Therefore, the Proposed Project would have **no impact** related to a release of pollutants due to inundation by flood, tsunami, or seiche.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (No Impact)

The project site is located within the Petaluma Valley Groundwater Basin. The Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin is applicable to the Petaluma Valley Groundwater Basin. The SWRCB Cannabis General Order WQ 2023-0102-DWQ adheres to the water quality and management standards identified in the Basin Plan. Compliance with the Cannabis General Order would ensure that the Proposed Project would not conflict with or obstruct implementation of the Basin Plan. Therefore, the Proposed Project would have **no impact** with respect to conflicts with water quality control and groundwater management plans.

3.11 Land Use and Planning

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.11.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to land use and planning in relation to the Proposed Project.

State Laws, Regulations, and Policies

DCC Commercial Cannabis Business Regulations

DCC regulations include requirements for annual license applications pertaining to minimum distance requirements between certain enumerated land uses in Business and Professions Code section 26054, subdivision (b). (Cal. Code Regs., tit. 4, § 15002, subd. (c)(18).) Specifically, pursuant to Section 26054, subdivision (b) of the Business and Professions Code, a commercial cannabis business may not be located within a 600-foot radius of a school providing instruction in kindergarten or any grades 1 through 12, daycare center, or youth center that is in existence at the time the license is issued, unless DCC or a local jurisdiction specifies a different radius.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-250(d). Permit Requirements. Commercial cannabis activities shall be subject to the land use permit requirements as shown in Table 1A-D Allowed Cannabis Uses and Permit Requirements. No other type of commercial cannabis activities are permitted except as specified in Table 1A-D. The county may refuse to issue any discretionary or ministerial permit, license, variance or other entitlement, which is sought pursuant to this chapter, including zoning clearance for a building permit, where the property upon which the use or structure is proposed is in violation of the county code. Commercial cannabis activities shall also be subject to permit requirements and regulations established by the Sonoma County Department of Health Services.

Sonoma County Code section 26-88-254(c). Permit Requirements. Commercial cannabis cultivation shall be subject to the land use permit requirements as shown in Table 1A-D Allowed Cannabis Uses and Permit Requirements. Zoning permits for outdoor cultivation may be issued by the Department of Agriculture/Weights, and Measures. Zoning permits and use permits for all other cultivation activities shall be issued by the permit and

resource management department. New structures, roads, and fences or conversion of existing structures or shipping containers, or similar structures, to cannabis cultivation shall be subject to design standards maintained by the review authority.

Sonoma County Code section 26-88-254 (f)(10). Building Requirements. All structures used in commercial cultivation shall comply with all applicable sections of the county code.

3.11.2 Environmental Setting

The project site is located within a leased portion of the 30.84-acre parcel. Commercial cannabis cultivation activities occur within an approximate two-acre fenced area. The commercial cannabis cultivation site is located on primarily fallow agricultural land. The parcel is accessed from Petaluma Hill Road. The entrance to the commercial cannabis cultivation area is located approximately 0.25 mile from the main entrance to the parcel via an existing internal road.

The site is zoned as Diverse Agriculture (DA). Under the Sonoma County Code, the purpose of the DA zone is to “[enhance and protect] land where soil, climate, and water conditions support farming but where small acreage intensive farming and part-time farming activities are predominant, and where farming may not be the principal occupation of the farmer.” (Sonoma County Code § 26-06-020.). This designation allows a variety of agricultural uses including commercial cannabis cultivation. The property is not within any Williamson Act Contract.

Surrounding land uses are also zoned Diverse Agriculture (DA) and Agricultural and Residential (AR) and are predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential development. The closest residences, located on adjacent parcels, are approximately 600 feet to the east, 775 feet to the southwest, 774 feet to the south, and over 1,000 feet to the west of the commercial cannabis cultivation area.

3.11.3 Discussion of Checklist Responses

a. Physically divide an established community (No Impact)

Commercial cannabis cultivation activities would be located entirely within the two-acre project site within the larger 30.84-acre parcel which is zoned for diverse agricultural uses. Land uses surrounding the site are characterized by large parcels zoned for diverse agricultural, rural residential uses. Access to the commercial cannabis cultivation site would be via existing county roads and existing internal roads. The Proposed Project would not alter or diminish access to adjacent properties. Operation of the Proposed Project would not physically divide an established community. Therefore, the Proposed Project would have **no impact** with respect to physical division of an established community.

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 (No Impact)

According to the Sonoma County Zoning and Land Use GIS Map (Sonoma County 2025), the project site is designated as Diverse Agriculture (DA). The proposed outdoor commercial cannabis cultivation operation is consistent with the General Plan land use and zoning designation of diverse agriculture. The Proposed Project would not conflict with any land use plan, policy, or regulation. Based on analysis contained in this IS/MND, the

Proposed Project would not create a significant adverse effect either directly or indirectly to the physical environment. There would be **no impact** on land use.

3.12 Mineral Resources

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to mineral resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA) provides comprehensive policies on surface mining and reclamation activities to ensure the minimization of adverse environmental impacts. Another responsibility of SMARA is to encourage the production, conservation, and protection of mineral resources of the state (DOC 2022). As part of SMARA, all mines in California are required to provide annual reports. The State Mining and Geology Board is required to identify, map, and classify any aggregate resources found throughout the state that contain significant mineral resources. Local jurisdictions are required to establish mineral resource management policies in their general plans that seek to enhance mineral conservation.

Local Laws, Regulations, and Policies

No local laws, regulations, and policies are applicable to mineral resources in relation to the Proposed Project.

3.12.2 Environmental Setting

The State Mining and Reclamation Act of 1975 (SMARA) identifies and protects California's mineral resources. The State Mining and Reclamation Act mandated the California Geological Survey to implement a classification-designation process. SMARA has developed mineral land classification maps and reports to assist in the protection and development of mineral resources. According to the SMARA, the following four mineral land use classifications are as follows:

- MRZ 1: Areas where adequate information indicates that no significant mineral deposits are present or likely to be present.

- MRZ 2: Areas where significant mineral deposits are present or likely to be present.
- MRZ 3: Areas with known mineral deposits that may qualify as mineral resources.
- MRZ 4: Areas of unknown or undetermined mineral resource potential.

According to Sonoma County Open Space and Resource Conservation Element, various minerals have historically been mined in Sonoma County over the past century, currently mining operations consist almost exclusively of the extraction and processing of rock, sand and earth products for use in construction and landscaping (Sonoma County 2020). Sonoma County has adopted the Aggregate Resources Management Plan that identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist). The project site is not located within a known mineral resource deposit area (Sonoma County 2025).

3.12.3 Discussion of Checklist Responses

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 (No Impact)

The project site is not located within an area classified as MRZ-2 (Sonoma County 2025). According to the California Geological Survey there are no known significant mineral resources in or near the project site. There are also no mining operations in or near the project site (DOC 2016). The Proposed Project would have **no impact** on mineral resources of value to the region and the residents of the state.

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 (No Impact)

There are no mineral resource recovery sites identified on or adjacent to the project site. The Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site. The Proposed Project would have **no impact** on mineral resources delineated on a local general plan, specific plan, or other land use plan.

3.13 Noise

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project result in:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.13.1 Overview of Noise and Vibration Concepts and Terminology

Noise

In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

Decibel (dB) is a measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.

A-weighted decibel (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Maximum sound level (Lmax) is the maximum sound level measured during a given measurement period.

Minimum sound level (L_{min}) is the minimum sound level measured during a given measurement period.

Equivalent sound level (Leq) is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound level during that same period.

Percentile-exceeded sound level (L_{xx}) is the sound level exceeded during x percent of a given measurement period. For example, L₁₀ is the sound level exceeded 10 percent of the measurement period.

Day-night sound level (L_{dn}) is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.

Community noise equivalent level (CNEL) is the energy average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels between 10:00 p.m. and 7:00 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. **Error! Reference source not found.** presents approximate noise levels for common noise sources, measured adjacent to the source.

Table 3.13-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 feet	110
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Source: Caltrans 2013.

Vibration

Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or “spectrum,” of many frequencies. The normal frequency range of most ground-borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz.

Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibration is generally limited to areas within a few hundred feet of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

3.13.2 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project. However, the Federal Transit Administration (FTA) *Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment* state that for evaluating daytime construction noise impacts in outdoor areas, noise thresholds of 90 dBA L_{eq} and 100 dBA L_{eq} should be used for residential and commercial/industrial areas, respectively (FTA 2018).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inch per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2018).

The US Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate Federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, documents and research completed by the EPA Office of Noise Abatement and Control continue to provide value in the analysis of noise effects.





State Laws, Regulations, and Policies

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table 3.13-2**.

For the protection of fragile, historic, and residential structures, Caltrans recommends a more conservative threshold of 0.2 in/sec PPV for normal residential buildings and 0.08 in/sec PPV for old or historically significant structures (Caltrans 2020).

Table 3.13-2. State Land Use Compatibility Standards for Community Noise Environment

Land Use Category	Community Noise Exposure - L _{dn} or CNEL (dB)					
	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Multi-Family	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Transient Lodging – Motels, Hotels	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Auditoriums, Concert Halls, Amphitheaters	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Sports Arenas, Outdoor Spectator Sports	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Playgrounds, Neighborhood Parks	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Office Buildings, Business Commercial and Professional	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Industrial, Manufacturing, Utilities, Agriculture	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable

-  **Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
-  **Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
-  **Normally Unacceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
-  **Clearly Unacceptable:** New construction or development generally should not be undertaken.
- Source: California Governor's Office of Planning and Research 2017.*

Local Laws, Regulations, and Policies

Sonoma County Airport Land Use Compatibility Plan

The County's Comprehensive Airport Land Use Plan (CALUP) was adopted by the Sonoma County Airport Land Use Commission (ALUC) in January 2001 (Sonoma County 2021). The Sonoma County CALUP is the official land use policy document within the airport influence areas for all six public use airports in the County. It establishes referral boundaries, airport influence area, air space protection standards, noise compatibility standards, safety compatibility standards, airspace protection standards, and other land use policies for the public use airports in the County.

Sonoma County General Plan

Noise Element

GOAL NE-1: Protect people from the adverse effects of exposure to excessive noise and to achieve an environment in which people and land uses may function without impairment from noise.

Objective NE-1.1: Provide noise exposure information so that noise impacts may be effectively evaluated in land use planning and project review.

Objective NE-1.2: Develop and implement measures to avoid exposure of people to excessive noise levels.

Objective NE-1.3: Protect the present noise environment and prevent intrusion of new noise sources which would substantially alter the noise environment.

Objective NE-1.4: Mitigate noise from recreational and visitor serving uses.

Policy NE-1a: Designate areas within Sonoma County as noise impacted if they are exposed to existing or projected exterior noise levels exceeding 60 dB Ldn, 60 dB CNEL, or the performance standards of **Table 3.13-3**.

Table 3.13-3. Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources⁵

Hourly Noise Metric*, dBA	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 2:00 a.m.
L ₅₀ (30 minutes in any hour)	50	45
L ₂₅ (15 minutes in any hour)	55	50
L ₀₈ (4 minutes 48 seconds in any hour)	60	55
L ₀₂ (72 seconds in any hour)	65	6-
*The sound level exceeded n% of the time in any hour. For example, the L ₅₀ is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level.		

Source: Sonoma County Noise Element 2012.

⁵ Table NE-2 Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources, in the General Plan Noise Element.

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(9). Airport Compatibility. All cannabis operations shall comply with the comprehensive airport land use plan.

Sonoma County Code section 26-88-254(g)(6). Noise Limits. Cultivation activities shall not exceed the general plan noise standards Table NE-2, measured in accordance with the Sonoma County noise guidelines.

3.13.3 Environmental Setting

The project site is located in unincorporated Sonoma County, approximately three miles southeast of the town of Cotati. The commercial cannabis cultivation site was previously used for agricultural uses, although it was fallow prior to the start of project activities.

Noise-sensitive land uses include areas where an excessive amount of noise would interfere with normal activities. Primary noise-sensitive land uses include residential uses, schools, public and private educational facilities, hospitals, convalescent homes, daycare facilities, places of worship, and libraries.

The project site is located in a rural environment with few substantial sources of noise. Noise levels are generally lower and more variable than in urban areas, and sources are typically natural or related to agricultural activities and low-density residential activities. The nearest sensitive receptors to the project site are: residences located on adjacent parcels (approximately 600 feet to the east, 775 feet to the southwest, 774 feet to the south, and over 1,000 feet to the west of the commercial cannabis cultivation area); Penngrove Elementary School, approximately 0.7 miles southwest of the site; Bright Skies Montessori, approximately 0.9 miles to the northwest; Credo High School, approximately 1.4 miles from the site; Monte Vista Elementary School, approximately 1.7 miles from the site; University Elementary School, approximately 2 miles from the site; Sonoma State University, approximately 2.1 miles to the northwest; and Mendez Family Daycare, approximately 2 miles northwest from the site. The nearest church is Penngrove Community Church, located approximately 0.8 miles southwest of the site; Sunset House assisted living facility is approximately 1.2 miles west of the site; and Wine Country Senior Living is approximately 1.3 miles to the northwest.

3.13.4 Discussion of Checklist Responses

a. Generate 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 (Less than Significant Impact)

Project construction has been completed, and all construction activities were performed in accordance with local approval by Sonoma County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated. Therefore, the Proposed Project would have **no impact** as a result of construction noise.

Operational components of the outdoor commercial cannabis cultivation occur within an approximate two-acre fenced area. Immature plants are delivered to the site from a licensed cannabis nursery facility to the commercial cannabis cultivation site and planted in fabric pots that sit on top of the ground in the designated canopy areas. Following harvest, harvested plants are immediately transferred offsite to a licensed cannabis facility for further processing (e.g., drying, trimming, packaging).

The number of employees onsite during the commercial cannabis cultivation season (March to November) varies based on the plant growth phase and site activities. Employees would carpool from a central office in Santa Rosa to minimize vehicle traffic to and from the site. This office also serves as the main storage facility for all commercial cannabis cultivation supplies and materials used at this site. Deliveries and shipments are limited to 8:00 a.m. to 5:00 p.m. Monday through Friday. The site is closed to the public.

The Proposed Project would generate noise during operating hours as a result of added project-related employee and delivery vehicle traffic. Commercial cannabis cultivation activities would occur during daylight hours and would be consistent with existing agricultural activities on the property. The site is zoned as Diverse Agriculture (DA). Surrounding land uses are zoned Diverse Agriculture (DA) and Agriculture and Residential (AR) and are predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential development. The types of noises generated by the Proposed Project would be consistent with existing uses surrounding the project site as well as previous agricultural use on the project site. Since project conditions would be similar to previous agriculture uses, the Proposed Project would not result in an increase in ambient noise levels over existing conditions.

Due to the Proposed Project's location, operational noise is not expected to exceed daytime or nighttime exterior noise thresholds established in the Sonoma County Noise Control Ordinance. The Proposed Project's operational noise impact would be **less than significant**.

b. Generate excessive groundborne vibration or groundborne noise levels (No Impact)

Project construction has been completed, and all construction activities were performed in accordance with local approval by Stanislaus County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated.

Project operations are not expected to generate any significant groundborne vibration or groundborne noise levels. Therefore, the Proposed Project would have **no impact** as a result of construction or operational groundborne vibration or noise.

c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, within 2 miles of a public airport or public-use airport, expose people residing or working in the project site to excessive noise levels (No Impact)

There are no airports within two miles of the project site. The nearest airport to the project site is the Petaluma Municipal Airport, which is located approximately 4.5 miles to the southeast. The project site is not located within an airport land use plan or within two miles of a public airport or private airstrip. It would not expose people at the project site to excessive noise. Therefore, the Proposed Project would have **no impact** with respect to airport noise.

3.14 Population and Housing

riteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14.1 Regulatory Setting

There are no federal, state, or local laws, regulations or policies applicable to population and housing in relation to the Proposed Project.

3.14.2 Environmental Setting

The project site is located in unincorporated Sonoma County. Sonoma County's population is currently estimated as being 481,812 as of July 1, 2024, a 1.4 percent decrease from the April 1, 2020 population of 488,850 (U.S. Census Bureau 2024). According to the General Plan Housing Element, as of 2019 there were estimated to be approximately 65,193 housing units and a population of 142,067 in unincorporated Sonoma County (Sonoma County 2023).

3.14.3 Discussion of Checklist Responses

a. Induce unplanned population growth (Less than Significant Impact)

The Proposed Project would have no future construction associated with development of cannabis operations. The number of employees for project operations would be as many as 10 at full build out. While it is likely that most employees would already reside locally, it is possible that employment at the Proposed Project would draw people from outside the county to live in the area. However, the small business size and associated number of employees would not result in substantial unplanned population growth in the area. This impact would be **less than significant**.

b. Displace a substantial number of existing people or housing (No Impact)

The Proposed Project does not involve demolition or relocation of existing facilities. Therefore, the Proposed Project would not displace a substantial number of people or housing, and there would be **no impact**.

3.15 Public Services

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. 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:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.15.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Several federal agencies have jurisdiction over law enforcement and fire protection related to unlicensed commercial cannabis cultivation operations on federal lands in California. Because cannabis use and cultivation remain illegal under federal law, several federal agencies investigate and prosecute cannabis use, cultivation, and distribution on federally managed lands. Federal agencies involved in law enforcement in California include the U.S. Forest Service (USFS), whose Law Enforcement and Investigations division conducts law enforcement operations on federal lands, including eradication of unlicensed cannabis cultivation on national forest lands. Both the U.S. Bureau of Land Management and the National Park Service law enforcement programs target cannabis cultivation on federally managed lands.

In addition to law enforcement on federal lands, there are federal agencies that investigate and prosecute cannabis business activities, which is currently illegal at the federal level. The Federal Bureau of Investigation, as the nation's foremost law enforcement agency, also works in California to investigate federal crimes and crimes that occur across state lines, including drug trafficking. The U.S. Drug Enforcement Administration enforces federal controlled substances laws and regulations, including enforcement activities related to cannabis.

State Laws, Regulations, and Policies

California Health and Safety Code

State fire regulations are set forth in section 13000 et seq. of the Health and Safety Code. The Health and Safety Code includes requirements related to fire protection and notification systems, fire protection devices, such as extinguishers and smoke alarms, and fire suppression training.

California Division of Occupational Safety and Health Regulations

In accordance with California Code of Regulations, title 8, sections 1270 (Fire Prevention) and 6773 (Fire Protection and Fire Equipment), Cal/OSHA has established minimum standards for fire suppression and emergency medical service (EMS). The standards include guidelines on the handling of highly combustible materials; fire hose sizing requirements; restrictions on the use of compressed air; access roads; and the testing, maintenance, and use of all firefighting and emergency medical equipment.

California Building, Electrical, and Fire Codes

The California Building Standards Code (Cal. Code Regs., tit. 24) serves as the basis for the design and construction of buildings in California. The California Building Standards Code (Cal. Code Regs., tit. 24, part 2) covers all aspects of building design and required safety features for all types of buildings, including fire protection systems, fire and smoke protection features, means of egress, and structural design and materials. Title 24, part 3 is the Electrical Code, which contains standards for electrical systems, including safety features such as overcurrent protection, surge arresters, and proper wiring methods.

Title 24, part 9 is the California Fire Code. This portion of the code contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire-resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials.

DCC Commercial Cannabis Business Regulations

MAUCRSA and its implementing regulations contain several provisions designed to reduce impacts to public services.

Under MAUCRSA, all cannabis business licensees in California must record activities on the state track-and-trace system, which will require unique identifiers of cannabis and cannabis products. Licensees are required to report the movement of immature and mature cannabis or cannabis products on the licensed premises and any movement associated with commercial cannabis activity between licensees through the track-and-trace system. This system is the primary recordkeeping and inventory system for recording all applicable commercial cannabis activities. Licensees are required to establish a functioning account in the track-and-trace system and must maintain an active account while licensed. The track-and-trace system is intended to reduce and report diversion of cannabis and cannabis products and thus reduces burdens on law enforcement services. (Cal. Code Regs., tit. 4, §§ 15047.1 - 15051.)

DCC regulations include minimum distance requirements between annual license holders and certain sensitive uses as enumerated in Business and Professions Code section 26054, subdivision (b). (Cal. Code Regs., tit. 4, § 15002, subd. (c)(18).) Specifically, section 26054, subdivision (b) of the Business and Professions Code specifies that a state-licensed cannabis business may not be located within a 600-foot radius of a school providing

instruction in kindergarten or any grades 1 through 12, daycare center, or youth center that is in existence at the time the license is issued, unless the DCC or a local jurisdiction specifies a different radius.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(16). Fire Code Requirements. The applicant shall prepare and implement a fire prevention plan for construction and ongoing operations and obtain any permits required from the fire and emergency services department. The fire prevention plan shall include, but not be limited to: emergency vehicle access and turn-around at the facility site(s), vegetation management and fire break maintenance around all structures.

Sonoma County Code section 26-88-254(f)(19). Lighting. All lighting shall be fully shielded, downward casting and not spill over onto structures, other properties or the night sky. All indoor and mixed light operations shall be fully contained so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise.

Sonoma County Code section 26-88-254(f)(21). Security and Fencing. A site security plan shall be required. All site security plans shall be held in a confidential file, exempt from disclosure as a public record pursuant to Government Code Section 6255(a). Security cameras shall be motion-sensor and be installed with capability to record activity beneath the canopy but shall not be visible from surrounding parcels and shall not be pointed at or recording activity on surrounding parcels. Surveillance video shall be kept for a minimum of thirty (30) days. Video must use standard industry format to support criminal investigations. Lighting and alarms shall be installed to ensure the safety of persons and to protect the premises from theft. All outdoor and mixed light cultivation sites shall be screened by non-invasive fire-resistant vegetation and fenced with locking gates with a Knox lock. No outdoor or mixed light cultivation sites located on parcels adjacent to public parks shall be visible from trails or public access points. Razor wire and similar fencing shall not be permitted. Weapons and firearms at the cultivation site are prohibited. Security measures shall be designed to ensure emergency access in compliance with fire safe standards. All structures used for cultivation shall have locking doors to prevent free access.

Sonoma County Code Section 13-15. County Fire Code designated—Administration and enforcement—Amendment by local Fire Protection Districts.

- (a). The 2022 California Fire Code as adopted by reference and amended in this article, shall constitute the county fire code.
- (b). Except as otherwise provided in subsection (c), the administration and enforcement of the county fire code within a local fire protection district shall be the responsibility of the local fire chief. The county fire warden/fire marshal shall be responsible for the administration and enforcement of the county fire code within those portions of the unincorporated area of the county not in a local fire protection district.
- (c). The county fire warden/fire marshal shall be responsible for plan checking and inspection of new construction and alterations subject to the county fire code, Chapter 13 within both those portions of the unincorporated area of the county not in a local fire protection district and those portions of the unincorporated area of the county in a local fire protection district which has adopted the county fire code, unless a local fire protection district notifies the county fire warden/fire marshal in writing that it has elected to have the local fire chief exercise those responsibilities within its jurisdictional area, whether according to the county fire code or the

district's amendment of the county fire code adopted per subsection (d). Any such action shall be effective if it is thereafter approved by the board of directors of the local fire protection district.

3.15.2 Environmental Setting

Fire Protection

The Proposed Project would be served by the Rancho Adobe Fire Protection District. The closest station is located at 11000 Main Street, Penngrove California 94951, approximately 1.2 miles from the Proposed Project.

Police Protection

The Proposed Project would be served by the Sonoma County Sheriff's Office. Since 1850, the Sonoma County Sheriff's Office has been providing law enforcement, court security services, and detention services to the people of Sonoma County. The Sheriff's Office is comprised of over 650 employees and approximately 100 volunteers. Servicing a county of over 1,600 square miles and population of over 500,000 people, the Sheriff's Office is responsible for primary law enforcement services of the unincorporated area, the Town of Windsor, and the City of Sonoma. (Sonoma County 2025.)

Schools

The school nearest to the Proposed Project is Penngrove Elementary. It is approximately 0.9 miles to the south at 365 Adobe Road, Penngrove.

Parks

The closest recreational area is Penngrove Park at approximately 1.2 miles away via roadways. The Proposed Project would not be adjacent to, nor physically impact any park.

Other Public Facilities

There are no other public facilities of any type (libraries, social services, etc.) identified within one mile of the Proposed Project.

3.15.3 Discussion of Checklist Responses

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities

i. Fire protection (Less than Significant Impact)

The Proposed Project would include outdoor cultivation plots and would not add structures and other facilities that could generate the possible need for fire protection services.

Fire protection may be required in the event of an accident, but such requirements would be short term and would not require increases in the level of public service offered. Considering the small size of the Proposed Project and there being no new structures there would not be the need to add fire stations, personnel, or fire fighting equipment. The impact would be **less than significant**.

ii. Police protection (Less than Significant Impact)

The Proposed Project would include land development that would add people and other activities that could generate the possible need for police protection services. The facility would be improved to comply with all state and local regulations pertaining to safety and security, including developing a security plan (review and approved by various County departments), installing security fencing; with 24-hour video surveillance and security lighting. Passcode-protected entry gates would be installed at vehicle and pedestrian entrances to the site to prevent unauthorized entry into the facility.

The California Department of Food and Agriculture Cannabis Cultivation Licensing PEIR (2017) noted that an elevated risk of crime associated with cannabis cultivation operations was a concern noted in a review of available literature. However, the PEIR did not find any definitive evidence either that state-licensed commercial cannabis operations were correlated with an increase in crime, or any evidence that licensed commercial cannabis activity operations required construction of new or expanded police facilities. Rather, it concluded that demand may decrease due to a larger number of lawful cultivators and their coordination and cooperation with law enforcement authorities. (CDFA 2017.)⁶

Considering the small size of the Proposed Project there would not be the need to add new stations, personnel, or equipment. Adherence to the above listed laws, regulations and policies, as applicable, would aid in avoiding and minimizing the Proposed Project's impact on police protection services. The impact would be **less than significant**.

iii. Schools (No Impact)

The Proposed Project would not generate new residents that would potentially use schools. It would place no demand on school services because it would not include the construction of facilities that require such services (i.e., residences) and would not involve the introduction of a temporary or permanent population into the area. There would be no adverse physical impacts associated with the provision of new or physically altered schools or a need for new or physically altered schools; the construction of which could cause significant environmental impacts, to maintain acceptable service ratios or other performance objectives. **No impact** would occur.

Section 3.11, "Land Use and Planning," evaluates potential impacts to schools regarding consistency with land use plans, policies, and regulations pertaining to the proximity of commercial cannabis facilities to schools.

iv. Parks (No Impact)

The Proposed Project would not generate new residents that would potentially use parks. It would place no demand on parks because it would not involve the construction of facilities that require such services (i.e., residences) and would not involve the introduction of a temporary or permanent population into the area. The Proposed Project would not be adjacent to, nor physically impact any park. **No impact** would occur.

⁶ The CDFA CalCannabis Cultivation Licensing PEIR examined the impacts of the statewide cannabis cultivation licensing program for CEQA purposes. It was certified by CDFA in 2017, following the passage of MAUCRSA and at the time of issuance of statewide commercial cultivation licensing regulations.

v. Other public facilities (No Impact)

The Proposed Project would not involve the introduction of a temporary or permanent population into this area. Accordingly, the Proposed Project would not result in impacts to other public facilities. **No impact** would occur.

3.16 Recreation

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
a. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.16.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to recreation resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

No state laws, regulations or policies are applicable to recreation in relation to the Proposed Project.

Local Laws, Regulations, and Policies

No local laws, regulations or policies are applicable to recreation in relation to the Proposed Project.

3.16.2 Environmental Setting

Sonoma County has numerous regional parks, state parks, and beaches.

- Regional parks: Sonoma County has over 60 regional parks, including beaches, parks with trails, and parks with sports fields and playgrounds.
- State parks: Sonoma County has 11 state parks, each with unique terrain.
- Beaches: Sonoma County has beaches, including Healdsburg Veterans Memorial Beach.

None of the above recreational facilities are within two miles of the Proposed Project. The closest recreational area is Penngrove Park at approximately 1.2 miles away via roadways. The Proposed Project would not be adjacent to, nor physically impact any recreational facility.

3.16.3 Discussion of Checklist Responses

a. Increase use of existing parks or recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated (No Impact)

The Proposed Project would not generate new residents that would 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 or other recreational facilities. Since there would be no increase in the number of recreational facility users, the Proposed Project would have **no impact**.

b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (No Impact)

The Proposed Project would not generate new residents that would potentially increase the use of parks or other recreational facilities. It does not include recreational facilities. Since there would be no increase in the number of recreational facility users, nor include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment, the Proposed Project would have **no impact**.

3.17 Transportation

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

3.17.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to transportation in relation to the Proposed Project.

State Laws, Regulations, and Policies

California Department of Transportation

The California Department of Transportation (Caltrans) is the state agency responsible for design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System within California. Caltrans requires a transportation permit for any transport of heavy construction equipment or materials that necessitates the use of oversized vehicles on state highways.

The Caltrans Transportation Impact Study Guide (TISG) was prepared to provide guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies but is intended to be a reference and informational document. The TISG replaces the Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System (Caltrans 2020).

California Manual on Uniform Traffic Control Devices, Part 6: Temporary Traffic Control

The California Manual on Uniform Traffic Control Devices (CA-MUTCD), Part 6: Temporary Traffic Control provides principles and guidance for the implementation of temporary traffic control (TTC) to ensure the provision of reasonably safe and effective movement of all roadway users (e.g., motorists, bicyclists, pedestrians) through or around TTC zones while reasonably protecting road users, workers, responders to traffic incidents, and

equipment. Additionally, this document notes that TTC plans and devices shall be the responsibility of the authority of a public body or official having jurisdiction for guiding road users (i.e., County of Mendocino for this project).

California Fire Code

The 2022 California Fire Code, which is found in Title 24 of the California Code of Regulations, incorporates by adoption the 2021 International Fire Code and contains regulations related to construction, maintenance, access, and use of buildings. Topics addressed in the California Fire Code include design standards for fire apparatus access (e.g., turning radii, minimum widths), standards for emergency access during construction, provisions intended to protect and assist fire responders, and several other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The California Fire Code contains specialized technical regulations related to fire and life safety. The California Building Standards Code, which includes the California Fire Code, contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. It is revised and published every 3 years by the California Building Standards Commission.

Senate Bill 743

Senate Bill (SB) 743 (Chapter 386, Statutes of 2023) requires the California Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the State CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. These updates indicated that VMT would be the primary metric used to identify transportation impacts. In December of 2018, OPR and the State Natural Resources Agency submitted the updated State CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved the updated State CEQA Guidelines and, as of July 1, 2020, implementation of updated State CEQA Guidelines, section 15064.3.

In December 2018, OPR published the most recent version of the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018), which provides guidance for VMT analysis. The Office of Administrative Law approved the updated State CEQA Guidelines and lead agencies had an opt-in period until July 1, 2020, to implement the updated guidelines regarding VMT. According to the Governor's Office of Planning Research's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County's commercial parking requirements are outlined in Sonoma County Code section 26-86-010:

- 1 reserved space per unit, and 1 guest parking space for every 3 units or portion thereof.

- 1 space for every 2 SRO rooms, plus 1 space for the management unit or office and 1 space for each employee, if any, on maximum shift.
- New and/or expanded uses must meet Parking Regulations under Article 86, and parking lot layout dimensions shown in the Off-Street Parking Design Standards under Article 82.
- Compliance with accessibility elements within the California Building Code is required.
- Parking shall be designated for a minimum of three automobiles, located at least twenty feet (20') off the public right-of-way or twenty feet (20') from the front property line with no automobile maneuvering permitted in the public right-of-way.

3.17.2 Environmental Setting

The site, outside of the commercial cannabis cultivation area, is developed with a large farm, roads, and crops. Existing structures include a single-family residence, a greenhouse associated with a non-cannabis commercial nursery, a metal warehouse/shop building that houses a construction business and two mobile office buildings, and two water storage tanks, two ponds, and other associated agricultural improvements. Surrounding land uses are predominantly pastureland, dairy farms, horse training and boarding facilities, and rural residential uses.

Existing Transportation Access

Entry to the site is via Petaluma Hill Road, a county-maintained road. Entry to the commercial cannabis cultivation area is located approximately 0.25 miles from the main entrance via a paved driveway.

Existing Commute Trips

Under the baseline condition, the site generated agricultural staff and equipment traffic to service existing operations.

3.17.3 Discussion of Checklist Responses

a. Conflict with applicable circulation plans, ordinances, or policies and applicable congestion management programs (No Impact)

Project improvements are wholly contained on the project site. The Proposed Project would not alter the physical configuration or operational characteristics at its existing access points to the existing, adjacent roadways.

The Proposed Project would provide sufficient parking spaces to accommodate the 10 employees plus visitors that would be expected to use the parking area at full project buildout.

There would be no conflict with any program, policy, ordinance, or plan during construction of operation. **No impact** would occur.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) (Less than Significant Impact)

Vehicle trips generated by project operations would be a maximum of approximately 20 one-way employee trips per day over the baseline during operations. Thus, there would be an increase in vehicle miles traveled (VMT) over the baseline condition.

According to the Governor's Office of Planning Research's Technical Advisory on Evaluating Transportation Impacts in CEQA, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact (OPR 2018). The volume of trips generated by the Proposed Project would be less than 110 trips per day. Impacts would be **less than significant**.

c. Substantially increase hazards resulting from geometric design features (No Impact)

The Proposed Project does not include any changes to any public roads or any aspect of the existing transportation network during project construction or operation. It would not create or increase hazards due to a geometric design feature and would not alter the geometrics of any public roadway. It would not introduce incompatible uses creating hazards. **No impact** would occur.

d. Result in inadequate emergency access (Less than Significant Impact)

The Proposed Project site would be accessed via Petaluma Hill Road, a county-maintained road. Entry to the commercial cannabis cultivation area is located approximately 0.25 miles from the main entrance via a paved driveway.

During operations, there would be no physical changes to roadways and only a small increase in the volume of employee and delivery vehicles accessing the site that could impact emergency access. The increase in traffic would be so small that it would be very unlikely to create any delays or access issues. The Proposed Project would cause a **less-than-significant impact**.

See also the analysis above in "Hazards and Hazardous Materials," Section 3.9.3(f).

3.18 Tribal Cultural Resources

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Proposed 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:				
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)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18.1 Regulatory Setting

Federal Laws, Regulations, and Policies

Federal law does not address tribal cultural resources (TCRs), which are defined and regulated in the Public Resources Code. However, similar resources, called Traditional Cultural Properties (TCPs), fall under the purview of Section 106 of the NHPA, as described in Section 3.5, "Cultural Resources." TCPs are locations of cultural value that are historic properties. A place of cultural value is eligible as a TCP "because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1990, rev. 1998). A TCP must be a tangible property, meaning that it must be a place with a referenced location, and it must have been continually a part of the community's cultural practices and beliefs for the past 50 years or more. Unlike TCRs, TCPs can be associated with communities other than Native American tribes, although the resources are usually associated with tribes. By definition, TCPs are historic properties; that is, they meet the eligibility criteria as a historic property for listing in the NRHP. Therefore, as historic properties, TCPs must be treated according to the implementing regulations found under Title 36 C.F.R. § 800, as amended in 2001.

State Laws, Regulations, and Policies

CEQA and State CEQA Guidelines

AB 52, which was approved by the California State Legislature in September 2014 and went into effect on January 1, 2015, requires lead agencies consult with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if requested by the tribe. The Bill, chaptered in Public Resources Code section 21084.2, also specifies that a proposed project with an effect that may cause a substantial adverse change in the significance of a TCR may have a significant effect on the environment.

As defined in Public Resources Code section 21074(a), TCRs are:

- (a) (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 Public Resources Code section 21074 as follows:

- (b) 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
- (c) 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 tribal cultural resource 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 in accordance with Public Resources Code section 21080.3.2 or section 21084.3. The latter section identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

California Register of Historical Resources

Public Resources Code section 5024.1 establishes the CRHR. See Section 3.5, “Cultural Resources,” for a full description of the CRHR, criteria for listing eligibility, guidelines for assessing historical integrity, and resources that have special considerations.

DCC Commercial Cannabis Business Regulations

DCC regulations require cultivators to comply with Health and Safety Code section 7050.5, subdivision (b) if human remains are discovered during cultivation activities. (Cal. Code Regs., tit. 4, § 16304, subd. (a)(3).)

Local Laws, Regulations, and Policies

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(14) Cultural and Historic Resources. Cultivation sites shall avoid impacts to significant cultural and historic resources by complying with the following standards. Sites located within a historic district shall be subject to review by the landmarks commission, unless otherwise exempt, consistent with Section 26-68-020 and shall be required to obtain a use permit. Cultivation operations involving ground disturbing activities, including but not limited to, new structures, roads, water storage, trenching for utilities, water, wastewater, or drainage systems shall be subject to design standards and referral to the Northwest Information Center and local tribes. A use permit will be required if mitigation is recommended by the cultural resource survey or local tribe.

The following minimum standards shall apply to cultivation permits involving ground disturbance. All grading and building permits shall include the following notes on the plans:

- If paleontological resources or prehistoric, historic-period or tribal cultural resources are encountered during ground-disturbing work at the project location, all work in the immediate vicinity shall be halted and the operator must immediately notify the agency having jurisdiction of the find. The operator shall be responsible for the cost to have a qualified paleontologist, archaeologist and tribal cultural resource specialist under contract to evaluate the find and make recommendations in a report to the agency having jurisdiction.
- Paleontological resources include fossils of animals, plants or other organisms. Historic-period resources include backfilled privies, wells, and refuse pits; concrete, stone, or wood structural elements or foundations; and concentrations of metal, glass, and ceramic refuse. Prehistoric and tribal cultural resources include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), midden (culturally darkened soil containing heat-affected rock, artifacts, animal bone, or shellfish remains), stone milling equipment, such as mortars and pestles, and certain sites features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe.
- If human remains are encountered, work in the immediate vicinity will stop and the operator shall notify the agency having jurisdiction and the Sonoma County Coroner immediately. At the same time, the operator shall be responsible for the cost to have a qualified archaeologist under contract to evaluate the discovery. If the human remains are determined to be of Native American origin, the Coroner must notify the Native American Heritage Commission within twenty-four (24) hours of this identification.

3.18.2 Environmental Setting

Please see the context discussion provided in Section 3.5, "Cultural Resources."

3.18.3 Discussion of Checklist Responses

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:

- 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) (Less than Significant with Mitigation)**

Tribal cultural resources (TRCs) are defined in Public Resources Code section 21074 as sites, features, places, cultural landscapes, sacred places, and objects that hold cultural value to a California Native American Tribe.

No TRCs within the project area or mitigation area have been identified that are either listed or eligible for listing on the CRHR or on any other local register of historical resources as defined by Public Resources Code section 21074 (Evans and DeShazo 2020). However as described in section 3.18.3(a)(ii) below, there is a possibility that TRCs may be located in the project area. Implementation of **Mitigation Measures TCR-1 (Implement Measures to Avoid Damaging Effects on TRCs), TCR-2 (Conduct Cultural Awareness Training), TCR-3 (Tribal Monitoring), and TCR-4 (Implement Inadvertent Discovery Plan)** would minimize potential impacts to TRCs, should there be any additional ground disturbance including but not limited to new structures, roads, water storage, trenching for utilities, water, wastewater, or drainage systems. Therefore, impacts from the Proposed Project would be **less than significant with mitigation incorporated** on known TRCs.

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, and considering the significance of the resource to a California Native American tribe, to be significant pursuant to criteria set forth in Public Resources Code section 5024.1(c) (Less than Significant with Mitigation)**

Montrose submitted a sacred lands file request to the Native American Heritage Commission (NAHC) on February 3, 2025. A response was received from the NAHC on February 3, 2025, which indicated the results of the sacred lands search were negative for this location. The NAHC also provided a list of 6 tribal contacts with a traditional and cultural affiliation with the project area for notification pursuant to Public Resources Code § 21080.3.1 (Assembly Bill 52). Letters were sent to each contact on April 24, 2025, and May 1, 2025, by DCC to elicit any concerns or information regarding any known tribal cultural resources within the Proposed Project area. **Table 3.18-1** lists the Tribes and contacts to whom DCC reached out in accordance with Assembly Bill 52 requirements.

Table 3.18-1. Native American Outreach

Organization/Tribe	Name of Contact	Letter Date	Tribal Response	Follow Up
Federated Indians of Graton Rancheria	Greg Sarris, Chairperson	4/24/25	Responded on 06/05/25. See text for details.	5/29/25
Guidiville Rancheria of California	Bunny Tarin, Tribal Administrator	4/24/25	No response received to date.	5/29/25

Organization/Tribe	Name of Contact	Letter Date	Tribal Response	Follow Up
Guidiville Rancheria of California	Michael Derry, Historian	4/24/25	Email could not be delivered.	5/29/25
Lytton Rancheria	Andy Mejia, Chairperson	4/24/25	See response for Brenda Tomaras.	5/29/25
Lytton Rancheria	Brenda Tomaras, Attorney	4/24/25	Responded on 5/01/25; Stated that the Tribe is not requesting further consultation based on the information provided.	N/A
Pinoleville Pomo Nation	Leona Willams, Chairperson	5/01/25	No response received to date.	5/29/25

DCC received a response from Lytton Rancheria, who stated that the Tribe is not requesting further consultation based on the information provided by DCC. DCC received a response from the Federated Indians of Graton Rancheria (FIGR) on June 5, 2025, requesting consultation regarding the Proposed Project. DCC sent responses to FIGR via e-mail on July 14, August 4, August 15, August 27, and September 8, 2025, and called FIGR on September 4, 2025, to provide additional information about the Proposed Project and schedule a consultation. FIGR responded on September 8, 2025 to schedule a consultation for October 1, 2025. The consulting Tribe was unable to survey the project area prior to implementation, but conducted a survey of the site in December, 2025. Although all construction activities have been completed and no further ground disturbance or other construction is expected to occur as a result of the project actions, the consulting Tribe has expressed concerns regarding the high probability for the existence of TCRs within the project area. As such, the consulting tribe has recommended **Mitigation Measures TCR-1 (Implement Measures to Avoid Damaging Effects on TCRs), TCR-2 (Conduct Cultural Awareness Training), TCR-3 (Tribal Monitoring), and TCR-4 (Implement Inadvertent Discovery Plan)** to mitigate impacts below a significant level, should there be any additional ground disturbance at the site including but not limited to new structures, roads, water storage, trenching for utilities, water, wastewater, or drainage systems. The impacts from the Proposed Project related to any additional ground disturbance would be **less than significant with mitigation incorporated** on known TCRs.

DCC has not received requests from any other individuals contacted for formal consultation under Public Resources Code section 21080.3.1, subdivision (b)(2).

Mitigation Measure TCR-1: Implement Mitigation Measures Recommended by Public Resources Code Section 21084.3 to Avoid Damaging Effects on Tribal Cultural Resources

Avoid and preserve the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

- Protecting the cultural character and integrity of the resource.

- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Protect the resource.

Mitigation Measure TCR-2: Conduct Cultural Awareness Training

All personnel conducting any additional ground-disturbing work within the licensed project area will complete a Cultural Awareness Training program lead by an SOI-Qualified Archaeologist and Tribal Representative from a consulting Tribe, including but not necessarily limited to, an FIGR Tribal Monitor.

Mitigation Measure TCR-3: Tribal Monitoring

Prior to any additional ground-disturbing activities, applicants shall enter into Tribal monitoring agreement with FIGR and any other consulting Tribe that has consulted with DCC prior to project approval and requests such agreement. Tribal monitors will be permitted to observe all ground-disturbing activities.

Mitigation Measure TCR-4: Implement Inadvertent Discovery Plan for the Treatment of Human Remains and Cultural Items

If unanticipated discoveries of human remains or associated grave goods, are discovered in the project area during ground-disturbing activities, the following Inadvertent Discovery Plan will be implemented.

If unanticipated discoveries of California Register of Historic Resources (CRHR)-eligible resources are identified, the Agency will work with the consulting Tribes to determine affiliation and develop appropriate treatment.

If human remains or associated grave goods are discovered, the Agency will provide for the following actions:

1. Immediately cease ground-disturbing activities within a 100-foot radius of the discovery, secure the area, and notify the County coroner
2. If the County coroner determines the remains are those of a Native American, the coroner will notify the California Native American Heritage Commission (NAHC) to designate the most likely descendant and contact the culturally affiliated Tribe.
3. Allow the designated Tribal member(s) to inspect the site of the discovery and determine how the human remains and grave goods should be treated with appropriate dignity and respect.
4. The location of a reburial will be recorded with the California Historic Resources Inventory System.
5. The Agency, the licensee, any contractors and consultants, and the coroner will not disclose the location of the original burial or reburial site.
6. Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the culturally affiliated Tribe. All cultural items, including ceremonial items and archaeological items, discovered during Project construction and operation will be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court or agency of competent jurisdiction. The Agency and Licensee will waive any and all claims to

ownership of Tribal cultural items, including ceremonial items and archaeological items that may be found.

Treatment of human remains will proceed in accordance with treatment plans developed in consultation with the most likely descendant of the culturally affiliated Tribe as identified by the NAHC.

3.19 Utilities and Service Systems

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a 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 provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.19.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to utilities and service systems in relation to the Proposed Project.

State Laws, Regulations, and Policies

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Pub. Resources Code, div. 30) requires all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (Pub. Resources Code, section 41780). The State, acting through the California Integrated Waste Management Board, 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.

Senate Bill (SB) 1383 (Chapter 395, Statutes of 2016) and AB 1826 (Chapter 727, Statutes of 2014) have established additional waste reductions for organic waste. SB 1383 was placed in code and requires 50-percent reduction in organic waste levels in landfills from 2014 levels by 2020 and 75-percent reduction by 2025. AB 1826 requires businesses to recycle organic waste and requires local jurisdictions to implement an organic waste recycling program to divert organic waste generated by businesses.

Urban Water Management Planning Act

California Water Code section 10610 et seq. requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year, prepare an urban water management plan. Urban water management plans must identify and quantify available water supplies and current and projected water use and demands, and plan for maintaining adequate water supply reliability during normal, dry, and multiple dry water years.

California Health and Safety Code—Hazardous Waste and Hazardous Materials

Several sections of the California Health and Safety Code deal with hazardous waste and hazardous materials. Division 20, chapter 6.5 addresses hazardous waste control and contains regulations on hazardous waste management plans, hazardous waste reduction, recycling and treatment, and hazardous waste transportation and hauling. These requirements are discussed in more detail in Section 3.8, “Hazards and Hazardous Materials.”

State Water Resources Control Board

The SWRCB Cannabis Cultivation Policy establishes requirements for cannabis cultivation activities to protect water quality and instream flows. The purpose of the Cannabis Cultivation Policy is to ensure that the diversion of water and discharge of waste associated with cannabis cultivation does not have a negative impact on water quality, aquatic habitat, riparian habitat, wetlands, and springs (SWRCB 2019). The Cannabis Cultivation Policy requires cultivators to contain and regularly remove all debris and trash associated with cannabis cultivation activities from the cannabis cultivation site. The SWRCB Cannabis Cultivation Policy also specifies that cannabis cultivators shall only dispose of debris and trash at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations.

In 2023, the SWRCB issued a General Order, the purpose of which is to ensure that discharges to waters of the State do not adversely affect the quality and beneficial uses of such waters. The Cannabis Cultivation General Order is a simplified WDR available to cannabis cultivators to regulate discharges of waste associated with cannabis cultivation. Threats of waste discharge may be from irrigation runoff, over fertilization, pond failure, road construction, grading activities, domestic and cultivation related waste (SWRCB 2023). SWRCB General Order WQ 2023-0102-DWQ requires that activities related to cannabis cultivation, which includes disposal of domestic sewage, must meet applicable County health standards, local agency management plans and ordinances, and/or the RWQCB Onsite Wastewater Treatment System policy.

DCC Commercial Cannabis Business Regulations

The following DCC regulations contain provisions related to water supply and solid waste.

Supplemental Water Source Information:

Section 16311 of the DCC regulations requires the following information to be provided for each water source identified by the applicant:

(a) Retail water supply sources:

(1) If the water source is a retail water supplier, as defined in section 13575 of the Water Code, such as a municipal provider, provide the following:

(A) Name of the retail water supplier; and

(B) A copy of the most recent water service bill or written documentation from the water supplier stating that service will be provided at the premises address.

(2) If the water source is a small retail water supplier, such as a delivery service, and is subject to section 26060.1(a)(1)(B) of the Business and Professions Code and the retail water supplier contract is for delivery or pickup of water from a surface water body or an underground stream flowing in a known and definite channel, provide all of the following:

(A) The name of the retail water supplier under the contract;

(B) The water source and geographic location coordinates, in either latitude and longitude or the California Coordinate System, of any point of diversion used by the retail water supplier to divert water delivered to the commercial cannabis business under the contract;

(C) The authorized place of use of any water right used by the retail water supplier to divert water delivered to the commercial cannabis business under the contract;

(D) The maximum amount of water delivered to the commercial cannabis business for cannabis cultivation in any year; and

(E) A copy of the most recent water service bill.

(3) If the water source is a small retail water supplier, such as a delivery service, and is subject to section 26060.1(a)(1)(B) of the Business and Professions Code and the retail water supplier contract is for delivery or pickup of water from a groundwater well, provide all of the following:

(A) The name of the retail water supplier under the contract;

(B) The geographic location coordinates for any groundwater well used to supply water delivered to the commercial cannabis business, in either latitude and longitude or the California Coordinate System;

(C) The maximum amount of water delivered to the commercial cannabis business for cannabis cultivation in any year;

(D) A copy of the well completion report filed with the Department of Water Resources pursuant to section 13751 of the Water Code for each percolating groundwater well used to divert water delivered to the commercial cannabis business. 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. When no well completion report is available, the State Water Resources Control Board may request additional information about the well; and

(E) A copy of the most recent water service bill.

(b) If the water source is a groundwater well, provide the following:

- (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.
- (c) If the water source is a rainwater catchment system, provide the following:
 - (1) The total square footage of the catchment footprint area(s).
 - (2) The total storage capacity, in gallons, of the catchment system(s).
 - (3) A detailed description and photographs of the rainwater catchment system infrastructure, including the location, size, and type of all surface areas that collect rainwater. Examples of rainwater collection surface areas include a rooftop and greenhouse.
 - (4) Geographic location coordinates of the rainwater catchment infrastructure in either latitude and longitude or the California Coordinate System.
- (d) If the water source is a diversion from a waterbody (such as a river, stream, creek, pond, lake, etc.), provide any applicable water right statement, application, permit, license, or small irrigation use registration identification numb/er(s), and a copy of any applicable statement, registration certificate, permit, license, or proof of a pending application issued under part 2 (commencing with section 1200) of division 2 of the California Water Code as evidence of approval of a water diversion by the State Water Resources Control Board.

Waste Management

Section 17223 of the DCC regulations creates the following restrictions for cannabis business waste management:

- (a) A licensee shall dispose of all waste in accordance with the Pub. Resources Code and any other applicable state and local laws. It is the responsibility of the licensee to properly evaluate waste to determine if it should be designated and handled as a hazardous waste, as defined in Pub. Resources Code section 40141.
- (b) A licensee shall establish and implement a written cannabis waste management plan that describes the method or methods by which the licensee will dispose of cannabis waste, as applicable to the licensee's activities. A licensee shall dispose of cannabis waste using only the following methods:
 - (1) On-premises composting of cannabis waste.
 - (2) Collection and processing of cannabis waste by a local agency, a waste hauler franchised or contracted by a local agency, or a private waste hauler permitted by a local agency in conjunction with a regular organic waste collection route.
 - (3) Self-haul cannabis waste to one or more of the following:
 - (A) A staffed, fully permitted solid waste landfill or transformation facility;
 - (B) A staffed, fully permitted composting facility or staffed composting operation;
 - (C) A staffed, fully permitted in-vessel digestion facility or staffed in-vessel digestion operation;
 - (D) A staffed, fully permitted transfer/processing facility or staffed transfer/processing operation;

- (E) A staffed, fully permitted chip and grind operation or facility; or
- (F) A recycling center as defined in title 14, California Code of Regulations, section 17402.5(d) that meets the following:
- (i) The cannabis waste received shall contain at least ninety (90) percent inorganic material;
 - (ii) The inorganic portion of the cannabis waste is recycled into new, reused, or reconstituted products that meet the quality standards necessary to be used in the marketplace; and
 - (iii) The organic portion of the cannabis waste shall be sent to a facility or operation identified in subsections (b)(3)(A)-(E).
- (4) Reintroduction of cannabis waste back into agricultural operation through on-premises organic waste recycling methods including, but not limited to, tilling directly into agricultural land and no-till farming.
- (c) The licensee shall maintain any cannabis waste in a secured waste receptacle or secured area on the licensed premises until the time of disposal. Physical access to the receptacle or area shall be restricted to the licensee, employees of the licensee, the local agency, waste hauler franchised or contracted by the local agency, or private waste hauler permitted by the local agency only. Nothing in this subsection prohibits licensees from using a shared waste receptacle or area with other licensees, provided that the shared waste receptacle or area is secured and access is limited as required by this subsection.
- (d) A licensee that disposes of waste through an entity described in subsection (b)(2) shall do all of the following:
- (1) Maintain and make available to the Department upon request the business name, address, contact person, and contact phone number of the entity hauling the waste; and
 - (2) Obtain documentation from the entity hauling the waste that evidences subscription to a waste collection service.

Local Laws, Regulations, and Policies

Countywide Integrated Waste Management Plan

Sonoma County, in cooperation with the cities in the County, prepared a Countywide Integrated Waste Management Plan (CoIWMP) in 1994. An amended CoIWMP was adopted in 2003. The California Integrated Waste Management Board approved the final 2003 CoIWMP in March of 2004.

The CoIWMP is the principal planning document for solid waste management in the County. Solid waste management facilities located in unincorporated areas, including landfills and transfer stations, are designated in the Land Use Element. Issues pertaining to solid waste management include:

- The need to temporarily close the Central landfill and transition from a landfill-based system to an outhaul based system (truck and/or rail transport) due to the expense and regulatory uncertainty associated with expanding the Central landfill and securing flow-control agreements from the cities,
- The need to accommodate the sludge disposal needs of wastewater treatment facilities serving both cities and unincorporated areas and other types of waste matter, including compostable yard waste and organic matter, recyclable in-organics (plastic, glass, metal, etc.) and non-compostable organic matter, by treating them as a resource rather than a waste product, and
- Reduction of the quantity of waste deposited in landfills by 50% or greater after 2000, based on waste generation rates of 1990.

The ColWMP contains goals, policies, and short, medium, and long-range objectives, together with measures designed to guide solid waste management and disposal actions of the County and other applicable agencies (Sonoma County 2003).

Sewer System Management Plan

The State Water Resources Control Board (SWRCB) requires public agencies that own or operate sanitary sewer systems longer than one mile to develop a Sewer System Management Plan (SSMP). The SSMP describes how the sewer collection system is operated, maintained, and evaluated. The SSMP includes a system evaluation and capacity assurance plan.

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system to reduce and prevent sanitary sewer overflows (SSOs), as well as mitigate any SSOs that do occur. The goals of the Sonoma Valley County Sanitation District SSMP are to:

- Properly manage, operate and maintain all parts of the wastewater collection system
- Provide adequate capacity to convey peak design flows
- Mitigate the impact of SSOs
- Protect the health and safety of the residents of the Sonoma Valley
- Maintain cost effectiveness while maintaining high efficiency
- Be responsive to customers

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(g)(8) Waste Management. A waste management plan addressing the storing, handling, and disposing of all waste by-products of the cultivation and processing activities in compliance with the best management practices issued by the agricultural commissioner shall be submitted for review and approval by the agency having jurisdiction. The plan shall characterize the volumes and types of waste generated, and the operational measures that are proposed to manage and dispose, or reuse the wastes in compliance with best management practices and county standards. All garbage and refuse on the site shall be accumulated or stored in non-absorbent, water-tight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with tight fitting lids. No refuse container shall be filled beyond the capacity to completely close the lid. All garbage and refuse on the site shall not be accumulated or stored for more than seven (7) calendar days, and shall be properly disposed of before the end of the seventh day in a manner prescribed by the solid waste local enforcement agency. All waste, including but not limited to refuse, garbage, green waste and recyclables, must be disposed of in accordance with local and state codes, laws and regulations. All waste generated from cannabis operations must be properly stored and secured to prevent access from the public.

Sonoma County Code section 26-88-254(g)(9) Wastewater Discharge. A wastewater management plan shall be submitted identifying the amount of wastewater, excess irrigation and domestic wastewater anticipated, as well as disposal. All cultivation operations shall comply with the best management practices issued by the agricultural commissioner and shall submit verification of compliance with the waste discharge requirements of the state water resource control board, or waiver thereof. Excess irrigation water or effluent from cultivation activities shall be directed to a sanitary sewer, septic, irrigation, graywater or bio-retention treatment systems. If discharging to

a septic system, a system capacity evaluation by a qualified sanitary engineer shall be included in the management plan. All domestic waste for employees shall be disposed of in a permanent sanitary sewer or on-site septic system demonstrated to have adequate capacity.

Sonoma County Code section 26-88-254(g)(10). Water Source. An on-site water supply source adequate to meet all on site uses on a sustainable basis shall be provided. Water use includes, but may not be limited to, irrigation water, and a permanent potable water supply for all employees. Trucked water shall not be allowed, except as provided below and for emergencies requiring immediate action as determined by the director. The onsite water supply shall be considered adequate with documentation of any one (1) of the following sources:

- a. **Municipal Water:** A municipal water supplier as defined in California Water Code Section 13575. The applicant shall provide documentation from the municipal water source that adequate supplies are available to serve the proposed use.
- b. **Recycled Water:** The use of recycled process wastewater or captured rainwater from an onsite use or connection to a municipal recycled water supply for non-potable use, provided that an adequate on-site water supply is available for employees and other uses.
- c. **Surface Water:** An existing legal water right and, if applicable, a Streambed Alteration Agreement issued by the California Department of Fish and Wildlife.

Sonoma County's Agricultural Commissioner's BMPs for cannabis operations include the following, as included on their website (Sonoma County 2025):

- Recycle or properly dispose of all plastic bags, containers, and irrigation materials.
- Properly dispose of green waste in a manner that does not discharge pollutants to a watercourse. This may be accomplished by composting, chipping, and/or shredding. The method of green waste disposal must be documented.
- Used growth medium (soil and other organic medium) shall be handled to minimize or prevent discharge of soil and residual nutrients and chemicals to watercourses. Proper disposal could include incorporating into garden beds, spreading on a stable surface and re-vegetating, storage in watertight dumpsters, or covering with tarps or plastic sheeting prior to proper disposal. The method of disposal must be documented.
- Compost piles are to be located outside of riparian setbacks for agricultural cultivation and in a manner that will not discharge pollutants to a watercourse. If necessary, construct a berm or install fiber roll around compost area to prevent runoff or use straw wattles around perimeter.
- Cover compost piles with tarp or impermeable surface prior to fall rains and continuously throughout the rainy season.

3.19.2 Environmental Setting

Water

The project site receives water service from the Penngrove Water Company for irrigation purposes. The Penngrove Water Company is a privately owned, investor-owned utility regulated by the California Public Utilities Commission.

Sewer

The site is not connected to the municipal sewer system nor a septic system.

Stormwater

In the baseline condition, the land adjacent to the Proposed Project site generated stormwater runoff due to the significant amount of impervious surfaces resulting from greenhouses and other structures existing near the Proposed Project site. The project site itself has no permanent impervious surfaces.

Solid Waste

The project site is on fallow agricultural land and therefore did not generate solid waste immediately prior to the Proposed Project.

Electricity and Natural Gas

The Proposed Project site is not served by electricity or natural gas.

Telecommunications

Existing telecommunication lines (i.e., for telephone, cable, and Internet) serve the project site.

3.19.3 Discussion of Checklist Responses

- a. Require the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects (Less than Significant Impact)***

Water

The Proposed Project would utilize the site's existing connection to the Penngrove Water Company water supply to serve commercial cannabis cultivation and all on-site water uses. It would not require relocation or construction of new or expanded water supply infrastructure. Therefore, there would be **no impact**.

Sewer

The Proposed Project would not be connected to the municipal sewer system. No wastewater treatment facilities would be required for the commercial cannabis cultivation activities. A portable toilet with a handwashing station would be provided and would be serviced weekly. There would be no change to sewer or septic systems and therefore there would be **no impact**.

Stormwater

No new drainage systems are proposed for the Proposed Project. It would not add any new impervious surfaces.

When plant materials are stored onsite, tarps and sediment control devices (e.g., silt fences, straw wattles, etc.) would be used to prevent material from discharging in stormwater runoff. The irrigation system would utilize either hand water and/or drip irrigation and automated irrigation controllers to ensure that no water is lost to throughflow and that a minimal amount of water is lost due to evaporation and leaching. No new drainage systems are proposed for and no change to the existing site is proposed as part of the Proposed Project. The Proposed

Project would follow BMPs as prescribed in the Site Management Plan to prevent movement of stormwater. Impacts would be **less than significant**.

Electricity and Natural Gas

The Proposed Project's commercial cannabis cultivation site will be entirely outdoors and would not require on-grid power to operate. It would be equipped with solar and/or battery-powered motion-sensor security lights and cameras and not require additional energy resources. Therefore, there would be **no impact**.

New or relocated natural gas lines would not be part of the Proposed Project. **No impact** would occur as it pertains to natural gas.

Telecommunications

Additional telecommunication infrastructure improvements (i.e., for telephone, cable, and internet) would not be required. Since it would not require relocation or construction of new or expanded telecommunications infrastructure, **no impact** would occur.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years (Less than Significant Impact)

Water for irrigation is provided by the Penngrove Water Company. The Applicants received a Will Serve Letter dated June 1, 2020, which states that the water company is able to continue to serve water to the property with a 2-inch line and meter. (Petaluma Hill 2022.) The project parcel has historically been used for agricultural purposes; the land was used for grazing and various types of agriculture.

Irrigation would utilize a combination of hand watering and drip irrigation. Typically, irrigation would occur early in the day while temperatures are the coolest to minimize evaporation. Soil moisture meters would be used to ensure that overwatering does not occur. (Hurvitz Environmental Services 2020.)

The site is located within the Petaluma Valley groundwater basin; a medium priority basin. Currently, the basin is within its sustainable yield. (Petaluma Valley GSA 2021.) Implementation of the Petaluma Valley Groundwater Sustainability Plan would ensure there would be water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be **less than significant**.

c. Result in a 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 provider's existing commitments (No Impact)

Wastewater would not require conveyance to or treatment by a wastewater treatment provider. The Proposed Project would include installation and maintenance of a portable toilet with a handwashing station and would be serviced weekly. Therefore, there would be no significant excess discharge. No wastewater would be discharged from the facility to a wastewater treatment provider. **No impact** would occur.

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 (Less than Significant Impact)

With implementation of the Proposed Project, solid waste would be generated from commercial cannabis cultivation activities (e.g., plant matter, soils, containers) and be processed and stored on site, in accordance with section 17223 of the DCC regulations. It would generate less than three cubic yards of solid waste annually. Solid waste would not be stored for more than seven calendar days and would be properly disposed of at a county transfer station or county landfill. Cannabis waste resulting from plant death or de-leafing activities would be composted onsite and reintroduced into the commercial cannabis cultivation site at the end of the growing season. No waste would be generated from processing activities (e.g., drying, trimming, etc.) since all cannabis material will be transferred offsite immediately after harvest.

Because the Applicant would dispose waste in accordance with state and local regulations, and because the facility has a relatively small operation that would generate only a small volume of solid waste, the Proposed Project's impact would be **less than significant**.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste (No Impact)

With the Applicant's preparation and fulfillment of an approved cannabis waste management plan as required by section 17223 of the DCC regulations, the Proposed Project would be in compliance with all regulations related to solid waste.

The Proposed Project would also comply with the SWRCB's Cannabis Cultivation Policy and DCC's solid waste reduction programs, which are designed to comply with federal, state, and local statutes and regulations related to solid waste. These statutes and regulations include the California Integrated Solid Waste Management Act, the California Beverage Container Recycling and Litter Reduction Act, and the County's solid waste disposal policies and practices. The Integrated Solid Waste Management Act requires that jurisdictions maintain a 50 percent or better diversion rate for solid waste.

Compliance with state and local requirements is required for issuance and maintenance of a state cannabis business license. (Bus. & Prof. Code, § 26030.) There would be **no impact**.

3.20 Wildfire

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.20.1 Regulatory Setting

Federal Laws, Regulations, and Policies

No federal regulations are applicable to Wildfire in relation to the Proposed Project.

State Laws, Regulations, and Policies

Executive Order B-52-18

On May 10, 2018, in response to the changing environmental conditions and the increased risk to California's citizens, California Governor Brown issued Executive Order (EO) B-52-18 to support the state's resilience to wildfire and other climate impacts; to address extensive tree mortality; increase forests' capacity for carbon capture; and to improve forest and forest fire management (EO 2018). EO B-52-18 requires the California Natural Resources Agency, in coordination with other agencies including the State Board of Forestry and Fire Protection, the California Department of Forestry and Fire Protection (CAL FIRE), to increase the pace and scale of fire fuel treatments on state and private lands. Moreover, EO B-52-18 calls for doubling the land actively managed through

vegetation thinning, prescribed burning, and restoration from 250,000 to 500,000 acres per year to reduce wildfire risk. To support these efforts, a May 11, 2018, budget revision committed \$96 million in additional state funds.

Senate Bill 1260

On February 15, 2018, Governor Brown signed Senate Bill (SB) 1260 (Chapter 624, Statutes of 2018), which aims to help protect California communities from catastrophic wildfire by improving forest management practices to reduce the risk of wildfires in light of the changing climate. It recognizes that prescribed burning is an important tool to help mitigate and prevent the impacts of wildfire and includes provisions that encourage more frequent use of prescribed burns in managing California's forest lands. SB 1260 also includes provisions for the State Board of Forestry and Fire Protection's Vegetation Treatment Program Programmatic Environmental Impact Report, when certified, to serve as the programmatic environmental document for future prescribed burns in the Sierra-Cascade, central coast, and north coast regions of the state.

Senate Bill 901

SB 901 (Chapter 626, Statutes of 2018) boosted the budget for government fire protection efforts. CAL FIRE will oversee those funds, generally divided into two categories: \$165 million per year for fire prevention grants to landowners and for community prevention efforts, and \$35 million to continue CAL FIRE's prescribed burning, research, and monitoring. In addition, under SB 901, landowners can help reduce overgrowth by cutting down small and mid-sized trees.

Assembly Bill 301

AB 301 (Chapter 104, Statutes of 2015) was enacted to amend section 4213.1 and add section 4213.2, which are related to fire prevention, to the Public Resources Code. Section 4213.1 requires CAL FIRE to notify an owner of property, through the Fire Prevention Fee billing process, that if selling the habitable structure or structures, a division of the fee may be negotiated as one of the terms of sale. Section 4213.2 of the Public Resources Code allows the owner of a property with one or more habitable structures subject to the fee, if selling the property, to negotiate a division of the fee as one of the terms of the sale. However, payment of the total fee liability remains the responsibility of the person who owns the habitable structure on July 1 of the year the fee is due.

Assembly Bill X1 29

AB X1 29 (Chapter 8, Statutes of 2011) was enacted to add Chapter 1.5 (commencing with Section 4210) to part 2 of Division 4 of the Public Resources Code. Existing law requires the state to have primary financial responsibility for preventing and suppressing fires within State Responsibility Areas (SRAs). An SRA is an area of the state where CAL FIRE has the primary financial responsibility for the prevention and suppression of wildland fires. AB X1 29 required the State Board of Forestry and Fire Protection to establish a regulatory program to impose a fire prevention fee for each structure on a parcel within a SRA.

Public Resources Code

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. (Pub. Resources Code, §§ 4201-4204; Gov. Code, §§ 51175-51189.) Factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. CAL FIRE has identified two types of wildland fire risk areas: (1) wildland areas that may contain substantial forest fire risks and hazards; and (2) very high fire hazard risk zones.

Public Resources Code section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on SRA lands. Public Resources Code sections 4790 through 4799.04 provide the regulatory authority for CAL FIRE to administer the California Forest Improvement Program. Public Resources Code sections 4113 and 4125 give CAL FIRE the responsibility to prevent and extinguish wildland fires in SRAs. The Public Resources Code also includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; requires the use of spark arrestors on construction equipment with internal combustion engines; specifies requirements for the safe use of gasoline-powered tools in fire hazard areas; and specifies fire suppression equipment that must be provided for various types of work in fire-prone areas.

New development located in SRAs are subject to the following requirements:

- Determination that new subdivisions are consistent with regulations adopted by the State Board of Forestry and Fire Protection pursuant to Public Resources Code sections 4290 and 4291 or are consistent with local ordinances certified by the State Board of Forestry and Fire Protection as meeting or exceeding the state regulations. (Cal. Code Regs., title 14, § 1266.01.)
- Defensible space of 100 feet around all buildings and structures. (Pub. Resources Code, § 4291; Cal. Code Regs., tit. 14, § 1299.03.)
- Provision of adequate emergency access and egress. (Pub. Resources Code, §§ 4290 and 4291; Cal. Code Regs., tit. 14, §§ 1273.01–1273.09.)
- Emergency water requirements. (Cal. Code Regs., tit.14, §§ 1275.01–1275.04.)
- Building signing and number requirements. (Pub. Resources Code, §§ 4290 and 4291; Cal. Code Regs., tit. 14, §§ 1274.01-1274.04.)
- California Building Code

California Code of Regulations, title 24, section 701A.3 (“New Buildings Located in Any Fire Hazard Severity Zone”) requires that new buildings located in any Fire Hazard Severity Zone within SRAs, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted, shall comply with all the requirements of Chapter 7A. These requirements include the following design elements:

- Roofing be designed to be fire resistant and constructed to prevent the intrusion of flames and embers (Cal. Code Regs., tit. 24, § 705A);
- Attic ventilation be designed to be resistant to the intrusion of flames and embers into the attic area of the structure (Cal. Code Regs., tit. 24, § 706A);
- Exterior walls design (including vents, windows, and doors) be designed with non-combustible or ignition-resistant material and to resist the intrusion of flame and ember (Cal. Code Regs., tit. 24, § 707A);
- Decking be designed with ignition-resistant material (Cal. Code Regs., tit. 24, § 709A); and
- Ancillary buildings and structures comply with the above provisions (Cal. Code Regs., tit. 24, § 710A).

Board of Forestry and Fire Protection

The Board of Forestry and Fire Protection (Board) is a Governor-appointed body within CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of CAL FIRE, and

representing the state's interest in federal forestland in California. Together, the Board and CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with developing policy to protect all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth. In addition, the Board is responsible for identifying Very High Hazard Severity Zones (VHFHSZ) in the SRA and in the Local Responsibility Area (LRA)—cities, urban regions, and agriculture lands where the local government is responsible for wildfire protection. Local agencies are required to designate, by ordinance, VHFHSZ and to require landowners to reduce fire hazards adjacent to occupied buildings within these zones. (Gov. Code, §§ 51179 and 51182.) The intent of identifying areas with very high fire hazards is to allow CAL FIRE and local agencies to develop and implement measures that would reduce the loss of life and property from uncontrolled wildfires. (Gov. Code, § 51176.)

Public Resources Code sections 4114 and 4130 authorize the Board to establish a fire plan, which, among other things, determines the levels of statewide fire protection services for SRA lands. CAL FIRE's most recently adopted fire plan is the 2024 Strategic Fire Plan; Government Code section 65302.5 gives the Board the regulatory authority to evaluate General Plan safety elements for its land use policies in the SRA and VHFHSZs as well as methods and strategies for wildland fire risk reduction and prevention in those areas.

CAL FIRE

CAL FIRE is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately owned wildlands. In addition, CAL FIRE provides emergency services in 36 of the state's 58 counties via contracts with local governments. Public Resources Code section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on non-federal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material. Public Resources Code sections 4790 through 4799.04 provide the regulatory authority for CAL FIRE to administer the California Forest Improvement Program. Public Resources Code sections 4113 and 4125 give CAL FIRE the responsibility for preventing and extinguishing wildland fires in the SRA. (Pub. Resources Code, §§ 4113 and 4125.) The Public Resources Code, beginning with section 4427, includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

CAL FIRE currently implements vegetation treatments under Public Resources Code sections 4475 through 4495. Public Resources Code sections 4461 through 4471 and 4491 through 4494 authorize CAL FIRE to implement its existing Chaparral Management Program, now known, in part, as the Vegetation Management Program (VMP). In addition, with the 2005 passage of SB 1084 (Chapter 5, Statutes of 2022), the Legislature modified, and in some cases, added language to Public Resources Code sections 4475 through 4480 that:

- Broadened CAL FIRE's range of vegetation treatment practices beyond those described for the existing CMP and VMP;
- Added a definition of "hazardous fuel reduction;" and

- Made other changes to the major statutory provisions guiding CAL FIRE's vegetation treatment authorities.

2024 Strategic Fire Plan for California

The 2024 Strategic Plan prepared by CAL FIRE and the California Natural Resources Agency lays out central goals for reducing and preventing the impacts of fire in the state (CAL FIRE 2024a). The goals are meant to establish, through local, state, federal, and private partnerships, a natural environment that is more resilient and human-made assets that are more resistant to the occurrence and effects of wildland fire. The goals of the 2024 Strategic Plan include: attract, hire, and retain quality employees; ensure all employees understand how the Department's various programs and job duties contribute towards efficiently achieving the CAL FIRE mission; promote a culture that values equitable access, embraces diverse backgrounds and experiences, and actively removes barriers to cultivate a more inclusive environment; leverage technology to modernize internal human resources processes and create efficient and effective innovative solutions to promote, support, and enhance the employee experience; strengthen the Department's physical and digital infrastructure and streamline equitable access to information across core services; and identify core capabilities and strengthen operational capacity.

In addition to the 2024 Strategic Plan, individual CAL FIRE units develop fire plans, which are major strategic documents that establish a set of tools for each CAL FIRE unit for its local area. Updated annually, unit fire plans identify wildfire protection areas, initial attack success, assets and infrastructure at risk, prefire management strategies, and accountability within their unit's geographical boundaries. The unit fire plan identifies strategic areas for prefire planning and fuel treatment as defined by the people who live and work locally. The plans include contributions from local collaborators and stakeholders and are aligned with other plans for the area.

California Fire Code

The California Fire Code (CFC) is contained within the California Code of Regulations, title 24. The CFC establishes requirements for development design to safeguard public health, safety, and general welfare from the hazards of fire. This includes standards on building design, materials, fire flow, and other suppression provisions. The CFC also regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazard classification system to determine what protective measures are required to protect life and provide fire safety. These measures may include applying construction standards, requiring separation between structures and property lines, and using specialized equipment. To ensure that these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every three years. Chapter 23 of the CFC provides specific standards for the construction and operation of motor fuel dispensing facilities that includes emergency shut-off systems, leak detection, secondary containment, and fuel delivery nozzle design requirements that includes vapor recovery to avoid fire hazards.

Emergency Response/Evacuation Plans

The draft 2024 California State Emergency Plan (SEP) plays a key role in guiding state agencies, local jurisdictions, and the public on emergency management. It describes the methods for conducting emergency operations, rendering mutual aid, emergency response capabilities of state agencies, resource mobilization, public information, and continuity of government during an emergency or disaster.

The 2017 State of California Emergency Plan was adopted by the Governor's Office of Emergency Services on October 1, 2017, and describes how state government mobilizes and responds to emergencies and disasters in

coordination with partners in all levels of government, the private sector, non-profits, and community-based organizations. The Plan also works in conjunction with the California Emergency Services Act and outlines a robust program of emergency preparedness, response, recovery, and mitigation for all hazards, both natural and human caused. All local governments with a certified disaster council are required to develop their own emergency operations plan (EOP) for their jurisdiction that meets state and federal requirements. Local EOPs contain specific emergency planning considerations, such as evacuation and transportation, sheltering, hazard specific planning, regional planning, public-private partnerships, and recovery planning. (OES 2017.)

DCC Commercial Cannabis Business Regulations

DCC regulations include the following requirements regarding wildfire:

A commercial cannabis business applying for a license to cultivate cannabis must provide an attestation that the local fire department has been notified of the cultivation site if the application is for an indoor license type. (Cal. Code Regs. tit. 4, § 15011, subd. (a).)

Local Laws, Regulations, and Policies

Sonoma County Community Wildfire Protection Plan

The 2016 Sonoma County Community Wildfire Protection Plan was developed with input from many organizations, including state and local fire departments, federal agencies, community groups, and land management agencies. The purpose of the Sonoma County Community Wildfire Protection Plan is to help reduce the potential loss of human life and damage to property, natural and cultural resources within Sonoma County due to wildfire.

The plan describes the wildfire risk and potential throughout the County, designates Wildland Urban Interface (WUI) areas, discusses assets at risk throughout the County, provides mitigation strategies, and discusses resources available.

Vision 2020 County Strategic Fire Plan

Vision 2020 County Strategic Fire Plan, adopted by the Board of Supervisors in October 2010, the Strategic Fire Plan contains recommended actions for improving and maintaining delivery of community-based fire suppression, rescue, and emergency medical services in County Service Area #40 (CSA #40) over a ten-year period. These recommended actions are based on the recommendations contained in the County CSA #40 Fire Services Analytical Review presented to the Board of Supervisors in August 2009.

Sonoma County Community Wildfire Protection Plan

The Sonoma County Community Wildfire Protection Plan (CWPP) 2023 Update was signed by the Sonoma County Board of Supervisors on May 9, 2023. The CWPP Update reflects collaborative development with active public participation, identifies wildfire risks and mitigation measures across the County, and lists community-driven Risk Reduction Priorities and specific project recommendations that agencies and community groups can use to develop projects MJHMP recommendations are referenced in the CWPP.

Sonoma County Zoning Ordinance

Sonoma County Code section 26-88-254(f)(16). Fire Code Requirements. The applicant shall prepare and implement a fire prevention plan for construction and ongoing operations and obtain any permits required from

the fire and emergency services department. The fire prevention plan shall include, but not be limited to: emergency vehicle access and turn-around at the facility site(s), vegetation management and fire break maintenance around all structures.

3.20.2 Environmental Setting

Fire Hazard Severity Zones (FHSZ) are developed by the Office of the State Fire Marshal and determined based on risk factors such as slope, winds, and fuel loading, and are classified based on the severity of the risk (moderate, high, and very high) (CAL FIRE 2024b).

The Proposed Project area is used for agriculture and is located in a rural residential area within unincorporated Sonoma County. The project site is not classified as being located within a FHSZ, the closest FHSZ is classified as “moderate” approximately 0.33 miles to the north, with the closest “very high” FHSZ located approximately 2 miles to the northeast (CAL FIRE 2024c).

3.20.3 Discussion of Checklist Responses

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan (Less than Significant Impact)

The site is accessed via Petaluma Hill Road, a two-lane road with a shoulder on each side of the road. The Proposed Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. However, as discussed in Section 2.6, construction associated with the Proposed Project is now complete, and as discussed in Section 1.5, the analysis of construction impacts is mooted. As discussed in more detail in Section 3.17, “Transportation,” during operations, the limited amount of increased traffic generated by the Proposed Project would not significantly impact emergency access. Therefore, impacts would be less than significant. As discussed in more detail in Section 3.17, “Transportation,” during operations, the limited amount of increased traffic generated by the Proposed Project would not significantly impact emergency access. Therefore, impacts would be **less than significant**.

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 (Less than Significant Impact)

The Proposed Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Typically, construction impacts would be assessed. However, as discussed in Section 2.6, construction is now complete, and as discussed in Section 1.5 the analysis of construction impacts is mooted.

During operation, the Proposed Project would not introduce new activities to the area which would significantly exacerbate wildfire risks, as the area would be used for agriculture, consistent with its zoning and the surrounding area, and the Proposed Project would be in an area in the jurisdiction of Rancho Adobe Fire Protection District. The closest station is located at 11000 Main Street, Penngrove CA 94951, approximately 1.2 miles away. Impacts would be **less than significant**.

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 (Less than Significant Impact)

The Proposed Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. As discussed in Section 2.6, construction associated with the Proposed Project is now complete. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred, if they cannot be mitigated. During operation, electrical components, such as security systems, would be solar and/or battery powered, within areas that have been cleared of other vegetation. Therefore, the Proposed Project is not expected to significantly exacerbate existing risks of wildfire. Therefore, this impact would be **less than significant**.

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 (Less than Significant Impact)

There are some small areas on and around the of the project site, which have been observed to have a susceptibility to deep-seated landslides (DOC 2010). However, the topography of the site is relatively flat with minor elevation changes on site and in the nearby vicinity. Furthermore, as discussed above, the Proposed Project site is not within a state or locally designated FHSZ. During operation, on-site coverage and uses would be an extension of existing on-site uses and would not include features that would substantially increase the risk to people or structures of flooding, landslides, post-fire slope instability, or drainage changes. Therefore, impacts would be **less than significant**.

3.21 Mandatory Findings of Significance

Criteria	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the project have the potential to substantially 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, substantially 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.21.1 Discussion of Checklist Responses

a. Effects on environmental quality, fish or wildlife, and historic resources (Less than Significant Impact)

As discussed in each resource section above, the Proposed Project would not result in significant impacts to biological or cultural resources and would not 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. Therefore, impacts would be **less than significant**.

b. Cumulative impacts (Less than Cumulatively Considerable Impact)

The CEQA Guidelines define cumulative impacts as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts reflect "the change in the environment which results from the incremental impact of the Proposed Project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative

impacts can result from individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines, § 15355[b]). CEQA Guidelines section 15355 further states that individual effects can be various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects. The CEQA Guidelines state that the discussion of cumulative impacts should reflect the severity of the impacts as well as the likelihood of their occurrence. However, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. Furthermore, the discussion should remain practical and reasonable in considering other projects and related cumulatively considerable impacts.

Existing and Reasonably Foreseeable Cannabis Facilities

Since recreational cannabis was legalized in Sonoma County, the County has approved permits for a total 281 cannabis businesses. As of 2023, active permits within the County consisted of 126 cultivation permits and 38 noncultivation permits (Sonoma County 2025). In 2023, Sonoma County estimated there were 27 unpermitted (illegal) cannabis sites in the County, down from a high of 267 such sites in 2019. (Sonoma County 2025.)

Aesthetics

The project site is not located within view of a scenic vista and would not result in a substantial change to scenic resources in the area. Potential impacts to aesthetic resources would be less than significant, and no mitigation measures are necessary.

Surrounding proposed commercial cannabis cultivation operations would require discretionary permits and would be evaluated for their potential to result in potentially significant environmental effects, including potential impacts to visual resources. Based on the rural and agricultural visual character of the area, newly proposed structures visible from surrounding public roadways would undergo evaluation for consistency with the surrounding visual character and may be required to implement visual screening and/or other measures if County staff identify potential impacts to visual resources. Proposed commercial cannabis cultivation projects, including use of mixed-light growing techniques, would be subject to DCC regulations requiring that any lighting be shielded from sunset to sunrise.

Based on the less-than-significant aesthetic impacts of the Proposed Project and discretionary review of surrounding proposed cannabis projects, the impacts to aesthetic and visual resources of the Proposed Project, when considered with the potential impacts of other reasonably foreseeable development in the area, would be **less than cumulatively considerable**.

Agriculture and Forestry Resources

The analysis provided in Section 3.2, “Agriculture and Forestry Resources,” indicates that the Proposed Project would not result in the permanent conversion of farmland and no potential impacts to forest land or timberland would occur. The Proposed Project would not result in a conflict with existing zoning for agricultural use or Williamson Act contract. Therefore, when considered with the potential impacts of other reasonably foreseeable commercial cannabis cultivation projects in the unincorporated county, the contribution of the Proposed Project’s potential impacts to agriculture and forestry resources is considered **less than cumulatively considerable**.

Air Quality

The analysis provided in Section 3.3, “Air Quality,” concludes that impacts related to air quality would be less than significant. Operational emissions would not exceed Bay Area Air District thresholds, a. Further, based on required setbacks and the size of the parcel, potential odors from proposed commercial cannabis cultivation activities would not result in nuisance odors above the threshold of significance.

The Proposed Project is one of 281 land use permit applications for commercial cannabis cultivation activities located within the county. All proposed commercial cannabis cultivation operations located within the county would require discretionary permits and would be evaluated for their potential to result in potentially significant environmental effects, including potential impacts to air quality. These proposed commercial cannabis cultivation projects would undergo evaluation for their potential to exceed applicable Bay Area Air District thresholds and result in potentially cumulatively considerable contribution to the county’s non-attainment status for ozone and/or fugitive dust. Proposed projects with the potential to exceed Bay Area Air District thresholds would be subject to standard Bay Area Air District mitigation measures to reduce potential air pollutant emissions to a less-than-significant level. These measures would also be applied for projects located within close proximity to sensitive receptor locations.

The analysis provided in Section 3.3, “Air Quality,” concludes that the Proposed Project’s potential other emissions (such as those leading to odor) would be less than significant based on the distance of proposed odor-emitting uses from the project property lines and distance to surrounding receptors. All proposed cannabis development projects in the project vicinity would be required to comply with County cannabis odor control requirements, including minimum setback distances. Therefore, the contribution of the Proposed Project’s potential impacts to air quality are considered less than cumulatively considerable.

Biological Resources

The analysis provided in Section 3.4, “Biological Resources,” concludes that implementation of the Proposed Project would not adversely affect biological resources.

The project site is located in an area that is fully developed for agricultural production. As a result, there is minimal undisturbed area surrounding the project site that would provide suitable habitat for special-status species. As compared to baseline conditions, implementation of the Proposed Project would have virtually no impacts to biological resources. All surrounding proposed cannabis development projects would undergo evaluation for potential to impact biological resources. Proposed cannabis projects that are determined to have the potential to impact sensitive species and/or their habitats, sensitive natural communities, federal or state wetlands, migratory corridors, native trees, or conflict with state or local policies or habitat conservation plans would be required to implement mitigation measures to reduce these impacts.

Based on the very limited impacts of the Proposed Project and discretionary review of surrounding projects, when considered with the potential impacts of other reasonably foreseeable development in the area, project impacts associated with biological resources would be **less than cumulatively considerable**.

Hydrology and Water Quality

As discussed in Section 3.10, “Hydrology and Water Quality,” the Proposed Project would not result in adverse impacts related to water quality, groundwater quality, or stormwater runoff. The project site is not within a flood hazard, tsunami, or seiche zone and would not risk release of pollutants due to project inundation.

All proposed commercial cannabis cultivation projects located in the county would be subject to standard County requirements for drainage, sedimentation, and erosion control for construction and operation. All potentially hazardous materials (e.g., pesticides, fertilizers) proposed to be utilized for these projects would be required to comply with CDPR requirements, DCC regulations, and the SWRCB Cannabis Cultivation Policy and General Order.

Water for irrigation is provided by the Penngrove Water Company. The Applicants received a Will Serve Letter from Penngrove Water Company dated June 1, 2020, which states that the water company is able to continue to serve water to the property with a 2-inch line and meter. (Petaluma Hill 2022.) The water supplier would be required to comply with groundwater sustainability plans and requirements. The project parcel has historically been used for agricultural purposes; the land was used for grazing and various types of agriculture.

Because the Proposed Project would comply with state and local regulations related to water quality; and because the Proposed Project would be supplied by a water provider that would be required to comply with local and state requirements for groundwater sustainability, impacts to hydrology and water quality would be **less than cumulatively considerable**.

Noise

As discussed in Section 3.13, “Noise,” operation of the Proposed Project would result in less than significant impacts.

Reasonably foreseeable future commercial cannabis cultivation projects would require discretionary permits and would be reviewed by County staff for potentially significant environmental impacts, including impacts associated with noise. Future projects with potential to generate noise above County standards or noise that would adversely affect surrounding sensitive receptors would be required to implement measures to reduce associated impacts.

There is no additional project construction required that would generate noise. Noise impacts from operations would be minimal, and similar both to surrounding agricultural activities as well as to agricultural activities that existed in the baseline condition.

The project-related operational contribution to traffic noise levels would be negligible. When combined with cumulative traffic, which is not likely to change from existing conditions, the Proposed Project’s contribution to traffic, and associated noise levels, would not represent an audible contribution to cumulative traffic noise levels. Therefore, the Proposed Project’s contribution to regional traffic noise impacts would be **less than cumulatively considerable**.

Transportation

As discussed in Section 3.17, “Transportation,” the Proposed Project would be consistent with existing circulation and traffic plans, and would not generate vehicle trips that would exceed existing VMT thresholds. In addition, the Proposed Project would be consistent with CAL FIRE/County Fire Department and County Public Works Department standards for site access and driveway design. Therefore, the Proposed Project’s potential impacts associated with these thresholds would be less than significant.

The total VMT for the county is estimated to be approximately 14,700,000 per day. (SCTA 2023.) Accordingly, the VMT associated with proposed commercial cannabis cultivation projects throughout the county is estimated to result in a very marginal increase in the total county VMT. Moreover, each project will be required to mitigate the project-specific impacts to the transportation network through standardized public facilities fees and other mitigation measures, based on the potential impacts. Such mitigation may include, but is not limited to, the installation of roadway and intersection improvements necessary to serve the project. Therefore, based on the size and scope of the Proposed Project, when considered with the potential impacts of other reasonably foreseeable commercial cannabis cultivation projects in the unincorporated county, the contribution of the Proposed Project to roadway impacts would be **less than cumulatively considerable**.

Other Impact Issue Areas

Based on the project's less-than-significant impacts and the discretionary review of all surrounding reasonably foreseeable future commercial cannabis cultivation projects, the Proposed Project's potential impacts associated with the following issue areas would be less than cumulatively considerable:

- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Land Use Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

c. Effects on human beings (Less than Significant Impact)

Environmental impacts that may have an adverse effect on human beings, either directly or indirectly, are analyzed in each environmental resource section in this Initial Study. As described in this document, the Proposed Project would not have any environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be **less than significant**.

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Appendix A – Biological Resources Information

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BIOLOGICAL RESOURCES REPORT

**8270 Petaluma Hill Road,
Pennngrove, Sonoma County, CA**

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Supporting Documents

1. Biological Assessment prepared by Sol Ecology, dated May 21, 2020
2. Cultural Resources Study prepared by Evans & De Shazo, Inc., dated July 7, 2020
3. Cumulative Impacts Assessment prepared by Native Sage, dated August 6, 2022
4. North Coast Regional Water Quality Control Board, Notice of Applicability, Coverage Under Water Quality Order WQ 2019-0001-DWQ; dated July 27, 2020
5. California Department of Fish and Wildlife, Refund for Notification of Lake or Streambed Alteration, EPIMS Notification No. 12259-R3, dated April 15, 2021
6. Site Management Plan, 8270 Petaluma Hill Road, Penngrove, CA prepared Hurvitz Environmental Services, Inc., dated August 6, 2020
7. Sonoma County Department of Agriculture/Weight and Measures Best Management Practices Cannabis Cultivation
8. Sonoma County Permit and Resource Management Department Negative Declaration adopted on December 20, 2016

1.0 INTRODUCTION

On May 11, 2020 Sol Ecology, Inc. performed a biological resources survey at 8270 Petaluma Hill Road in Penngrove, Sonoma County, California (Project Site). The proposed project includes a new small outdoor cannabis cultivation project on a small 2-acre portion of the larger property. This report is prepared in accordance with the requirements of the Sonoma County Agricultural Department for new cannabis cultivation sites.

The purpose of the assessment was to identify potential biological resources that may be present on the property subject to State or Federal regulation including: listed species and/or critical habitats protected under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), and/or California Fish and Game Code. In addition, wetland and non-wetland waters potentially regulated under Section 404 and 401 of the Clean Water Act, the Porter-Cologne Act, or habitats subject to Section 1600 of the California Fish and Game Code are also identified.

This report describes the results of the site survey and assessment of the Project Site for the presence of sensitive biological resources protected by local, state, and federal laws and regulations. This report also contains an evaluation of potential impacts to sensitive biological resources that may occur from the proposed project and potential mitigation measures to compensate for those impacts as warranted. This assessment is based on information available at the time of the study and on-site conditions that were observed on the date of the site visit.

1.1 Project Setting

The Project Site is zoned Diverse Agriculture (DA) and is located in southern Sonoma County within the town of Penngrove to the east of Highway 101. The t Site is within the Class 3 Marginal Groundwater Area Zone, and is located within the Petaluma Valley Medium Priority Basin. The property is not within any Williamson Act contract. The Project Site consists of approximately 2 acres and is located on primarily fallow land next to a row of greenhouses. The larger property is developed containing a large farm, roads, and crops (primarily flowers). The western third of the Project Site contains hoop houses with earthen foundations covered in tarps. The eastern third is comprised of dense poison hemlock. Aerial images show historic tilling of the site.

1.2 Project Description

The proposed project is for a medicinal cannabis small outdoor cultivation site on four 10,000 square foot leased portions of the property affecting approximately 2 acres of the overall larger site. Plants will be placed directly in the ground in spring and harvested in the fall. No operations will occur during the winter months. No pesticides will be maintained on site and rodenticides will not be employed. Water will be provided via on-site municipal water sources. Erosion and sediment control materials will be employed to prevent wastewater from leaving the cultivation area. Plant waste will be stored in containers prior to removal from the site. Security lights and alarms will be motion-sensored and lights will be downcast and shielded to avoid spilling into

nearby habitats. Agricultural fencing will be employed to protect crops from wildlife and block access to the site. The proposed project is subject to the San Francisco Bay Regional Water Quality Control Board (RWQCB) jurisdiction.

2.0 METHODS

On May 11, 2020, the Project Site was traversed on foot to determine the presence of (1) wetland and non-wetland waters potentially subject to federal or state regulation, (2) federal or state listed plant and wildlife species, or (3) presence of designated critical habitat.

2.1 Literature Review

To evaluate whether federal or state listed plant and wildlife species or other sensitive biological resources (e.g., wetlands) could occur in the Project Site and vicinity, Sol Ecology biologists reviewed the following:

- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute Cotati quadrangle and eight adjacent quadrangles (CNPS 2020a);
- California Natural Diversity Database (CNDDB) records search for USGS 7.5-minute Cotati quadrangle and eight adjacent quadrangles (California Department of Fish and Wildlife [CDFW] 2020);
- U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species for the Project Site (USFWS 2020a);
- CDFG publication *California's Wildlife, Volumes I-III* (Zeiner et al. 1990);
- CDFG publication *California Bird Species of Special Concern* (Shuford and Gardali 2008);
- CDFW and University of California Press publication *California Amphibian and Reptile Species of Special Concern* (Thomson et al. 2016);
- USFWS National Wetlands Inventory, Wetlands Mapper (USFWS 2020b); and
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (USDA 2019).

Based on information from the above sources, Sol Ecology developed lists of federal and state protected plant and wildlife species and sensitive biological resources that could be present in the project vicinity (Appendix B). Figures 2 and 3 (Appendix A) present the results of a 5-mile CNDDB record search around the study area for special status plants and wildlife. All biological resources are evaluated for their potential to occur within the study area in Section 3.0 of this report.

2.2 Field Survey

The Project Site was evaluated for the presence of sensitive biological communities subject to State or Federal regulation, including wetland and non-wetland waters. Sensitive communities were identified using the online version of *A Manual of California Vegetation* (CNPS 2020b) and California Wildlife Habitat Relationships (CWHR) habitat classifications.

The Project Site was also surveyed to determine if any wetland and non-wetland waters potentially subject to jurisdiction by the U.S Army Corps of Engineers (USACE), RWQCB, or CDFW are present. This preliminary assessment was based primarily on the presence of wetland plant indicators, hydrology or wetland soils. A preliminary waters assessment was based on the presence of unvegetated, ponded areas or flowing water, or evidence indicating their presence such as a high-water mark or a defined drainage course.

Sol Ecology biologists performed reconnaissance-level surveys for listed species on and adjacent to the Project Site on May 11, 2020. The focus of the surveys was to identify whether suitable habitat elements for each of the listed species documented in the surrounding vicinity are present on the Project Site or not and whether the project would have the potential to result in impacts to any of these species and/or their habitats either on- or off-site. Habitat elements examined for the potential presence of sensitive plant species included: soil type, elevation, vegetation community, and dominant plant species. For wildlife species, habitat elements examined included the presence of: dispersal habitat, foraging habitat, refugia or estivation habitat, and breeding (or nesting) habitat.

3.0 RESULTS

3.1 Sensitive Biological Communities

Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or riparian habitat. These habitats are protected under federal regulations such as the Clean Water Act; state regulations such as the Porter-Cologne Act, and the California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Program. There are two man-made ponds north of the Project Site that are associated with arroyo willow (*Salix lasiolepis*), coyote brush (*Baccharis pilularis*), duckweed (*Lemna* sp.), Himalayan blackberry (*Rubus armeniacus*), and marsh pennywort (*Hydrocotyle ranunculoides*). These two features are outside the proposed project site and will be completely avoided. No setback is required per the State Water Board General Order for Cannabis Cultivation Sites near man-made ponds. However, the order requires complete avoidance of riparian habitat when present. No other potentially jurisdictional wetlands or waters are present on or adjacent to the project site.

Soils at the site are mapped as Cotati fine sandy loam, 2 to 9 percent slopes and Diablo clay, 2 to 9 percent slopes. Cotati fine sandy loam typically occurs on terraces and is not hydric. Cotati fine

sandy loam is moderately well drained and parent material is alluvium derived from sedimentary rock. Minor soil components include Pajaro (4%), Goldridge (4%), Steinbeck (4%), and Unnamed (3%). Diablo clay typically occurs on hills and is not hydric. Diablo clay is well drained and parent material is residuum weathered from sedimentary rock. Minor soil components include Raynor (6%), Haire (6%), and Clear Lake (3%). The primary vegetation community observed on the Project Site is ruderal vegetation growing on fallow land, which is not considered sensitive. Photographs of the Project Site are provided in Appendix C. All plants observed during the site visit are provided in Appendix D - Observed Species Table.

3.2 Federal and State Protected Plants

Listed species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing.

Based upon a review of the resources and databases given in Section 2.1, 20 listed plant species have been documented within a five-mile radius of the Project Site (Appendix A, Figure 3). Due to the disturbed nature of the site, the ruderal vegetation community, and soils described above, the Project Site does not have the potential to support federal and state protected plant species. All plants observed during the site visit are provided in Appendix D.

Listed plant species documented in the area are unlikely or have no potential to occur on the Project Site for one or more of the following reasons:

- Hydrologic conditions (e.g. marsh habitat, seeps) necessary to support the listed plants do not exist on the Project Site.
- Edaphic (soil) conditions (e.g. rocky soils) necessary to support the listed plants do not exist on site.
- Topographic conditions (e.g. slopes) necessary to support the listed plants do not exist on site.
- Unique pH conditions (e.g. serpentine) necessary to support the listed plant species are not present on the Project Site.
- Associated vegetation communities (e.g. cismontane woodland, chaparral, broadleaved upland forest) necessary to support the listed plants do not exist on site.

3.3 Federal and State Protected Wildlife

In addition to wildlife listed as federal or state endangered and/or threatened, federal and state candidate species, CDFW California Fully Protected species and species protected under Fish and Game Code (such as maternity bat roosts and/or other species natal sites) are also considered under this review. In addition to regulations for listed species, most native birds in the United States (including non-status species) are protected by the federal Migratory Bird Treaty Act of

1918 (MBTA) and the California Fish and Game Code (CFGF), i.e., sections 3503, 3503.5 and 3513. Under these laws, deliberately destroying active bird nests, eggs, and/or young is illegal.

Eight protected wildlife species have been documented within five miles of the Project Site (Appendix A, Figure 4). Based on the presence and condition of biological communities described above, the Project Site has the potential to support none of these due to absence of suitable habitat elements in and immediately adjacent to the Project Site. Habitat elements that were evaluated but found to be absent from the immediate area of the Project Site include the following:

- No suitable burrows on or immediately adjacent to the Project Site (e.g. for burrowing owl or American badger).
- No suitable roosting habitat such as barns, old buildings, or large snags (e.g. for Townsend's big-eared bat).
- No suitable stream habitat on or immediately adjacent to the property (e.g. for steelhead).
- No suitable vernal pool or wetland habitats on or immediately adjacent to the property (e.g. for California tiger salamander).
- Absence of trees and/or suitably sized shrubs for protected raptors such as golden eagle and white-tailed kite.

While there are several nearby occurrences of the California tiger salamander (*Ambystoma californiense*), a federal and state listed species shown in Figure 3, the nearest occurrence was recorded in 1972 and is now presumed to be extirpated (CDFW 2020). The nearest extant breeding occurrence is more than 2 miles away. The adjacent man-made ponds do not provide suitable breeding habitat for California tiger salamander and the Project Site is located outside designated critical habitat. Lastly, the ruderal and farmed nature of the site precludes most burrowing animals that would provide upland habitat for tiger salamander. Based on this, there is no potential for California tiger salamander to occur on the Project Site.

Similarly, California red-legged frog (*Rana draytonii*), a federal listed species is also documented in the vicinity of the Project Site. However, the nearest documented occurrence is more than 2 miles from the site which is beyond the known overland dispersal distance for this species. Furthermore, there are no recorded occurrences within the known dispersal distance to the east of Highway 101 despite surveys in this area. Nonetheless, the adjacent man-made ponds may provide suitable aquatic habitat for California red-legged frog. At the time of the survey however, the pond surface was completely occluded by aquatic pennywort and duckweed eliminating any open water habitat required by this species. As such this species could potentially be present seasonally during dieback (outside the period of operations) but is not likely to be present year-round or to utilize these features for breeding and thus, is unlikely to disperse into uplands within the Project Site. Nonetheless, both ponds and their associated riparian habitat will be completely avoided by the proposed project. The absence of available refugia on the Project Site preclude California red-legged frog and thus no impacts are expected.

4.0 CONCLUSION AND RECOMMENDATIONS

Based on the absence of sensitive communities and/or suitable habitat for protected plants and wildlife, no impacts to biological resources is expected because of the proposed project.

Sensitive Biological Communities

Two man-made ponds are north of the Project Site and a small portion of their associated riparian vegetation does occur within the Project boundary. The two ponds and their associated riparian vegetation will not be impacted during project activities and all riparian habitat will be completely avoided. Furthermore, no potentially jurisdictional wetlands or waters are present on the Project Site. As such, no impacts are anticipated to sensitive biological communities and no mitigation is proposed.

Protected Plant Species

The Project Site does not have the potential to support federal and state protected plant species due to the disturbed nature of the ruderal vegetation community observed on site. Therefore, no impacts are anticipated to protected plant species and no mitigation is proposed.

Protected Wildlife Species

The Project Site does not have the potential to support federal and state protected wildlife species due to the absence of suitable habitat elements as a result of historic farming which has eliminated most small mammal burrows and/or other refugia that would support protected species in this area. Nearby man-made ponds do not support breeding populations of listed amphibians due to the absence of open water habitat. Therefore, no impacts are anticipated to protected wildlife species and no mitigation is proposed.

5.0 REFERENCES

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APPENDIX A

PROJECT FIGURES: SITE LOCATION MAP AND CNDDDB DATABASE RESULTS

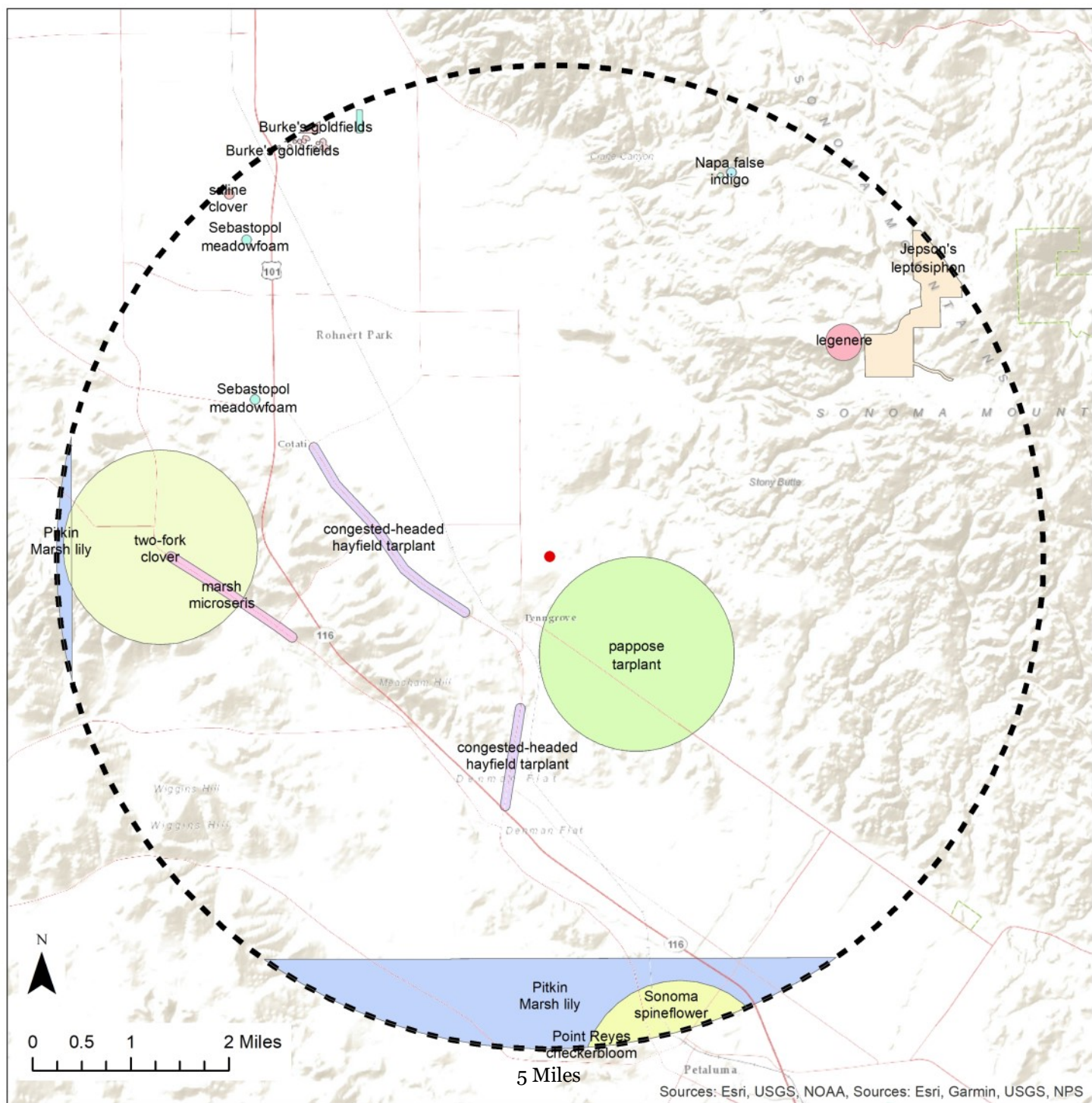
Figure 1: Location of Project Area
8270 Petaluma Hill Rd., Pennngrove, CA



- Project Study Area
- Ponds
- Parcel Boundaries

Figure 2: Special Status Plant Species within 5 Miles of the Project Site

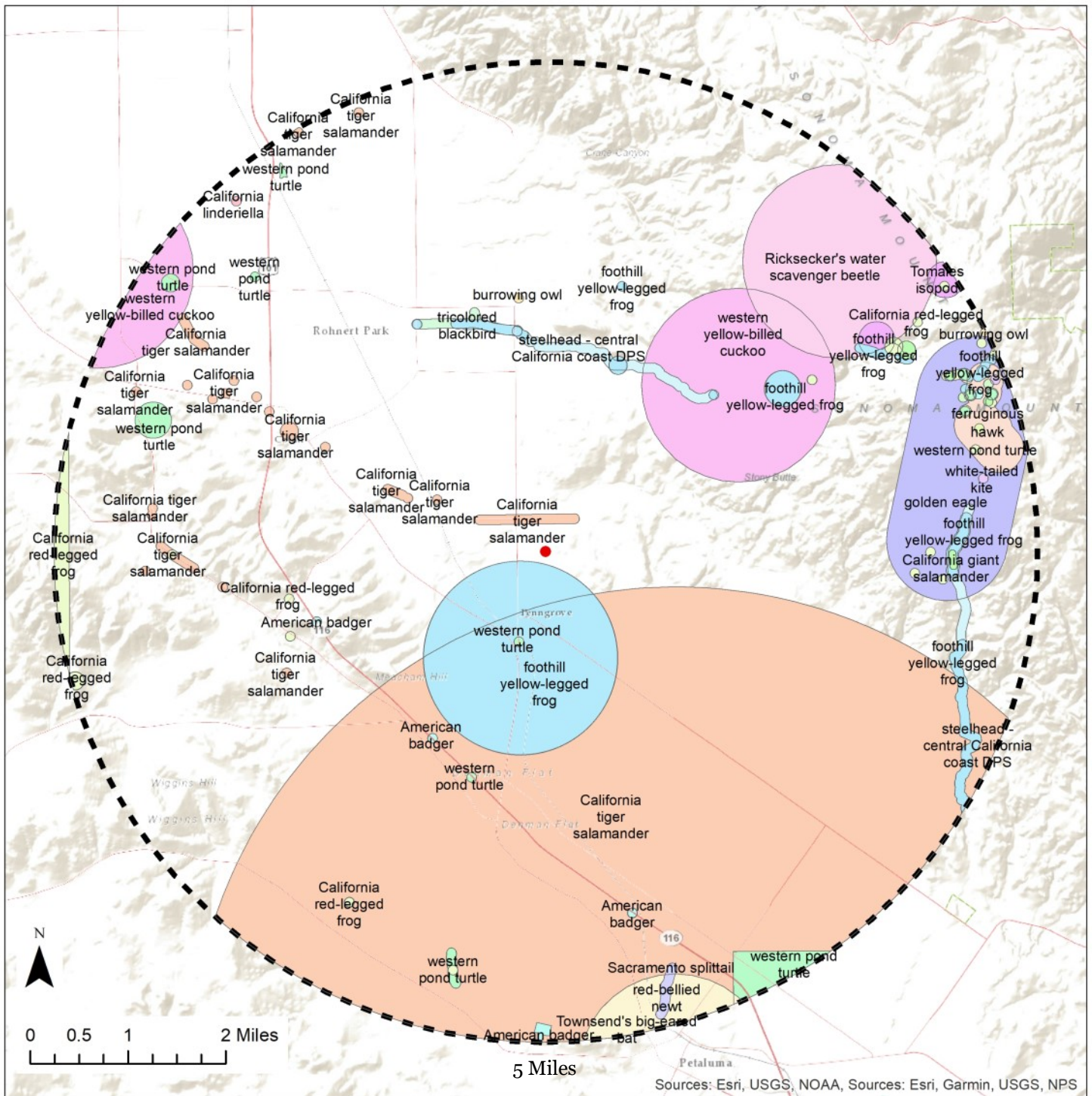
8270 Petaluma Hill Rd., Pennngrove, CA



- | | | | | | | | | | | | | | | | | | |
|--------------------------|------------------------|-----------------------------------|----------------------------|------------------------------|-------------------------|--------------------------------|-----------------------------|--------------------------|-----------------------|-------------------------|--|---------------------------|----------------|------------------------|------------------------|---------------------|-----------------------|
| ● Project Location | ■ 5 Mile Buffer | ● North Coast semaphore grass (1) | ● Pacific Grove clover (1) | ● Petaluma popcornflower (1) | ● Pitkin Marsh lily (2) | ● Point Reyes checkerbloom (1) | ● Sebastopol meadowfoam (3) | ● Sonoma spineflower (1) | ● Sonoma sunshine (1) | ● alkali milk-vetch (1) | ● congested-headed hayfield tarplant (3) | ● fragrant fritillary (1) | ● legenera (1) | ● marsh microseris (1) | ● pappose tarplant (1) | ● saline clover (1) | ● two-fork clover (1) |
| ● Burke's goldfields (2) | ● Franciscan onion (1) | ● Jepson's leptosiphon (1) | ● Napa false indigo (1) | | | | | | | | | | | | | | |

Figure 3: Special Status Animal Species within 5 Miles of the Project Site

8270 Petaluma Hill Rd., Pennngrove, CA



- | | | | |
|------------------------------------|------------------------------------|---|--|
| ● Project Location | ■ 5 Mile Buffer | ● Ricksecker's water scavenger beetle (1) | ● grasshopper sparrow (1) |
| ● American badger (5) | ● California giant salamander (4) | ● Sacramento splittail (1) | ● red-bellied newt (1) |
| ● California horned lark (1) | ● California linderiella (1) | ● Tomales isopod (2) | ● steelhead - central California coast DPS (2) |
| ● California red-legged frog (16) | ● California tiger salamander (22) | ● Townsend's big-eared bat (1) | ● tricolored blackbird (1) |
| ● California tiger salamander (22) | | ● burrowing owl (2) | ● western bumble bee (1) |
| | | ● ferruginous hawk (1) | ● western pond turtle (10) |
| | | ● foothill yellow-legged frog (11) | ● western yellow-billed cuckoo (2) |
| | | ● golden eagle (1) | ● white-tailed kite (2) |

APPENDIX B

CNDDDB RESULTS AND USFWS IPAC WITHIN 5 MILES OF THE PROJECT SITE



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad> IS < /span>(Cotati (3812236)> OR < /span>Glen Ellen (3812235)> OR < /span>Kenwood (3812245)> OR < /span>Santa Rosa (3812246)> OR < /span>Sebastopol (3812247)> OR < /span>Two Rock (3812237)> OR < /span>Point Reyes NE (3812227)> OR < /span>Petaluma (3812226)> OR < /span>Petaluma River (3812225))< /span>
< /span>> AND < /span>Taxonomic Group> IS < /span>(Fish> OR < /span>Amphibians> OR < /span>Reptiles> OR < /span>Birds> OR < /span>Mammals> OR < /span>Mollusks> OR < /span>Arachnids> OR < /span>Crustaceans> OR < /span>Insects> OR < /span>Ferns> OR < /span>Gymnosperms> OR < /span>Monocots> OR < /span>Dicots> OR < /span>Lichens> OR < /span>Bryophytes)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Accipiter cooperii</i> Cooper's hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	133 133	118 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Agelaius tricolor</i> tricolored blackbird	G2G3 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	106 139	955 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	G5T2 S2	None None	Rare Plant Rank - 1B.2	600 600	25 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus	G5T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	100 1,180	21 S:6	1	0	0	1	0	4	5	1	6	0	0
<i>Ambystoma californiense</i> California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	50 475	1231 S:82	10	25	24	5	4	14	7	75	78	3	1
<i>Ammodramus savannarum</i> grasshopper sparrow	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,150 2,150	27 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden	330 900	76 S:7	1	0	1	1	0	4	2	5	7	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz	400 400	93 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	G2 S2	None None		90 130	15 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Antrozous pallidus</i> pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	80 730	420 S:7	0	2	0	1	2	2	4	3	5	1	1
<i>Aquila chrysaetos</i> golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,800 1,800	321 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Arctostaphylos densiflora</i> Vine Hill manzanita	G1 S1	None Endangered	Rare Plant Rank - 1B.1	200 240	2 S:2	0	0	1	1	0	0	1	1	2	0	0
<i>Arctostaphylos stanfordiana ssp. decumbens</i> Rincon Ridge manzanita	G3T1 S1	None None	Rare Plant Rank - 1B.1	300 800	12 S:6	0	0	2	1	1	2	4	2	5	0	1
<i>Astragalus claranus</i> Clara Hunt's milk-vetch	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	770 1,165	6 S:2	0	1	0	0	0	1	0	2	2	0	0
<i>Astragalus tener var. tener</i> alkali milk-vetch	G2T1 S1	None None	Rare Plant Rank - 1B.2	30 30	65 S:1	0	0	0	0	1	0	1	0	0	0	1



Summary Table Report

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California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	-1 2,400	1989 S:7	0	2	4	0	0	1	0	7	7	0	0
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	890 1,230	51 S:2	2	0	0	0	0	0	2	0	2	0	0
<i>Blennosperma bakeri</i> Sonoma sunshine	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	70 330	24 S:17	0	8	3	0	3	3	5	12	14	2	1
<i>Bombus caliginosus</i> obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	150 300	181 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Bombus crotchii</i> Crotch bumble bee	G3G4 S1S2	None Candidate Endangered		300 300	276 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus occidentalis</i> western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive XERCES_IM-Imperiled	0 750	279 S:7	0	0	0	0	0	7	7	0	7	0	0
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	G3? S3?	None None	Rare Plant Rank - 1B.2	650 650	39 S:4	0	1	0	0	0	3	3	1	4	0	0
<i>Buteo regalis</i> ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,278 2,278	107 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Buteo swainsoni</i> Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	120 120	2518 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Caecidotea tomalensis</i> Tomaes isopod	G2 S2S3	None None		1,640 2,120	6 S:2	1	0	0	0	0	1	2	0	2	0	0
<i>Calamagrostis crassiglumis</i> Thurber's reed grass	G3Q S2	None None	Rare Plant Rank - 2B.1	150 150	15 S:1	0	0	0	0	0	1	1	0	1	0	0



Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Calicina diminua</i> Marin blind harvestman	G1 S1	None None		150 150	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Campanula californica</i> swamp harebell	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	150 150	139 S:2	0	0	0	0	2	0	2	0	0	1	1
<i>Castilleja uliginosa</i> Pitkin Marsh paintbrush	GXQ SX	None Endangered	Rare Plant Rank - 1A	150 200	2 S:2	0	0	0	0	2	0	2	0	0	2	0
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden	510 2,700	33 S:7	0	0	1	0	1	5	3	4	6	0	1
<i>Ceanothus divergens</i> Calistoga ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	680 1,900	26 S:9	1	1	0	2	0	5	3	6	9	0	0
<i>Ceanothus foliosus var. vineatus</i> Vine Hill ceanothus	G3T1 S1	None None	Rare Plant Rank - 1B.1	150 250	6 S:3	0	0	1	0	0	2	1	2	3	0	0
<i>Ceanothus masonii</i> Mason's ceanothus	G1 S1	None Rare	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	600 900	8 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Ceanothus purpureus</i> holly-leaved ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden	475 475	43 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Ceanothus sonomensis</i> Sonoma ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden	475 1,900	30 S:14	2	0	0	0	0	12	10	4	14	0	0
<i>Centromadia parryi ssp. parryi</i> pappose tarplant	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	80 80	39 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Chloropyron maritimum ssp. palustre</i> Point Reyes salty bird's-beak	G4?T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	2 4	76 S:2	1	0	1	0	0	0	1	1	2	0	0
<i>Chloropyron molle ssp. molle</i> soft salty bird's-beak	G2T1 S1	Endangered Rare	Rare Plant Rank - 1B.2	5 5	27 S:2	0	0	0	0	2	0	2	0	0	2	0



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<i>Chorizanthe valida</i> Sonoma spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden	30 150	6 S:2	0	0	0	0	2	0	2	0	0	2	0
<i>Cirsium andrewsii</i> Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2	300 300	31 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Clarkia imbricata</i> Vine Hill clarkia	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	230 232	2 S:2	0	1	1	0	0	0	1	1	2	0	0
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	90 600	164 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	30 120	635 S:2	1	0	0	0	0	1	1	1	2	0	0
<i>Coturnicops noveboracensis</i> yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	283 283	45 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	G5T4? SH	None None	Rare Plant Rank - 2B.2		6 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Delphinium bakeri</i> Baker's larkspur	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	305 705	6 S:4	0	0	0	1	0	3	0	4	4	0	0



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<i>Delphinium luteum</i> golden larkspur	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	150 150	11 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Dicamptodon ensatus</i> California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	350 2,185	234 S:9	4	2	0	0	0	3	0	9	9	0	0
<i>Downingia pusilla</i> dwarf downingia	GU S2	None None	Rare Plant Rank - 2B.2	85 700	132 S:12	4	1	0	1	2	4	7	5	10	1	1
<i>Elanus leucurus</i> white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	120 2,160	180 S:3	2	1	0	0	0	0	0	3	3	0	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	12 2,240	1385 S:42	6	12	15	6	0	3	10	32	42	0	0
<i>Eremophila alpestris actia</i> California horned lark	G5T4Q S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	2,275 2,275	94 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Erethizon dorsatum</i> North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	163 200	523 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Eriogonum luteolum var. caninum</i> Tiburon buckwheat	G5T2 S2	None None	Rare Plant Rank - 1B.2	550 550	26 S:2	1	0	0	0	0	1	0	2	2	0	0
<i>Fritillaria lanceolata var. tristulis</i> Marin checker lily	G5T2 S2	None None	Rare Plant Rank - 1B.1	70 70	32 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Fritillaria liliacea</i> fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden USFS_S-Sensitive	150 900	82 S:14	0	3	1	0	3	7	9	5	11	3	0
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	0 9	112 S:3	2	0	0	0	0	1	1	2	3	0	0



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<i>Gilia capitata ssp. tomentosa</i> woolly-headed gilia	G5T1 S1	None None	Rare Plant Rank - 1B.1	300 300	11 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_UCBG-UC Botanical Garden at Berkeley	20 1,705	52 S:19	1	2	0	0	2	14	15	4	17	2	0
<i>Hesperolinon congestum</i> Marin western flax	G1 S1	Threatened Threatened	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	200 560	27 S:4	2	1	0	0	0	1	0	4	4	0	0
<i>Horkelia tenuiloba</i> thin-lobed horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	200 250	27 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	G2? S2?	None None		1,500 1,500	13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hydroporus leechi</i> Leech's skyline diving beetle	G1? S1?	None None		1,180 1,180	13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasiurus blossevillii</i> western red bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	67 67	128 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Lasiurus cinereus</i> hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasthenia burkei</i> Burke's goldfields	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	50 442	35 S:23	3	8	5	1	4	2	8	15	19	1	3
<i>Lasthenia californica ssp. bakeri</i> Baker's goldfields	G3T1 S1	None None	Rare Plant Rank - 1B.2	125 125	19 S:1	0	0	0	0	0	1	1	0	1	0	0



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<i>Lasthenia conjugens</i> Contra Costa goldfields	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	280 280	36 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Laterallus jamaicensis coturniculus</i> California black rail	G3G4T1 S1	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	0 7	303 S:7	1	5	0	0	0	1	0	7	7	0	0
<i>Lavinia symmetricus ssp. 2</i> Tomaes roach	G4T2T3 S2	None None	CDFW_SSC-Species of Special Concern	160 160	4 S:1	1	0	0	0	0	0	1	0	1	0	0
<i>Layia septentrionalis</i> Colusa layia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley		57 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Legenere limosa</i> legenere	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	90 1,400	83 S:2	0	0	1	0	1	0	2	0	1	0	1
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	G2G3 S2S3	None None	Rare Plant Rank - 1B.2 SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	400 1,900	51 S:8	0	0	1	0	0	7	1	7	8	0	0
<i>Lilium pardalinum ssp. pitkinense</i> Pitkin Marsh lily	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank SB_RSABG-Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	150 200	4 S:4	0	2	0	0	1	1	3	1	3	1	0



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<i>Limnanthes vincularis</i> Sebastopol meadowfoam	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	50 135	46 S:41	2	7	6	3	6	17	16	25	35	5	1
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	90 776	438 S:6	0	1	0	0	0	5	4	2	6	0	0
<i>Melospiza melodia samuelis</i> San Pablo song sparrow	G5T2 S2	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	0 9	41 S:5	2	1	0	0	0	2	2	3	5	0	0
<i>Microseris paludosa</i> marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz	40 80	38 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Myotis thysanodes</i> fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	210 210	86 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Myotis volans</i> long-legged myotis	G5 S3	None None	IUCN_LC-Least Concern WBWG_H-High Priority	210 210	117 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Myotis yumanensis</i> Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low-Medium Priority	210 210	265 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	50 1,320	64 S:15	1	2	0	0	5	7	11	4	10	3	2
<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	G4 S2?	Endangered Endangered	AFS_EN-Endangered	445 445	23 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Oncorhynchus mykiss irideus pop. 8</i> steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	260 400	44 S:4	1	2	0	1	0	0	0	4	4	0	0



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<i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	G4T2 S2	None None	Rare Plant Rank - 1B.3	2,600 2,600	11 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Plagiobothrys mollis</i> var. <i>vestitus</i> Petaluma popcornflower	G4?TX SX	None None	Rare Plant Rank - 1A	20 20	1 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	G2 S2	None Threatened	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_BerrySB-Berry Seed Bank SB_RSABG-Rancho Santa Ana Botanic Garden	460 780	27 S:2	1	1	0	0	0	0	0	2	2	0	0
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	GNR S3	None None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	1 1	15 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Polygonum marinense</i> Marin knotweed	G2Q S2	None None	Rare Plant Rank - 3.1	5 5	32 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Potentilla uliginosa</i> Cunningham Marsh cinquefoil	GH SH	None None	Rare Plant Rank - 1A	150 150	1 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	G5T1 S1	Endangered Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	3 18	99 S:6	1	4	0	0	0	1	0	6	6	0	0
<i>Rana boylei</i> foothill yellow-legged frog	G3 S3	None Candidate Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	21 2,100	2468 S:28	10	6	5	2	0	5	7	21	28	0	0
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	10 2,230	1543 S:38	7	16	12	0	0	3	3	35	38	0	0
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	G1G2 S1S2	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	3 8	144 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Rhynchospora alba</i> white beaked-rush	G5 S2	None None	Rare Plant Rank - 2B.2	200 200	11 S:1	0	1	0	0	0	0	1	0	1	0	0



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<i>Rhynchospora californica</i> California beaked-rush	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	150 150	9 S:3	0	0	0	0	1	2	3	0	2	0	1
<i>Rhynchospora capitellata</i> brownish beaked-rush	G5 S1	None None	Rare Plant Rank - 2B.2	150 150	25 S:2	0	0	1	0	1	0	1	1	1	1	0
<i>Rhynchospora globularis</i> round-headed beaked-rush	G4 S1	None None	Rare Plant Rank - 2B.1	150 150	2 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Riparia riparia</i> bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	25 25	298 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Sidalcea calycosa ssp. rhizomata</i> Point Reyes checkerbloom	G5T2 S2	None None	Rare Plant Rank - 1B.2	30 30	34 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Sidalcea oregana ssp. valida</i> Kenwood Marsh checkerbloom	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	400 400	2 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Spirinchus thaleichthys</i> longfin smelt	G5 S1	Candidate Threatened		0 0	46 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Streptanthus anomalus</i> Mount Burdell jewelflower	G1 S1	None None	Rare Plant Rank - 1B.1	235 535	2 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Syncaris pacifica</i> California freshwater shrimp	G2 S2	Endangered Endangered	IUCN_EN-Endangered	120 300	20 S:5	2	2	1	0	0	0	1	4	5	0	0
<i>Talanites ubicki</i> Ubick's gnaphosid spider	G1 S1	None None		150 150	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Taricha rivularis</i> red-bellied newt	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	20 800	136 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	24 2,200	592 S:12	1	4	2	2	0	3	3	9	12	0	0



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<i>Trifolium amoenum</i> two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_RSABG-Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley SB_USDA-US Dept of Agriculture	160 300	26 S:6	0	0	0	0	0	6	6	0	6	0	0
<i>Trifolium buckwestiorum</i> Santa Cruz clover	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture		64 S:2	0	0	0	0	0	2	1	1	2	0	0
<i>Trifolium hydrophilum</i> saline clover	G2 S2	None None	Rare Plant Rank - 1B.2	75 100	56 S:5	0	1	0	1	2	1	3	2	3	1	1
<i>Trifolium polyodon</i> Pacific Grove clover	G1 S1	None Rare	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_USDA-US Dept of Agriculture	20 20	21 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Triquetrella californica</i> coastal triquetrella	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	328 328	13 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	6 6	39 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Vespericola marinensis</i> Marin hesperian	G2 S2	None None		80 80	23 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Viburnum ellipticum</i> oval-leaved viburnum	G4G5 S3?	None None	Rare Plant Rank - 2B.3		39 S:2	0	0	0	0	0	2	2	0	2	0	0

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

Sonoma 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 species¹ 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 Fisheries²).

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:

Birds

NAME

STATUS

Northern Spotted Owl *Strix occidentalis caurina* Threatened
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/1123>

Yellow-billed Cuckoo *Coccyzus americanus* Threatened
 There is **proposed** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/3911>

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is final critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/2076	Endangered

Insects

NAME	STATUS
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/3394	Endangered

Crustaceans

NAME	STATUS
California Freshwater Shrimp <i>Syncaris pacifica</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7903	Endangered

Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4338	Endangered
Sebastopol Meadowfoam <i>Limnanthes vincularis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/404	Endangered
Showy Indian Clover <i>Trifolium amoenum</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered
Sonoma Alopecurus <i>Alopecurus aequalis</i> var. <i>sonomensis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/557	Endangered
Sonoma Sunshine <i>Blennosperma bakeri</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1260	Endangered

Critical habitats

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

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Tiger Salamander <i>Ambystoma californiense</i> https://ecos.fws.gov/ecp/species/2076#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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.

APPENDIX C

SITE PHOTOGRAPHS



Photo 1. Ruderal vegetation within the Project Site on May 11, 2020.



Photo 2. Former greenhouses with ruderal vegetation within the Project Site on May 11, 2020.



Photo 3. Former greenhouses with ruderal vegetation within the Project Site on May 11, 2020.



Photo 4. Man-made pond north of the Project Site on May 11, 2020.

APPENDIX D

OBSERVED SPECIES TABLE

Scientific Name	Common Name
Plants	
<i>Avena barbata</i>	wild oat
<i>Baccharis pilularis</i>	coyote brush
<i>Conium maculatum</i>	poison hemlock
<i>Eucalyptus polyanthemos</i>	silver dollar gum
<i>Festuca perennis</i>	rye grass
<i>Helminthotheca echioides</i>	bristly ox-tongue
<i>Hordeum</i> sp.	barley
<i>Hydrocotyle ranunculoides</i>	marsh pennywort
<i>Lemna</i> sp.	duckweed
<i>Phalaris aquatica</i>	harding grass
<i>Pinus radiata</i> .	pine
<i>Plantago lanceolata</i>	English plantain
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rumex crispus</i>	curly dock
<i>Salix lasiolepis</i>	arroyo willow
<i>Sonchus oleraceus</i>	common sow thistle
<i>Vicia sativa</i>	vetch
Wildlife	
<i>Anas platyrhynchos</i>	mallard
<i>Agelaius phoeniceus</i>	red-winged blackbird
<i>Melospiza melodia</i>	song sparrow
<i>Haemorhous mexicanus</i>	house finch

Appendix E - Field Surveyor Qualifications:

Biological Assessment and Wildlife Ecology

Dana Riggs, Principal Biologist for Sol Ecology received her Bachelor of Science degree in Earth Systems, Science and Policy at California State University of Monterey Bay in 2001. Prior to founding Sol Ecology, she was a principal biologist and head of the Wildlife and Fisheries Department at WRA, a mid-size environmental consulting firm in San Rafael, California. She has 20 years of experience directing a broad range of resource studies from planning level to post-construction including: biological habitat assessments and mapping, special status species surveys, corridor studies, site restoration and monitoring, federal and state regulatory permitting, local permitting, mitigation and restoration planning for aquatic species, and NEPA and CEQA documentation for a variety of public and private sector clients. Dana has extensive experience working with species including California red-legged frog and California tiger salamander and has been approved by USFWS and CDFW to monitor for these species on projects throughout the state.

Biological Assessment and Plant Ecology

Andrew Georgeades, Senior Ecologist for Sol Ecology received his Bachelor of Science degree in Natural Resource Management and Conservation at San Francisco State University in 2005. Prior to co-founding Sol Ecology, Andrew worked as a natural resources' specialist for the Golden Gate National Recreation Area where he was responsible for monitoring native and rare plant populations and planning and supervising revegetation projects within the park. Andrew also previously worked for the California Native Plant Society as a vegetation project lead on the "Manual of California Vegetation, 2nd Ed." Publication. As a lead, he performed plant surveys, identified vegetation habitat types, landforms, environmental conditions, and plant species following the project protocol. Andrew currently is responsible for overseeing all floristic and focused plant surveys at Sol Ecology and maintains a CDFW scientific collecting permit. Andrew was assisted by **Amy May, Botanist** who has more than a decade of experience working in environmental consulting and has expertise in conducting wetland delineations and rare plant surveys.

Appendix B – Cultural Resources and Tribal Cultural Resources Evaluation

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EVANS & DE SHAZO

ARCHAEOLOGY HISTORIC PRESERVATION

RESULTS OF A CULTURAL RESOURCES STUDY FOR THE PROPOSED CANNABIS CULTIVATION PROJECT AT 8270 PETALUMA HILL ROAD, PENNGROVE, SONOMA COUNTY, CALIFORNIA

PREPARED FOR:

Josie Maldonado
Manager | Licensing and Compliance
All Good, LLC
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PREPARED BY:

Sally Evans, M.A., RPA
Principal Archaeologist | Cultural Resource Specialist
sally@evans-deshazo.com

July 7, 2020

Evans & De Shazo, Inc.
1141 Gravenstein Highway South
Sebastopol, CA 95472
707-823-7400
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STATEMENT OF CONFIDENTIALITY

This report identifies the locations of archaeological resources within Sonoma County, which is confidential information, as the cultural, scientific, and artistic values associated with these archaeological sites can be damaged or destroyed through uncontrolled public disclosure of information about their locations.

Disclosure of this information to the public may be in violation of both federal and state laws. Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act. Applicable United States (U.S.) laws include, but may not be limited to, Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archaeological Resources Protection Act (16 USC 470hh). California state laws that apply include, but may not be limited to, Government Code Sections 6250 et seq. and 6254 et seq.

If any information in this document is to be released for public review, all locational information associated with archaeological resources must be redacted before public distribution.



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INTRODUCTION

Evans & De Shazo, Inc. (EDS) was contracted by All Good LLC to provide a Cultural Resources Study (CRS) for a proposed project that includes the cultivation of cannabis and the development of supporting infrastructure (Project) within an approximate 1-acre portion of the 30.84-acre property located at 8270 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). To ensure compliance with CEQA and the Sonoma County Cannabis Land Use Ordinance No. 6245, the Sonoma County Department of Agriculture, Weights & Measures requested a CRS to determine the presence of significant or potentially significant cultural resources within the Project Area that could be affected by the Project.

The CRS was completed by EDS Principal Archaeologist, Sally Evans, M.A., RPA (#29300590) who exceeds the Secretary of Interior's professional qualification standards in Archaeology and History. The methods used to complete the CRS included a record search and review, a Sacred Lands inventory and Native American consultation, and field survey of the proposed cannabis cultivation area. The results of the CRS are presented herein.

PROJECT DESCRIPTION

The Project includes the outdoor cultivation of above-ground cannabis within four adjacent 10,000-square-foot areas, as well as the development of supporting infrastructure (Figure 1). The Project Area currently contains a 20,000 square foot shade structure that was built in 1987, which will be retained and used for the above-ground cultivation of cannabis. The Project does not entail any grading or construction.

PROJECT AREA LOCATION AND SETTING

The Project Area is a 1-acre portion of land located within the 30.84-acre Property located at 8270 Petaluma Hill Road in Penngrove, Sonoma County, California, within Assessor Parcel Number (APN) 047-101-019. On the USGS 7.5-minute Cotati, California (1980) quadrangle, the Project Area lies in Township 5 North, Range 7 West, Mt. Diablo Base Meridian (Figure 2). The Universal Transverse Mercator (UTM) grid coordinates at the approximate center of the Project Area are: 529616 meters East and 4240201 meters North, Zone 10.

The Property is bound by rural residential and agricultural properties on all sides and Petaluma Hill Road on the west. The Property currently contains a 110,000 square foot greenhouse associated with a non-cannabis commercial nursery, a 20,000 square foot shade structure, a 10,000 square foot metal warehouse/shop building that houses a construction business, and two 10,000 gallon water storage tanks, as well as two ponds, as well as other associated agricultural improvements. All existing buildings and structures within the Property were constructed in 1984 and after.

The Project Area includes approximately 1-acre of land, a portion of which contains the 20,000 square foot shade structure that will be retained as part of the Project. The Project Area is generally level and situated approximately 140 feet above mean sea level. The closest water sources to the Project Area are associated with the Petaluma River watershed and include Lichau Creek, located 0.26-miles northwest, and the headwaters of an unnamed seasonal tributary located 750 feet southeast of the Project Area.

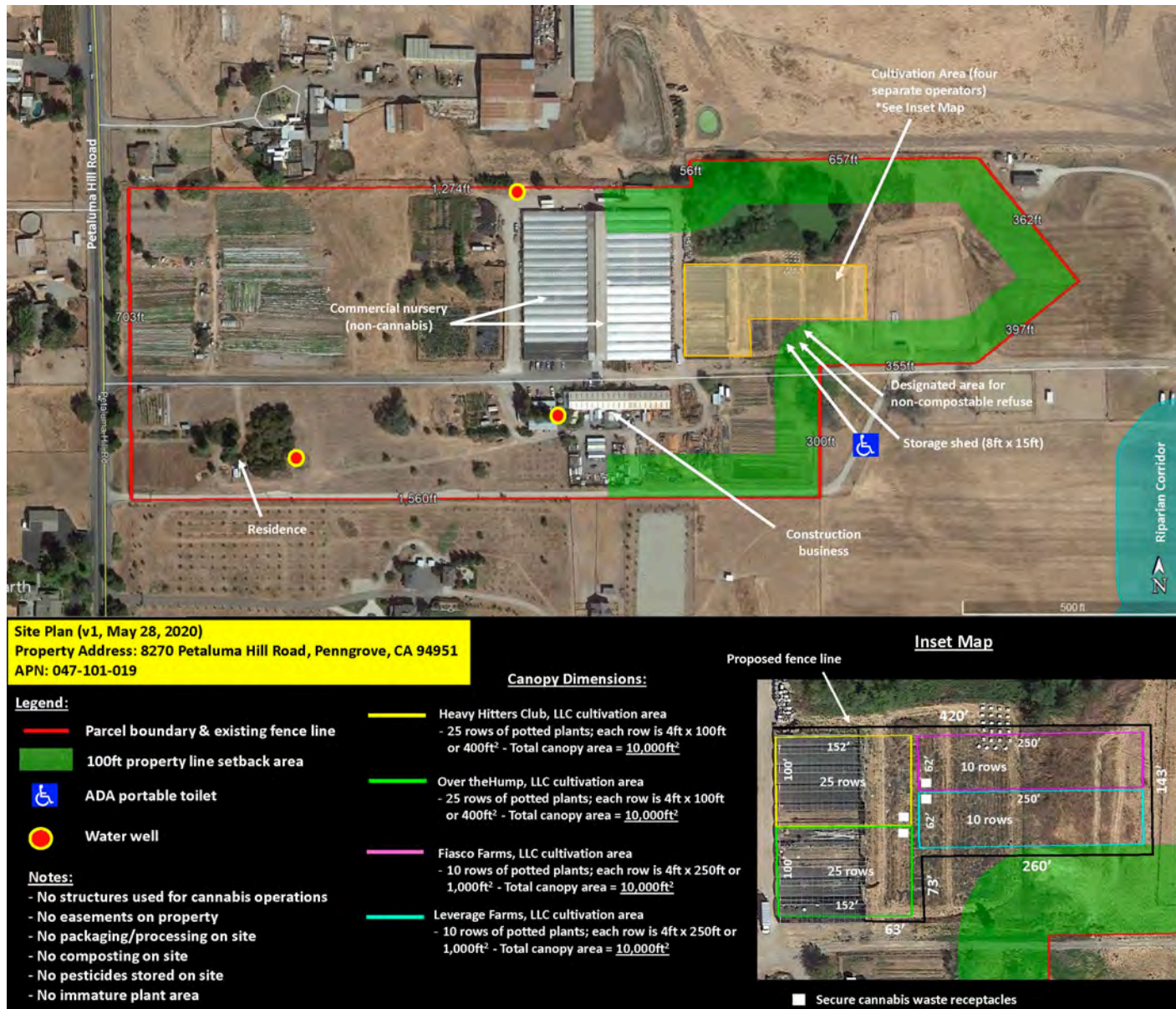
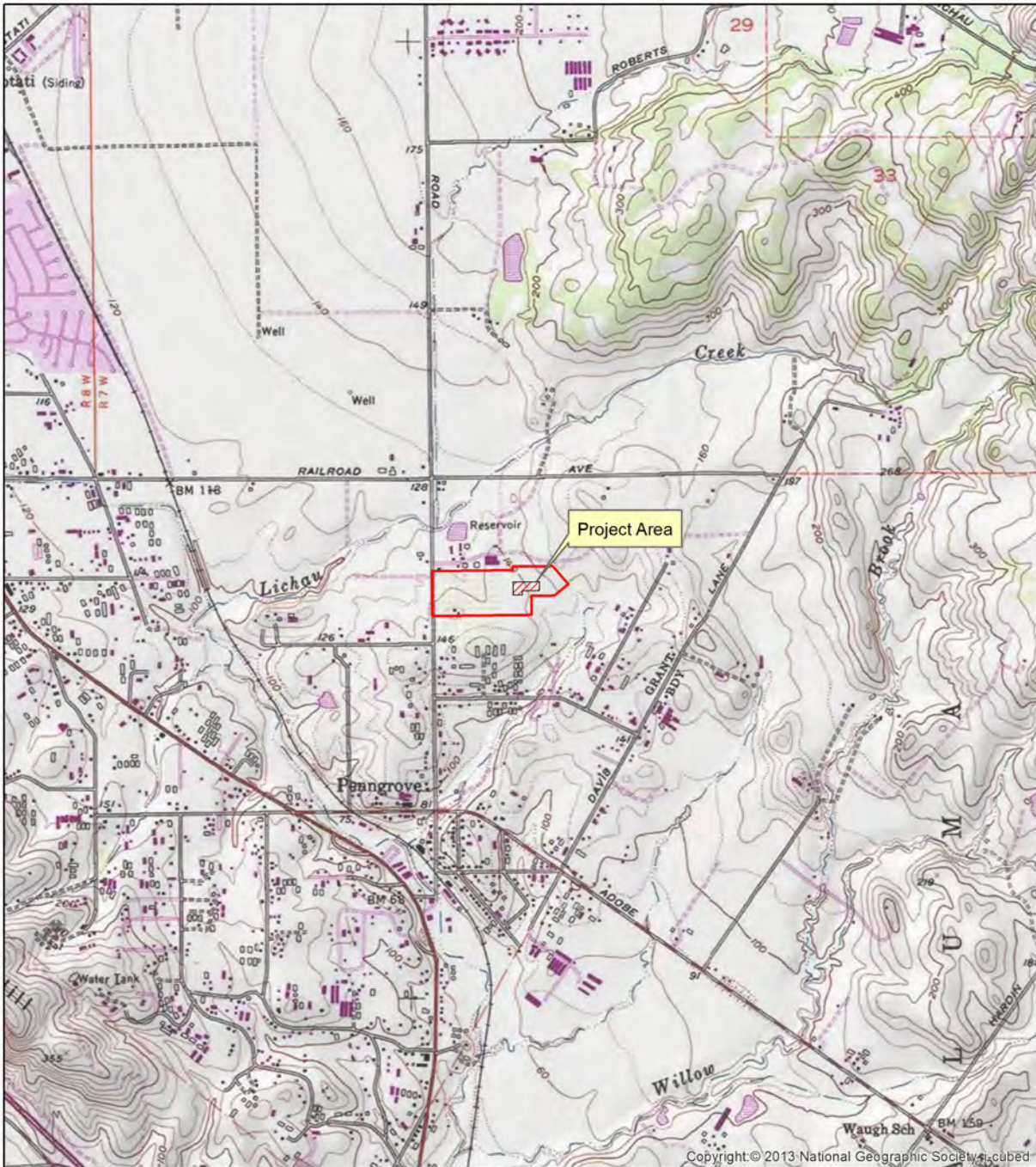


Figure 1: Site plan (May 28, 2020).



Sonoma
County

0 0.5 1 Miles

1:24,000

**8270 Petaluma Hill Road, Penngrove
Sonoma County, California
APN 047-101-019**

USGS 7.5' Cotati, Calif. (1980)
Township 5 North | Range 7 West | Section 30

Map Projection:
NAD 83 UTM Zone 10N

- Subject Property
- Project Area



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ARCHAEOLOGY & HISTORIC PRESERVATION

SRE: 06/15/2020

Figure 2: Project Area shown on the USGS 7.5' Cotati (1980) quadrangle.

REGULATORY SETTING

The proposed Project is subject to CEQA and the Guidelines for Implementing CEQA (State CEQA Guidelines, 14 CCR Section 15064.5), as well as Sonoma County Cannabis Land Use Ordinance (No. 6245). To ensure compliance with CEQA and the Sonoma County Cannabis Land Use Ordinance No. 6245. These regulations, as they pertain to cultural resources, are outlined below.

THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA is encoded in Sections 21000 et seq. of the Public Resources Code (PRC) with Guidelines for implementation codified in the California Code of Regulations (CCR), Title 14, Chapter 3, Sections 15000 et seq. CEQA requires state and local public agencies to identify the environmental impacts of proposed discretionary activities or projects, determine if the impacts will be significant, and identify alternatives and mitigation measures that will substantially reduce or eliminate significant impacts to the environment. According to CEQA, cultural resources and tribal cultural resources are aspects of the environment that require identification and consideration regarding potential impacts (14 CCR §15064.5 and PRC §21084.1). There are five classes of cultural resources defined by the State Office of Historic Preservation (OHP) that include:

- **Building:** A structure created principally to shelter or assist in carrying out any form of human activity. A “building” may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure:** A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object:** Construction primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures, and boundary markers.
- **Site:** The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **District:** Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

SIGNIFICANCE CRITERIA

According to CCR §15064.5, buildings, structures, objects, sites, and districts are historically significant if they are:

- Listed in, or eligible for listing in the California Register of Historic Resources (CRHR) (PRC §5024.1 and 14 CCR §4850 et. seq.);
- Listed in, or eligible for listing in, the National Register of Historic Places (NRHP);
- Included in a local register of historical resources, as defined in an historical resource survey meeting the requirements of PRC §5024.1(g); or
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

California Register of Historical Resources (CRHR)

A resource is eligible for listing on the CRHR if it has integrity and meets at least one of the following criteria:

1. 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;
2. Associated with the lives of persons important to local, California or national history;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Buildings, sites, structures, objects, and districts representative of California and United States history, architecture, archaeology, engineering, and culture convey significance when they also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A resource has integrity if it retains the characteristics that were present during the resource's period of significance. Enough of these characteristics must remain to convey the reasons for its significance.

National Register of Historic Places (NRHP)

In order to be included or qualify for the NRHP, a building, structure, object, site or district must possess significance in American history, architecture, archaeology, engineering or culture, and must be associated with an important historic context and retain historic integrity of those features necessary to convey its significance. The resource should possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet any of the following criteria:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Is associated with the lives of persons important in our past; or

- C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possesses high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or,
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

Unique Archaeological Resources

If an archeological site is an historical resource (i.e., listed, or eligible for listing in the CRHR) potential adverse impacts to it must be considered, just as for any other historical resource (PRC §21084.1 and §21083.2(l)). If an archeological site is not an historical resource but meets the definition of a “unique archeological resource” as defined in PRC §21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

Local Register of Historical Resources

A resource included in a local register of historical resources, as defined in PRC §5020.1(k), or identified as significant in an historical resource survey meeting the requirements PRC §5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

TRIBAL CULTURAL RESOURCES

Assembly Bill 52 (AB 52) was passed in 2014 and initiated compliance on July 1, 2015. AB 52 amended CEQA to address California Native American tribal concerns regarding how cultural resources of importance to tribes are treated under CEQA. The passage of AB 52 created a new category of resource called a “tribal cultural resource” (TCR). The statute identifies a TCR as a separate and distinct category of resource, separate from a historical resource. CEQA now specifies that a project that may cause a substantial adverse change in the significance of a “tribal cultural resource” [as defined in PRC §21074(a)] is a project that may have a significant effect on the environment. To help determine whether a project may have such an effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of the proposed project. According to AB 52, tribes may have expertise in tribal history and “tribal knowledge about land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.”

PRC §21074 defines a “tribal cultural resource” as any of the following:

- A. Sites, features, places, cultural landscapes, sacred places, or objects with cultural value to a California Native American tribe that are either (A) included or determined to be eligible for inclusion in the CRHR, or (B) included in a local register of historical resources as defined in subdivision (k) of §5020.1.; or,
- B. a resource that the lead agency determines, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of §5024.1 - taking into account the significance of the resource to a California Native American tribe.

PRC §21080.3.2 provides that as part of the tribal consultation process, parties could propose mitigation measures. If the California Native American tribe requests consultation to include project alternatives, mitigation measures, or significant effects, the consultation would be required to cover those topics. PRC §21082.3 provides that any mitigation measures agreed upon during this consultation “shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring program” if determined to avoid or lessen a significant impact on a tribal cultural resource.

SONOMA COUNTY CANNABIS LAND USE ORDINANCE NO. 6245

The Cannabis Land Use Ordinance (No. 6245) that was adopted by the County of Sonoma Board of Supervisors in December 2016 and revised October 2018 amended Chapter 26 (Zoning Ordinance) of the Sonoma County Code to allow for the cultivation of cannabis and permit cultivation of commercial medical cannabis. The Ordinance contains requirements to ensure the protection of the public health, safety, and environmental resources. To ensure protection of significant cultural resources, the ordinance states:

Section 14) Cultural and Historic Resources. Cultivation sites shall avoid impacts to significant cultural and historic resources by complying with the following standards. Sites located within a Historic District shall be subject to review by the Landmarks Commission, unless otherwise exempt, consistent with Section 26-68-020 and shall be required to obtain a use permit. Cultivation operations involving ground disturbing activities, including but not limited to, new structures, roads, water storage, trenching for utilities, water, wastewater, or drainage systems shall be subject to design standards and referral to the Northwest Information Center (NWIC) and local tribes. A use permit will be required if mitigation is recommended by cultural resource survey or local tribe.

The following minimum standards shall apply to cultivation permits involving ground disturbance. All grading and building permits shall include the following plans:

If paleontological resources or prehistoric, historic-period, or tribal cultural resources are encountered during ground-disturbing work at the project location, all work in the immediate vicinity shall be halted and the operator must immediately notify the agency having jurisdiction of the find. The operator shall be responsible for the cost to have a qualified paleontologist, archaeologist, and tribal cultural resource specialist under contract to evaluate the find and make recommendations in a report to the agency having jurisdiction.

Paleontological resources include fossils of animals, plants, or other organisms. Historic-period resources include backfilled privies, wells, and refuse pits; concrete, stone, or wood structural elements or foundations; and concentrations of metal glass, and ceramic refuse. Prehistoric and tribal cultural resources include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), midden (culturally darkened soil containing heat-affected rock, artifacts, animal bone, or shellfish remains), stone milling equipment, such as mortars and pestles, and certain sites features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe.

If human remains are encountered, work in the immediate vicinity will stop and the operator shall notify the agency having jurisdiction and the Sonoma County Coroner immediately. At the same time, the operator shall be responsible for the cost to have a qualified archaeologist under contract to evaluate the discovery. If the human remains are determined to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification.

STUDY METHODS

The following methods were utilized to identify significant or potentially significant cultural resources within the Project Area: a record search and review, Native American Sacred Lands inventory and consultation with local Native American tribes, and a field survey of the Project Area. These methods are described below.

RECORD SEARCH AND REVIEW

A record search and review of the Project Area was completed that included a record search at the NWIC of the California Historical Resources Information Systems (CHRIS) in order to obtain and review previous cultural resource studies and resource records pertaining to lands located within 0.5-miles of the subject Property. Research also consisted of reviewing appropriate prehistoric, ethno-historic, and historic references to provide a cultural setting for the subject Property, as well as soils and geologic data to identify the potential for buried archaeological resources to be present within the Project Area. As part of the record search, the following lists of cultural resources were reviewed:

- Built Environment Resource Directory (BERD) (OHP 2020)
- California Register of Historical Resources (CRHR)
- National Register of Historic Places (NRHP)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- Archaeological Determinations of Eligibility (ADOE) for Sonoma County (OHP 2012)
- California Inventory of Historic Resources (OHP 1976)
- Five Views: An Ethnic Sites Survey for California (OHP 1988)

SACRED LANDS INVENTORY AND NATIVE AMERICAN CONSULTATION

EDS contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands inventory for the subject Property and a list of local Native American tribes to contact for information about Sacred Sites, Traditional Cultural Resources, or other properties of traditional religious and cultural importance located within or near to the subject Property. The purpose of the Sacred Lands inventory and tribal consultation was to address the preservation and mitigation of impacts to California Native American historic, cultural, or sacred sites, as defined in PRC §5097.9 and PRC §5097.993, including sites that are listed or may be eligible for listing in the CRHR, historic or prehistoric ruins, burial grounds, any archaeological, prehistoric or historic Native American rock art, any archaeological, prehistoric or historic features, inscriptions made by Native Americans at such a site, places of worship, sacred or ceremonial sites, and sacred shrines on public and private properties. This consultation is separate from the government-to-government consultation that is required to determine the presence or absence, or potential effects to, Tribal Cultural Resources, as defined in PRC § 21074.

FIELD SURVEY

EDS complete a field survey of the Project Area to determine if there are any potentially significant cultural resources present that could be impacted by the proposed Project. To accomplish this task, the field surveyor inspected the Project Area for evidence of prehistoric archaeological sites, including artifacts, such as chipped stone (obsidian, chert and basalt) flakes and tools (e.g. projectile points, knives, scrapers), shellfish remains, ground stone, fire-affected rock, and other indicators of prehistoric archaeological resources. The field surveyor also inspected the Project Area for evidence of historic-era archaeological resources, such as surface scatters of farming or domestic type artifacts (i.e. glass, ceramic, metal, etc.), as well as features such as alignments of stone or brick, foundation elements from previous structures, minor earthworks, and historic plantings (i.e. old fruit, nut or other types of trees, and ornamental plants). There are currently no built-environment resources located within the Project Area.

CULTURAL SETTING

This section provides a prehistoric, ethno-historic, and historic setting for the Project Area and vicinity. Each setting serves as the basis for understanding the prehistory and history of the Project Area, the potential for significant cultural resources to be located within the Project Area, and the types of cultural resources that could be present.

PREHISTORIC SETTING

Archaeological evidence indicates that human occupation of Sonoma County began as early as the Paleo-Indian Period (ca. 10,000-6000 B.C.). This is indicated by the presence of fluted projectile points and chipped stone crescents that have been found in a few archaeological sites located in Sonoma County, near the Laguna de Santa Rosa, Bodega Bay, and Warm Springs Creek dam, as well as in the neighboring Mendocino and Lake counties. Based on limited archaeological evidence from this period, it appears that populations within and surrounding Sonoma County consisted of small, highly mobile groups that practiced broad-spectrum hunting and gathering techniques.

Archaeological evidence suggests that during the Lower Archaic Period (6000-3000 B.C.), people living in Sonoma County practiced a mobile hunting and gathering economy, residing in camps situated along marshes and on grasslands, and traveling to the surrounding uplands to acquire resources available in those areas on a seasonal basis. The types of artifacts that are found in archaeological sites dating to this period include large, wide-stemmed projectile points, cobble tools, handstones, and milling slabs. These artifacts are characteristic of the Borax Lake Pattern, a distinctive cultural pattern recognized throughout much of the North Coast Ranges during this time. In Sonoma County, the Borax Lake Pattern is recognized by the Spring Lake Aspect, specifically at sites located in Santa Rosa, and Duncan's Landing on the Sonoma Coast. A prehistoric archaeological site located in the Rincon Valley area of Santa Rosa, known as CA-Son-20, is the "type site" for the Spring Lake Aspect. This site dates to 6300 B.C. and contains artifacts such as wide-stemmed points, milling slabs and handstones (Wickstrom and Fredrickson 1982).

During the Middle Archaic Period (3000-1000 B.C.) people began to practice a more localized foraging strategy. Archaeological evidence reveals that new types of ground stone implements (mortars and pestles) began to be used, suggesting an increased dietary reliance on acorns rather than hard seeds, and a concomitant increase in sedentism. Formalized exchange relationships were also established, as evident by the presence of cut marine shell (*Olivella* sp.) beads obtained from the coast and often found in association with burials, and an increased amount of obsidian originating from sources in Napa Valley rather than the locally available obsidian source at Annadel, located in present-day Santa Rosa (Milliken et al. 2007).

The Middle Archaic Period was also marked by significant climatic changes during which warmer and drier conditions led to the reduction of lake basins in southern California, and across California there is a general decrease in the number of sites. This is thought to be the result of a reduced population during this time; however, it is suggested that the paucity of sites is more likely related to a period of increased alluvial deposition that buried many former living surfaces that date to this period (Meyer and Rosenthal 2007).

The Upper Archaic Period (1000 B.C. - A.D. 500) was characterized by cooler conditions accompanied by increased precipitation in northern and central California, which likely resulted in more favorable conditions for human occupation. Sites dating to this period demonstrate marked differences in their constituents relative to the Middle Archaic Period. These new occupations are ascribed to the Berkeley Pattern, which appears to have originated in the Clear Lake area during the Lower Archaic Period. Berkeley Pattern sites are characterized by more sedentism, a highly-developed bone tool industry, numerous mortars and pestles that further imply a greater reliance on acorns, and tightly flexed burials with few to no associated artifacts or preference toward orientation. When present, associated burial artifacts typically include *Olivella* saddle and saucer beads and *Haliotis* (abalone) shell pendants (Milliken et al. 2007; Moratto 1984). The Berkeley Pattern is represented at archaeological sites throughout Sonoma, Napa, and Lake counties.

The North Bay became the "seat of innovation" during the Upper Emergent Period (A.D. 1000-1500), as new ornament forms and technologies emerged, such as the bow and arrow, toggle harpoon, hopper mortar, clamshell disk beads, and steatite and magnesite beads and tubes. This period was marked by wide-ranging changes in *Olivella* bead forms and their distribution. The manufacture of clamshell disk beads also began and seems to have centered primarily on the Santa Rosa Plain and within the Napa

Valley. These type beads were used as exchange currency with a standardized value. The burial practice of cremation was also introduced in the North Bay during this time as well (Milliken et al. 2007). These shifts in technology, artifact types and mortuary practices, which for the most part spread throughout the San Francisco Bay Area from north to south, appear to indicate that another upward cycle of regional integration took place during this period. However, this cycle was stopped short by the Contact Period, marked by Spanish colonization of the region.

ETHNO-HISTORIC SETTING

As indicated on ethnographic maps of the area (Barrett 1908; Kelly 1978; Kroeber 1925; Milliken 2009), the Project Area is located within the aboriginal territory of the Coast Miwok, whose territory included all of present-day Marin County and portions of southern Sonoma County. The Project Area is located in the vicinity of several Coast Miwok tribelets who occupied the Bloomfield, Cotati, and Petaluma regions, including the *Licatuut*, *Tamalsimelá*, and *Petaluma* (Milliken 2009) (Figure 3).



Figure 3: Subject Property shown on a map of probable locations and possible boundaries of Native communities in the region (Milliken 2009).

The Coast Miwok based their subsistence around a hunting-and-gathering economy and utilized both marine and terrestrial resources. Up to seven species of acorns provided the main vegetable staple, while a number of other nuts, berries, seeds, kelp, and seaweed were also relied upon. Black-tailed deer and Tule elk were the primary big game animals, but many other mammals and birds, including antelope, bears, sea lions and sea otters, squirrels, rabbits, and a variety of inland and shore birds, were also eaten. Shellfish, including abalone, oyster, mussel, and clam species, were also important to the

diet, and their shells also provided material for both currency and as decorative items. Obsidian was a valuable resource for all prehistoric Californians, who used it to fashion spear points, arrowheads, knives, scrapers, and other cutting implements. Obsidian used by the Coast Miwok was obtained from the Annadel source located near Santa Rosa in Sonoma County and from sources in the Napa Valley, and was accessible through trade.

The Miwok divided themselves into small autonomous village communities (or tribelets), such as the *Licatuit*, *Tamalsimelá*, and *Petaluma* who occupied the Bloomfield, Cotati, and Petaluma regions, that made use of designated tracts of land and maintained both seasonal campsites and large permanent settlements. Small communities moved around within their territory and sometimes, with permission, across the territories of other groups to gain access to a variety of seasonally available subsistence and exchange resources, and to visit places of religious importance. While some locations were used only on occasion for specific purposes, others were used year-round and reflect a variety of economic and ritual activities. Larger semi-permanent and permanent villages consisted of single or multi-family, circular, conical, or domed huts (covered with grass or redwood bark), as well as a semi-subterranean ceremonial building. Sweathouses, of similar design to the ceremonial building, were also common.

The sociopolitical organization within village communities was non-egalitarian, meaning that differences in status or rank between individuals existed. Most tribelets had a headman or chief, known as the *hoipu*, and one or two headwomen, called *maien*. These individuals held high status within the group as organizers of various political, social, and religious activities (Slaymaker 1982). The Coast Miwok had strong spiritual beliefs that were expressed in dance performances, various healing practices, proper behavior, and in their intimate knowledge of the land.

“...communities shared a number of beliefs and practices, reflected in an active spiritual life, a rich oral literature, a sense of community, a feeling of belonging to the land rather than being master of it, and a concern about ways to avoid illness and death by poisoning. Rules for proper behavior acted as the glue that held all this together. Everyone knew that they must respect not only the land and its animals but also one another’s property” (Georke 2012:24).

The first European contact with the Coast Miwok was in 1579 when Sir Francis Drake stopped in Point Reyes to repair his ship, the *Golden Hinde*. Sixteen years later, Sebastian Cermeño’s galleon, the *San Agustín*, ran aground in the same place as Drake’s ship in 1579, and again there is documentation of contact with the indigenous people. Then in 1603, Sebastian Vizcaino’s landed his ship at Tomales Point and again there was contact with the local Coast Miwok. There seems to be no further contact with Europeans until late 1769 when Portola is said to have “discovered” San Francisco Bay. Six years after Portola, on August 5, 1775, Captain Juan Manuel de Ayala sailed the *San Carlos* into San Francisco Bay and dropped anchor in Richardson Bay near present-day Sausalito. During their forty-four days stay, the crew interacted with the Coast Miwok who were “generous with food and gifts, curious about the Spaniards, polite, intelligent and respectful to their elders” (Georke 2012:42).

Less than a year after Captain Juan Manuel de Ayala sailed the *San Carlos* into the San Francisco Bay, the Spanish returned to the area to establish a mission in San Francisco called Mission San Francisco de Asís (est. 1776; also referred to as Mission Dolores), and a military presidio. Over the next several decades, the Coast Miwok culture became severely disrupted following the establishment of Mission San

Francisco de Asís (1776), Mission San Jose (1817), Mission San Rafael Archángel (1817), and the Mission San Francisco Solano in Sonoma (1823). The establishment of missions in the Americas was the most important institution used by the Spanish to establish control of Native American territory and peoples. The missions were “established to gather natives living their free way of life in small scattered villages into one central mission site” (Castillo 1978:100).

Over a 50-year period, from 1783 to 1832, a total of 2,828 Coast Miwok were baptized at the missions, including 1,694 at Mission Dolores between 1783 and 1817, 390 at Mission San Jose between 1815 and 1817, 725 at Mission San Rafael between 1817 and 1832, and 19 at Mission San Francisco Solano in 1824 and 1825 (Milliken 2009:5). The Coast Miwok people of the of the Petaluma region (i.e. *Petalumas*) began to be baptized in 1814. The *Petalumas* went to Mission Dolores from 1814 through 1817, to Mission San Jose from 1816 through 1818, to Mission San Rafael Archángel from 1818 through 1822, and to Mission San Francisco Solano in 1824 (Milliken 2009:92). The *Licatuit*, *Tamalsimelá* and other tribal communities in the Bloomfield/Cotati region were baptized at Mission San Rafael Archángel between 1818 and 1824 (Milliken 2009:94). Upon arrival at the missions, the Coast Miwok, along with other Native American populations living at the missions, were aggregated to relatively small areas with bad sanitation, hot conditions, and minimal ventilation, which provided a favorable environment for the spread of contagious diseases. It is estimated that the population of Native Americans in California declined about 45% during Spanish occupation due to introduced diseases and sickness (Cook 1943:13-22). The mission system ended with secularization between 1834 and 1836.

Upon secularization, the Coast Miwok were freed from Mission control, but were kept in servitude by Mexican land grant owners who took control over most mission property and lands, as well as vast quantities of land called ranchos. The early American period was even more devastating to Native Americans, as the newly arriving Euro-American settlers found Native people an impediment to acquiring land, livestock, and gold, and this led to frequent violent confrontations and laws that further infringed on the rights of native people to occupy their ancestral land. Treaties were negotiated and rejected; reservations were established, dissolved, and reinstated; and native peoples were left in a continued period of unrest (Dutschke 2014). The 1880s saw an increase in public awareness of the problems California Indians faced, and the government sought to formally educate them as a means of assimilation (Heizer 1978:115). However, the schools threatened family and cultural ties because children were sent off to boarding schools and separated from their parents and were no longer allowed to speak their native language or practice cultural traditions; and so considerable resistance to the schools developed.

In 1887 the General Allotment Act, also known as the Dawes Act was passed by the U.S. Congress that provided each Native American living on one of the eight California reservations that existed at the time a 160-acre allotment of land per family unit and an allotment of public lands appropriated by the government for those not residing on a reservation. The land was to be held in trust by the Bureau of Indian Affairs (BIA) until a time when the occupant could show that they were using the land for agricultural purposes and had become self-sufficient. By 1905, Native Americans and their supporters began a drive to acquire land, better education, the rights of citizenship, and settlement of the unfulfilled treaty conditions (Dutschke 2014).

Between 1903 and 1906, an anthropologist and linguist from U.C. Berkeley, Samuel A. Barrett, traveled around the greater Sonoma County region recording the linguistic boundaries of native groups and the



locations of both active and old village sites (Barrett 1908). His purpose was to reconstruct the cultural geography and social relationships of the various native groups that had formerly inhabited the region. According to Barrett, the closest ethnographically-reported village sites to the Project Area are located closer to Cotati and Petaluma. No village sites were reported in the vicinity of the Project Area (Barrett 1908) (Figure 4).

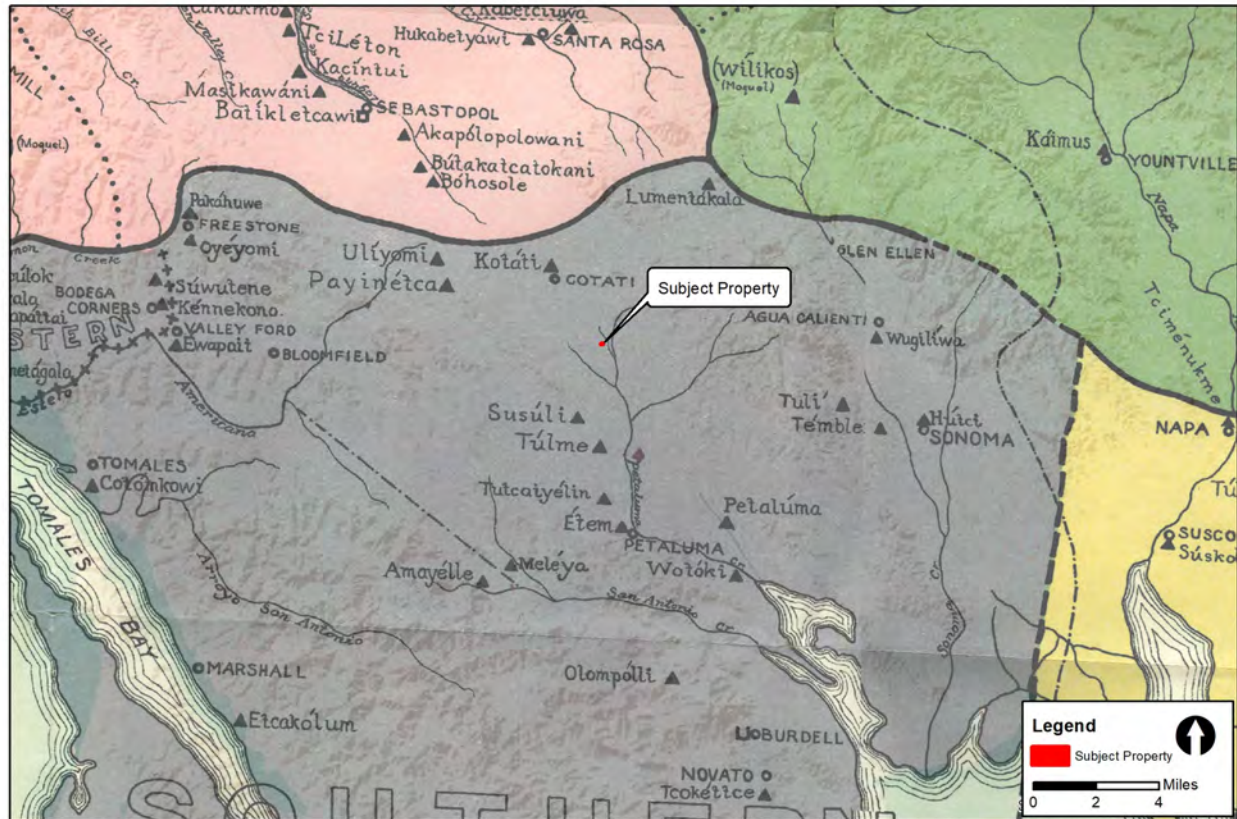


Figure 4: Subject Property shown on S.A. Barrett's map of village sites (1908).

Contemporary Coast Miwok

The Federated Indians of Graton Rancheria (FIGR), formerly the Federated Coast Miwok, gained federal recognition of their tribal status and sovereignty in December 2000. The new tribe consists of members of both Coast Miwok and Southern Pomo descent.

HISTORIC PERIOD SETTING

This section outlines the historical chronology of the Penngrove area with reference to events and themes related to the history of the area from the Spanish period to the later American period.

Spanish Period (1769 – 1821)

The Spanish were the first Europeans to colonize California beginning in 1769 when the first mission in Alta (upper) California¹ was established by the Spanish in San Diego. Spanish activity in the San Francisco Bay Area increased greatly after this time with several Spanish expeditions travelling through the Bay Area between 1769 and 1776 to search for suitable places to establish missions. Although none of these early expeditions are reported to have reached present-day Sonoma County, they resulted in the establishment of several missions throughout the Bay Area, including the Presidio of San Francisco and Mission San Francisco de Asis (1776) in present-day San Francisco, Mission Santa Clara de Asis (1777) in present-day Santa Clara, Mission San Jose de Guadalupe (1797) in present-day Fremont, and Mission San Rafael Archangel (1817; gained full mission status in 1822) in present-day San Rafael.

Mexican Period (1821 - 1846)

In 1821 Mexico declared its independence from Spain and took possession of California. A review of historic information for the Cotati area indicates that during the Mexican Period, the Project Area was within the 17,234-acre land grant known as *Rancho Cotate* (Figure 5), which was one of over 700 ranchos created between 1824 and 1846 following the formation of the Mexican Republic in 1824. *Rancho Cotate* encompassed what is now Cotati, Rohnert Park and Penngrove.

Rancho Cotate was originally granted by the Mexican government to Captain Juan Castaneda in 1844 for his service in the Mexican army; however, he lost title to the land after being unable to fulfill the legal requirements of ownership. The rancho land then passed through a number of hands, including those of Thomas O. Larkin. Larkin was born in Charlestown, Massachusetts and moved to California in 1832 at the age of 30. Larkin's first home, known today as the Larkin House (extant), is located in present-day Monterey, California and is claimed to be the first "designed" two-story house built in California.² He is also known for constructing the first brick building in San Francisco in 1850. Owing to his busy life as a merchant, trader, builder and politician, Larkin soon sold *Rancho Cotate* to Colonel Joseph S. Ruckle in the early 1840s. Ruckle was a businessman who would go on to become an Oregon State Senator. Ruckle owned the property for a short time, and in 1849 he sold the *Cotate Rancho* to California land-baron Dr. Thomas Stokes Page (Menefee 1873; Tuomey 1926) (Figure 6). Page owned and operated a cattle ranch on the property, and in 1892 created the Cotati Land Company with his sons and began subdividing the land.

¹ *Alta California* was a polity of New Spain founded in 1769 and became a territory of Mexico after the end of the Mexican War of Independence on 1821.

² The Larkin House is known as the "prototype" for Monterey Colonial architecture and is currently located within Monterey State Historic Park.

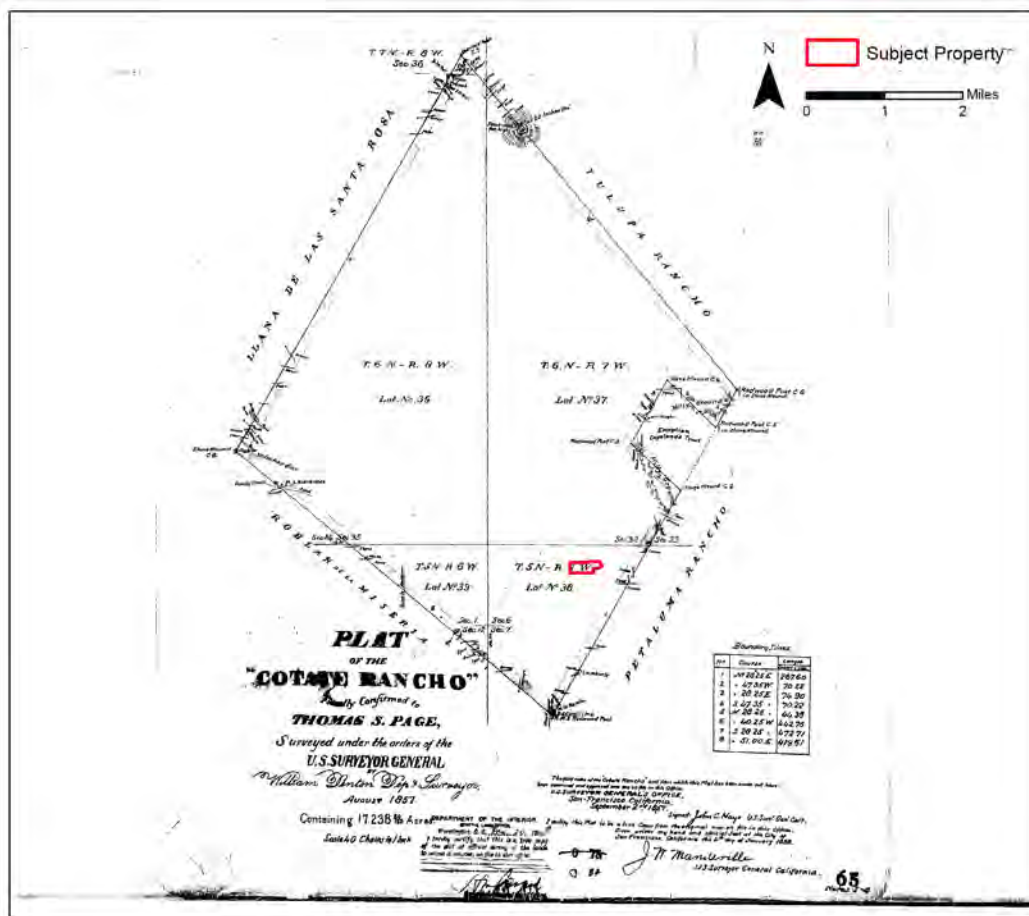


Figure 5: 1857 Plat Map of the Cotate (Cotati) Rancho.



Figure 6: Photograph of Dr. Thomas Page ca. 1860 (courtesy of the Cotati Historical Society).

American Period (Post 1848)

The American Period in California is marked by the end of the Mexican-American War (1846-1848) in 1848 when the U.S. signed the Treaty of Guadalupe Hidalgo and took possession of the territories that included California, along with Nevada, Utah, New Mexico, most of Arizona and Colorado, and parts of Oklahoma, Kansas, and Wyoming. When the U.S. took possession of California and other Mexican lands in 1848, it was bound by the Treaty of Guadalupe Hidalgo to honor the legitimate land claims of Mexican citizens residing in the captured territories. However, on January 24, 1848, within weeks of the treaty signing, James W. Marshall discovered gold along the American River in California, and news of the discovery brought tens of thousands of immigrants (known as “49ers”) to California from all over the U.S., as well as other countries.

The massive influx of new settlers who came to California during the Gold Rush soon gave rise to land disputes, as settlers began to move into rancho lands that they perceived as unoccupied and available for settlement. In order to investigate and confirm the titles of land claims of former (now American) Mexican citizens in California, officials acquired the provincial records of the Spanish and Mexican governments in Monterey and transferred them to the U.S. Surveyor General's Office in San Francisco, including land deeds, sketch maps (*disenos*), and various other documents, that were used to help settle land title disputes. In 1851, the U.S. passed the California Land Act that established the Public Land Commission to review these records and determine the validity of the Spanish and Mexican era land grants and charged the Surveyor General with surveying confirmed land grants. Of the 813 grants ultimately claimed, the land commission approved only 553; however, some of the confirmed grants were reduced in original size and the cost of litigation to prove their land titles forced most Californios³ to lose their land and cattle, and more often than not, their land was lost to newly arriving settlers and the lawyers who were hired to defend land titles (Olmsted 1986).

As required by the Land Act of 1851, Page's claim to *Rancho Cotate* was filed with the Public Land Commission in September of 1852 and was confirmed in 1854 and patented in 1857 (Tuomey 1926). During this time, Page and his wife, Anna Maria Liljevalch Page, and their eight children, were not living in California, but were residing in Valparaiso, Chile where Page had been practicing medicine since 1836. However, Page's agents began raising livestock on the rancho in the 1850s, and in the 1860s a large Victorian house was constructed for Page and his family within the rancho in anticipation for their eventual move to California (Draper and Draper 2014). Throughout the 1850s and 1860s, the rancho was mainly utilized for hunting game, cattle grazing, dairying, and wheat farming (Cotati Historical Society 2010).

By 1869, a number of people had squatted on Page's land, mainly due to the absence of Page and his family from the rancho (Draper and Draper 2014), and the 1867 map produced by A. B. Bowers shows several settlers living within the rancho. In 1869, Page, who was still living in Valparaiso, Chile at this time, became ill and decided to finally move his family to Rancho Cotati. Page, his wife, Anna Maria, three of their daughters, and their youngest son, William, moved to *Rancho Cotate*; however, at the request of his father, Page's first born son, Olof, who had just graduated Pennsylvania Medical School, returned to Valparaiso, Chile to take over his father's medical practice. While living in California, Page and his wife rarely stayed in the Victorian house (no longer extant) that had been constructed for them

³ Californios were elite families that received large land grants from Spain and Mexico.

on a hilltop within the rancho, but instead they lived in San Francisco in a house they had purchased in 1870. However, several of Page's sons moved to the rancho during the 1870s and operated a large dairy and stock farm that had been established.

In 1872, Page died in San Francisco, and *Rancho Cotati*, which now totaled approximately 16,000-acres and was one of the largest farms in Sonoma County at the time, continued to be managed by his sons. To ensure the rancho remained intact for several years beyond his death, Page left a very detailed will that included a clause stating that the rancho would remain intact until his youngest "male" child reached 25 years of age; and as a result, *Rancho Cotati* remained one of the last of Sonoma County's land grants to subdivided.



Figure 7: 1898 Illustration of Rancho Cotati (Reynolds and Proctor 1898).

HISTORY OF THE SUBJECT PROPERTY

Historic maps and aerial photographs dating from 1867 to 1993 were reviewed to obtain information specifically related to the subject Property in order to reveal past land use activities within the Project Area that could indicate the potential for historic-era archaeological deposits to be present within the Project Area. The research revealed that in 1867 the subject Property may have been occupied by William Ayers (Figure 8). William was born in Ireland in 1826 and moved to the U.S. with his parents as a young child. When they arrived in the U.S., the family moved to Illinois, where William grew up working on his father's farm. In 1849, he married Martha S. Wade and they had seven children. In 1850, at the age of 24, William and Martha set out to California, crossing the plains by ox teams to pursue wealth in the gold mines near Placerville, California. William spent one year in the gold mines before earning enough money for he and his family to move to Sonoma County. It appears that they may have originally settled near the subject Property and later purchased a ranch in the Petaluma area and pursued farming (Ancestry.com 2009, 2015; Gregory 1911:683). William was a charter member and Treasurer of the

International Order of Odd Fellows (I.O.O.F.) Petaluma Lodge No. 30 that was founded in 1854 (Munroe-Frasier 1880:322).

According to the 1877 map by Thos. Thompson, the subject Property was part of a 160-acre property owned by Joseph Himebauch, and a house and orchard were present within the approximate center of the subject Property (Figure 9). The map also shows a blacksmith shop within Himebauch's 160-acre property that was located to the south of the subject Property. Research did not reveal any specific information about Joseph Himebauch.

By 1897, the subject Property was part of a 160-acre property owned by John O'Hara (Figure 10), who appears to have also owned the property in 1908 (Figure 11). John was born in Ireland and moved to California in 1855, arriving in Sonoma County in 1857. According to Thompson (1877:100), O'Hara was a farmer and proprietor of the "Valley House"; although no further information about John O'Hara or the "Valley House" was found.

A series of USGS maps dating between 1916 and 1980, and aerial maps from 1942, 1952, 1965, and 1987 were also reviewed. The 1916 map does not show any buildings within the subject Property (Figure 12); however, the 1944, 1954, and 1980 USGS maps show a house within the southwestern portion of the subject Property, which is also shown on the 1942, 1952, and 1965 aerial photographs (Figure 13, Figure 14, Figure 15, and Figure 16). The 1942, 1953, and 1965 aerial photographs and the 1954 USGS map also show the western half of the subject Property was an orchard, which extended through the property to the south.

According to the 1987 aerial photograph, the house was still extant and the existing 110,000 square foot greenhouse and 10,000 square foot metal warehouse/shop building had been constructed within the subject Property by this time (Figure 17). According to County of Sonoma permit history, the greenhouse and warehouse/shop buildings were constructed in 1984 and the shade structure was constructed in 1987. By 1993 the subject Property also contained a pond and other associated agricultural and administrative improvements; and the 10,000 gallon water storage tanks were added sometime after 2000. These agricultural-related buildings and structures were associated with Passanisi Nursery, Inc., a family owned wholesale and retail nursery that operated within the subject Property between 1989 and 2012.

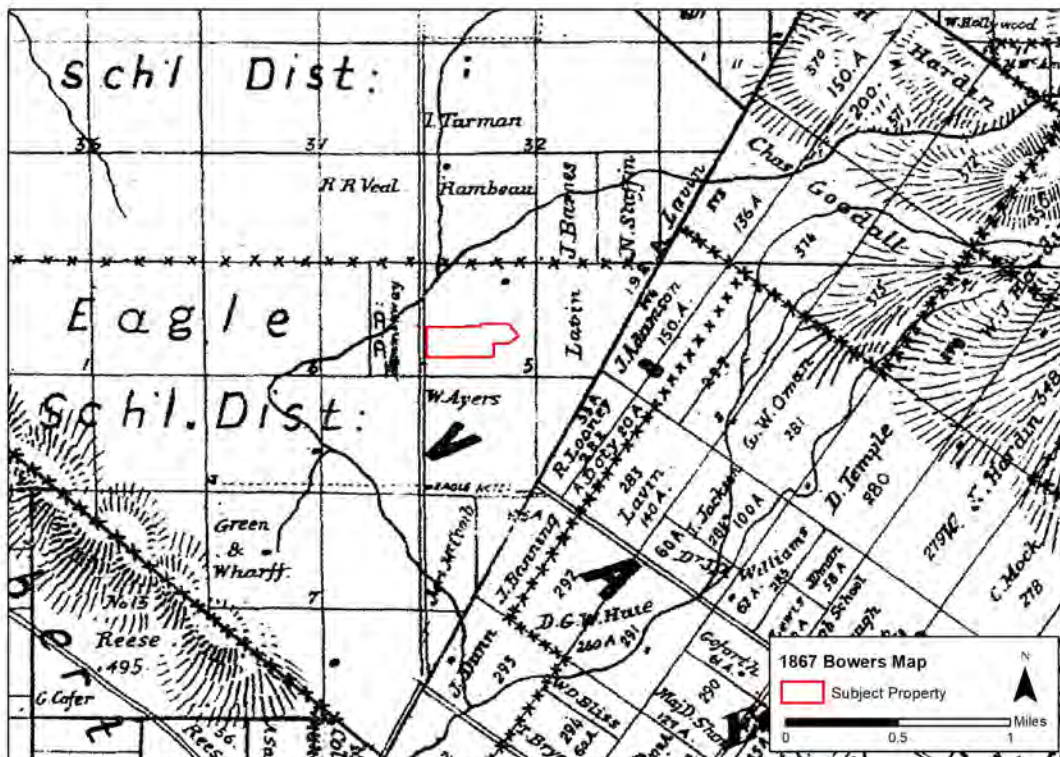


Figure 8: Subject Property shown on 1867 map by A. B. Bowers.



Figure 9: Subject Property shown on the 1877 map by Thos. Thompson. The map shows a house and orchard within the subject Property.

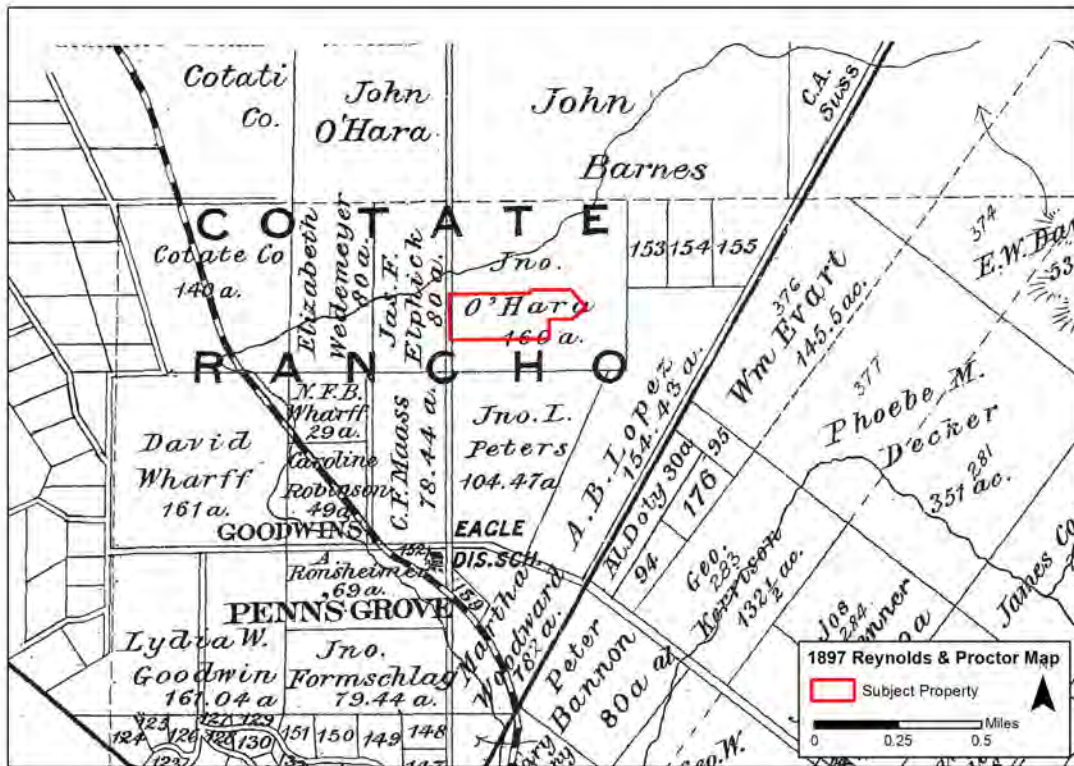


Figure 10: Subject Property shown on the 1897 Sonoma County atlas map by Reynolds and Proctor (1898).



Figure 11: Subject Property shown on the 1908 map by McIntire & Lewis.

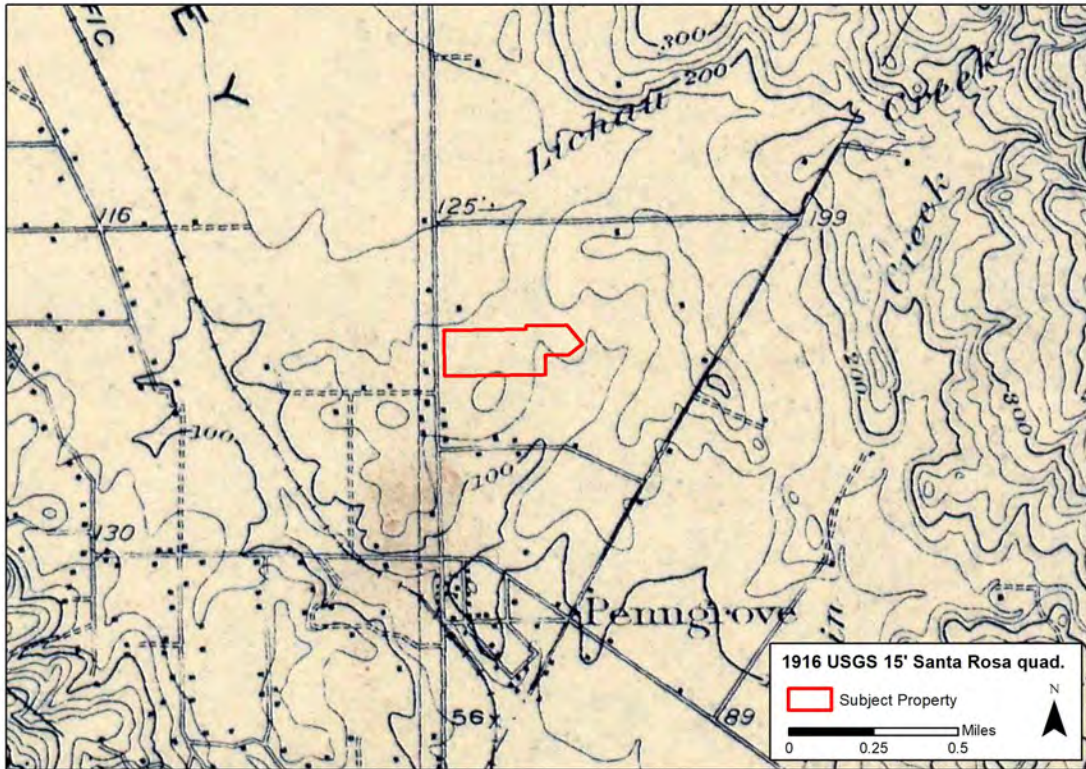


Figure 12: Subject Property shown on the 1916 USGS 15' Santa Rosa quadrangle map.

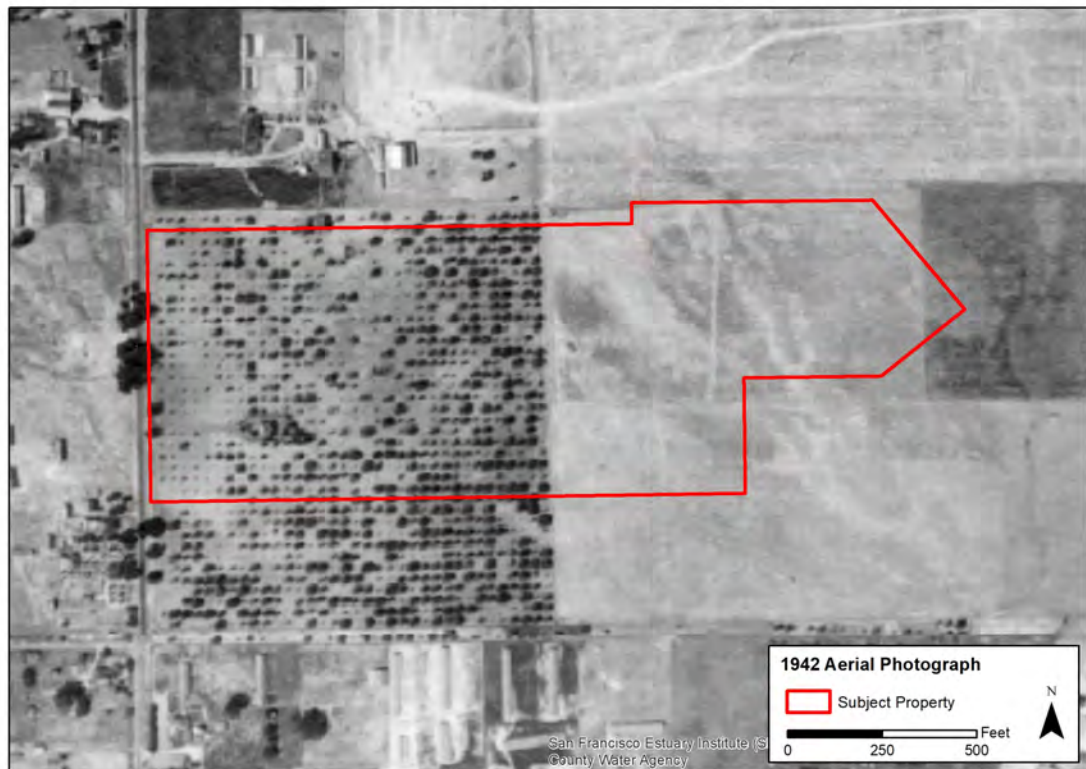


Figure 13: Subject Property shown on the 1942 aerial photograph (U.S. Department of War 1942).

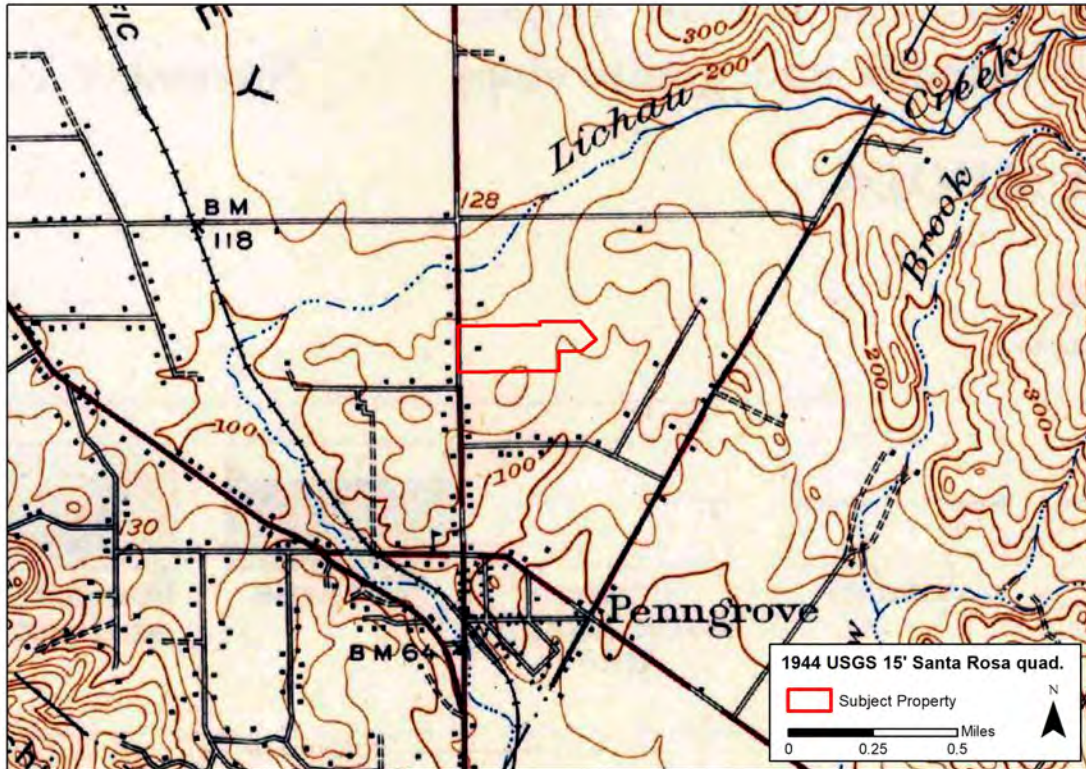


Figure 14: Subject Property shown on the 1944 USGS 15' Santa Rosa quadrangle map.



Figure 15: Subject Property shown on the 1953 aerial photograph (U.C. Santa Barbara Library).

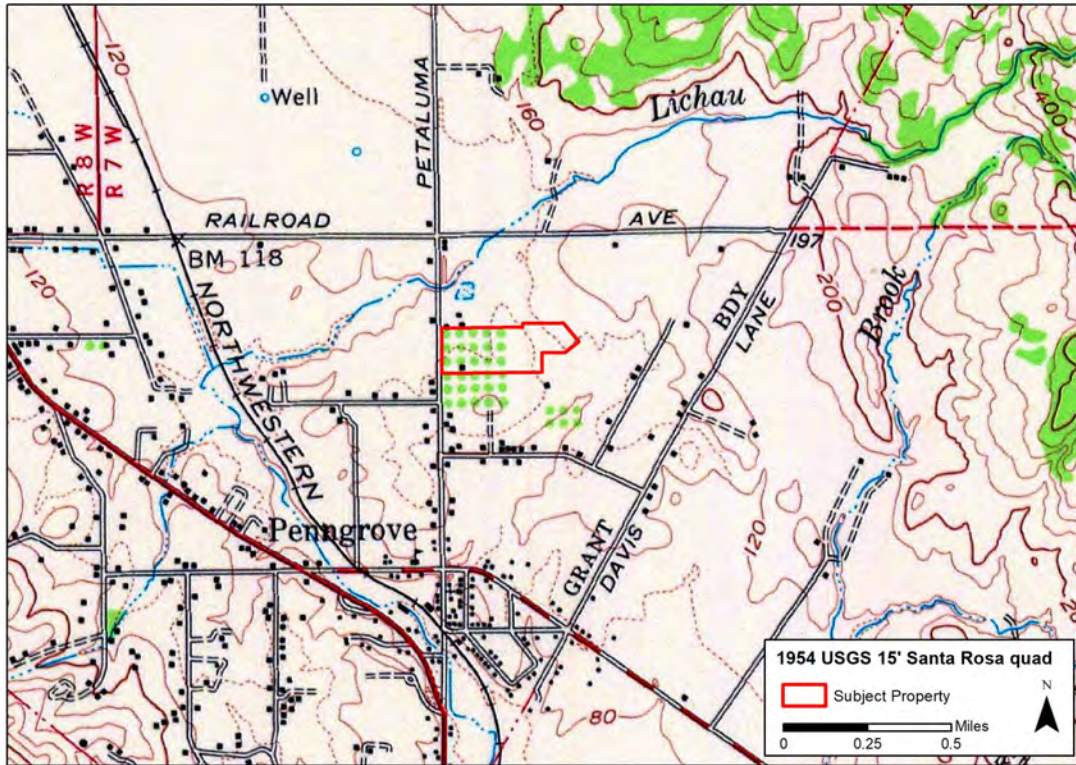


Figure 16: Subject Property shown on the 1954 USGS 15' Santa Rosa quadrangle map.



Figure 17: Subject Property shown on the 1987 aerial photograph (U.C. Santa Barbara Library).

STUDY FINDINGS

The results of the record search and review, Native American Sacred Lands inventory and consultation with local Native American tribes, and field survey are provided below.

RESULTS OF RECORD SEARCH

In order to identify previously recorded cultural resources within the Project Area, EDS defined a record search study area that included the subject Property and a 0.5-mile buffer for resources and cultural studies. On June 23, 2020, the NWIC provided the results of the record search (NWIC File #19-2229), which was supplemented by information available in the EDS digital library.

Previously Identified Cultural Resources in Record Search Area

There are no previously recorded cultural resources within the subject Property, but there is one identified unrecorded historic-period archaeological resource within the subject Property, and one previously recorded cultural resource within 0.5-miles of the subject Property that are listed below in Table 1.

Table 1: Previously Identified Cultural Resources within the Record Search Area.

Primary	Trinomial	Resource Name	Resource Type	Age	Attributes	Recording Event(s)
<i>Resources within the Project Area</i>						
[none]	[none]	[none]	Archaeological Site	Historic	Remnants of two previous buildings, including a brick fireplace, two stone columns at entrance to a driveway, an unknown brick feature, scatter of domestic-type artifacts (i.e., glass, ceramic, ferrous metal) and building material (i.e. metal pipes, faucets, water heater, etc.).	Evans (2000)
<i>Resources within 0.5-miles of the Project Area</i>						
P-49-001734	[none]	ARS 92-47-02	Archaeological Site	Prehistoric	Two modified lithic flakes	Bryne (1992)

A review of the OHP's BERD for Sonoma County does not list any cultural resources within or near to the subject Property. Furthermore, there are no cultural resources listed in the CRHR, the NRHP, or California Inventory of Historic Resources located within or near the subject Property, and there are no California Historical Landmarks or California Points of Historical Interest located within or near the subject Property.

Previous Cultural Resource Studies in Record Search Area

According to information on file at the NWIC and EDS, the subject Property was previously surveyed for cultural resources in 2000 (Evans 2000). In addition, there have been 18 previous cultural resources studies within the record search area. These studies are listed below in Table 2, followed by a summary of the previous cultural resource study of the subject Property.

Table 2: Previous Cultural Resource Studies within the Project Area and within 0.5-miles of the Subject Property.

Report No.	Author(s)	Year	Title	Resources
<i>Studies within Project Area</i>				
S-22664	Sally Evans (Archaeological Resource Service)	2000	A Cultural Resources Evaluation of the Property at 8340 Petaluma Hill Road, APN 047-101-014, Penngrove, Sonoma County, California.	Unrecorded historic-period resource
<i>Studies within 0.5-miles of the Project Area</i>				
S-7138	Katherine Flynn (Archaeological Resource Service)	1984	Archaeological survey of the Lands of Capdarest, APN 47-191-31 located between 8790 and 8816 Petaluma Hill Road, Penngrove, Sonoma County (letter report)	
S-11342	Suzanne B. Stewart (Anthropological Studies Center)		An Archaeological Study for the Penns Grove Estates (6180 Old Redwood Highway) and Maas Meadows (269 Adobe Road) Subdivisions, Penngrove, Sonoma County, California.	P-49-002301
S-11342a	Anmarie Medin (Anthropological Studies Center)	1992	An Archaeological Site Boundary Definition for CA-SON-1802, Penngrove, Sonoma County, California.	
S-11573	Thomas M. Origer	1990	An Archaeological Survey of the Fishman Property, Penngrove, Sonoma County, California	
S-13217	Thomas M. Origer (Tom Origer & Associates)	1990	An Archaeological Survey for the AT&T Fiber Optics Cable, San Francisco to Point Arena, California.	P-21-000042, P-21-000043, P-21-000347, P-21-000527, P-21-000528, P-21-002694, P-38-001336, P-49-002834
S-13217a	Thomas M. Origer (Tom Origer & Associates)	1990	Archaeological Findings Regarding a Selection of a Route through Novato for the AT&T Fiber Optics Cable (letter report)	
S-13217b	Thomas M. Origer (Tom Origer & Associates)	1991	An Archaeological Study of Revised Portions of the AT&T Route near Santa Rosa and Sausalito (letter report)	
S-13217c	Thomas M. Origer (Tom Origer & Associates)	1991	Archaeological Study of AT&T Revised Fiber Cable Routes (letter report)	
S-13217d	Thomas M. Origer (Tom Origer & Associates)	1992	Archaeological Survey of Alternative Fiber Optics Cable Routes, Point Arena (letter report)	
S-15331	Janine M. Loyd (Tom Origer & Associates)	1993	An Archaeological Survey for the Petaluma Hill Road Signal Interconnect Project, Sonoma County, California	
S-17663	Stephen Bryne	1992	A Cultural Resources Evaluation of the Helen	P-49-001733,



Report No.	Author(s)	Year	Title	Resources
	(Archaeological Resource Service)		Oberg Parcel, APN 47-091-47, 490 Formschlag Lane, Penngrove, Sonoma County, California	P-49-001734
S-17664	Katherine Flynn (Archaeological Resource Service)	1995	A Cultural Resources Evaluation of the Parcel Located at 8843 Petaluma Hill Road, Penngrove, Sonoma County (APN 047-091-039), MNS 95-1002	
S-22736	Jones & Stokes Associates, Inc.	2000	Final Cultural Resources Inventory Report for Williams Communications, Inc., Fiber Optic Cable System Installation Project, Point Arena to Robbins and Point Arena to Sacramento, California: Volume I	Sonoma county resources only: P-49-000195, P-49-000334, P-49-000423, P-49-000867, P-49-001196, P-49-001225, P-49-001232, P-49-001352, P-49-002134, P-49-002291, P-49-002834, P-49-002896, P-49-002897
S-22736a	Jones & Stokes Associates, Inc.	2000	Volume II - Project Maps: Final Cultural Resources Inventory Map Atlas for the Williams Communications, Inc. Fiber Optic Cable System Installation Project, Point Arena to Robbins and Point Arena to Sacramento, California	
S-22736b	Jones & Stokes Associates, Inc.	2000	Volume III, Technical Appendices: Final Cultural Resources Inventory Report for the Williams Communications, Inc. Fiber Optic Cable System Installation Project, Point Arena to Robbins and Point Arena to Sacramento, California	
S-25054	Elizabeth Bedolla and Katherine Flynn (Archaeological Resource Service)	2002	A Cultural Resources Evaluation of the Southeast Specific Plan Area in Rohnert Park, Sonoma County, California	
S-49539	Eileen Barrow (Tom Origer & Associates)	2017	A Cultural Resources Study for the SOMO Village Project, Rohnert Park, Sonoma County, California	P-49-005892
S-50936	Ian Hickey and Sally Evans (Evans & De Shazo, Inc.)	2018	A Cultural Resources Study of the Proposed Project at 7900 Petaluma Hill Road, Penngrove, Sonoma County, California	

Previous CRS of the Subject Property (S-22664)

The subject Property was previously surveyed for cultural resources in 2000 as part of a CRS of the 68.8-acre property at 8340 Petaluma Hill Road (APN 047-101-014) that included 100% of the subject Property (Evans 2000). The study was completed for Joseph and Betty Ann Passanisi as part of a proposed minor subdivision of the 68.8-acre property into three separate parcels, including a 47.1-acre parcel (Lot 1) that included the subject Property, a 17-acre parcel (Lot 2) located to the south of the subject Property,

and a 4.7-acre parcel (Lot 3) located to the east of the subject Property. The study included a record search and review and a field survey of the 68.8-acre property. The study resulted in the identification of remnants of two previous buildings and associated landscape features, including two stone columns located at the entrance to a driveway, a brick fireplace, an unknown brick feature, a scatter of domestic-type artifacts (i.e., glass, ceramic, ferrous metal) and building material (i.e. metal pipes, faucets, water heater, etc.), a low rock wall, and ornamental plants and trees. These features and artifacts were observed within the southwest corner of the subject Property, approximately 950 feet from the Project Area. The study also resulted in the identification of an isolated prehistoric artifact (obsidian flake) within the subject Property, approximately 700 feet west of the Project Area.

Review of Project Area Soils and Geology

The northern San Francisco Bay Area has undergone dramatic changes in the landscape over the past 13,000 years due to rising sea levels and increased sedimentation into streams and rivers (Meyer and Rosenthal 2007). These changes resulted in many late Pleistocene and early Holocene land surface being overlain by thick deposits of alluvial soils that are generally less than 5,000 years old and that have established an interface with an older land surface represented by a well-developed buried soil profile, or paleosol. Additionally, certain landforms such as alluvial fans, floodplains, and areas along rivers and streams, are more likely to contain buried sites. Therefore, the record search and review also included a review of information about the soils, geology, and sediments in the Project Area that were used to assess the potential for the Project Area to contain buried prehistoric archaeological resources. Determining the geologic age of the landform on which the Project Area is located is important because most Pleistocene-age landforms (1.8 million years to 11,800 calibrated years before present) have little or no potential to contain buried prehistoric archaeological resources because they formed prior to occupation of the area by humans; however, most Holocene-age (post 11,800 calibrated years before present) landforms have the potential for buried sites because they formed when people occupied the region (Meyer and Rosenthal 2007:15).

Soils maps of the Project Area, and associated soil descriptions and profiles, show that the Project Area contains Diablo clay, 2 to 9 percent slopes, and Cotati fine sandy loam, 2 to 9 percent slopes. Diablo clay, which covers approximately 65 percent of the Project Area, occurs on hills and consists of residuum⁴ weathered from sedimentary rock; and Cotati fine sandy loam, which covers approximately 35 percent of the Project Area, occurs on terraces and consists of alluvium derived from sedimentary rock (USDA 2020). According to the geologic map of the Cotati 7.5-minute quadrangle (Clahan et al. 2003), these soils are associated with the Middle Petaluma Formation (geologic unit Tpm), which is Miocene-age (23.03 to 5.333 million years ago) and a predominantly lacustrine and fluvial deposit comprised of siltstone and sandstone with interbedded conglomerate with minor silicified tuff, chert, lignite, and limestone. Clasts in conglomerate are mostly pebbles derived from the Franciscan formation, but clasts of Cretaceous and Tertiary sandstone, and Tertiary volcanics are present as well.

Since the Project Area is situated on a terrace that consists of Miocene-age residuum and alluvial soil, there is little or no potential for the Project Area to contain buried prehistoric archaeological resources.

⁴ Residuum (residual soil material) is unconsolidated, weathered, or partly weathered mineral material that accumulated as the bedrock disintegrated in place.

RESULTS OF SACRED LANDS INVENTORY AND NATIVE AMERICAN CONSULTATION

A Sacred Sites inventory request was made to the NAHC on June 17, 2020 to inquire about listed Sacred Sites located within or near to the subject Property and to obtain a list of local Native American tribes who may have additional information about Sacred Sites, Traditional Cultural Resources, or other properties of traditional religious and cultural importance located within or near to the subject Property. A search of the Sacred Lands file conducted by the NAHC on June 18, 2020 did not indicate the presence of any Sacred Sites within or near the subject Property (Fonseca 2020). As recommended by the NAHC, a letter was sent via electronic mail and U.S. Postal Service (USPS) to the 10 individuals and organizations on the Native American contact list to request further information about Sacred Sites, Traditional Cultural Resources, or other properties of traditional religious and cultural importance located within or near to the subject Property, and to inquire about Native American issues related to the Project. The following individuals were contacted:

Table 3: Native American individuals and organizations contacted.

Tribal Organization	Contact	Correspondence/Response
Cloverdale Rancheria of Pomo Indians	Patricia Hermosillo, Chairperson	Letter sent via USPS on 6/23/2020. No response received to date.
Dry Creek Rancheria Band of Pomo Indians	Chris Wright, Chairperson	Letter sent via email on 6/23/2020. No response received to date.
Federated Indians of Graton Rancheria (FIGR)	<ul style="list-style-type: none"> • Gene Buvelot • Greg Sarris, Chairperson • Also copied FIGR Tribal Heritage Preservation Officer (THPO) 	Letter sent via email on 6/23/2020. No response received to date.
Guidiville Indian Rancheria	Merlene Sanchez	Letter sent via email on 6/23/2020. No response received to date.
Kashia Band of Pomo Indians of the Stewarts Point	<ul style="list-style-type: none"> • Loren Smith, THPO • Dino Franklin, Chairperson • Also copied Elaini Vargas, current THPO 	Letter sent via email on 6/23/2020. No response received to date.
Lytton Rancheria of California	<ul style="list-style-type: none"> • Marjorie Mejia, Chairperson • Also copied Brenda Tomaras with Tomaras & Ogas, LLP 	Letter sent via email on 6/23/2020. Response received (see below).
Middletown Rancheria	Sally Peterson, THPO	Letter sent via email on 6/23/2020. No response received to date.
Middletown Rancheria of Pomo Indians	Jose Simon III, Chairperson	Letter sent via email on 6/23/2020. No response received to date.
Mishewal-Wappo Tribe of Alexander Valley	Scott Gabaldon, Chairperson	Letter sent via email on 6/23/2020. No response received to date.

As of the date of this report, one response has been received (see below). All correspondence with the NAHC and local Native American tribes is included in Appendix A.

Lytton Rancheria of California

On June 23, 2020, EDS received an email from Brenda Tomaras of Tomaras & Ogas, LLP, the law firm representing Lytton Rancheria of California. The email states that the Project Area is within traditional Pomo territory and due to the potential for finding tribal cultural resources, Lytton Rancheria intends to consult further with the appropriate lead agency and will request a copy of the CRS report at that time. Ms. Tomaras also requested that all cultural resources found within the Project Area, including isolated prehistoric artifacts, be documented within this report even if the resource does not reach the level of significance under CEQA (Appendix A, Tomaras 2020).

RESULTS OF FIELD SURVEY

A field survey of the Project Area was conducted by EDS Archaeologist, Ryan Poska, M.A., on June 26, 2020. The subject Property in which the Project Area is located consists of a 30.84-acre parcel that contains a 110,000 square foot greenhouse, a 20,000 square foot shade structure, a 10,000 square foot metal warehouse/shop building that houses a construction business, two 10,000 gallon water storage tanks, two ponds, as well as other associated agricultural and administrative improvements. All existing buildings and structures within the subject Property were constructed in 1984 and after.

The Project Area includes approximately 1-acre of land, a portion of which contains the 20,000 square foot shade structure. The Project Area is generally level and situated approximately 140 feet above mean sea level. It is characterized by non-native annual grassland and a few clusters of native and introduced shrubs, trees, and fencing (Figure 18, Figure 19, Figure 20, and Figure 21).

The methods used to complete the field survey of the Project Area included walking a series of linear transects oriented north/south and spaced approximately five meters apart. Due to the presence of tall, thick grasses and weeds in the eastern portion of the Project Area and the existing shade structure and a fabric covering in the western portion of the Project Area, the soil visibility throughout the Project Area was very poor, approximately <5% percent; however, soil was visible in a few areas where ground-burrowing animals had kicked-up soil from below the surface, and to further improve soil visibility, the surveyor used a trowel to scrape away the vegetation in several areas along each transect in order to thoroughly inspect the soil below. The soil throughout the Project Area consisted of very dark grey (Munsell 2.5Y 3/1) colored sandy loam that contained very few gravels and nodules (<5-inches diameter) of chert, basalt, and cryptocrystalline silicates.

No cultural resources, including prehistoric or historic period artifacts, or other indications of a cultural or archaeological resource was observed in the Project Area.



Figure 18: Overview of the eastern portion of the Project Area (facing N).



Figure 19: Overview of the western portion of the Project Area, facing north/northeast.



Figure 20: Overview of eastern portion of the Project Area, facing west.



Figure 21: Overview of the existing shade structure in the western portion of the Project Area, facing southwest.

CONCLUSIONS

In accordance with CEQA regulations and guidelines, and Sonoma County Cannabis Land Use Ordinance No. 6245, EDS conducted a CRS to determine if there are any cultural resources that could be impacted by the proposed Project that includes the cultivation of above-ground cannabis and the development of supporting infrastructure within an approximate 1-acre portion of the 30.84-acre Project Area located at 8270 Petaluma Hill Road, Penngrove, Sonoma County, California. The CRS included a record search and review, a Sacred Lands inventory and Native American consultation, and a field survey of the proposed Project Area. The CRS was completed by EDS Principal Archaeologist, Sally Evans, M.A., RPA who exceeds the Secretary of Interior's qualification standards in Archaeology and History.

The following is a summary of findings of the CRS:

- The record search conducted at the NWIC resulted in the identification of one unrecorded historic-period archaeological resource and one isolated prehistoric artifact (obsidian flake) within the subject Property (Evans 2000) but did not result in the identification of any cultural resources within the Project Area.
- A review of historic maps and aerial photographs dating from 1867 to 1993, identified a house within the approximate center of the subject Property as early as 1877, and a second house within the southwestern portion of the subject Property that was present by 1944 and demolished sometime between 1987 and 2000. No buildings appear to have been present within the Project Area during the historic period. The existing shade structure currently located within the Project Area was associated with Passanisi Nursery and appears to have been constructed in 1987. Based on these findings, the Project Area appears to have a moderate potential for buried historic-era archaeological resources.
- The review of geologic and soils data revealed that the Project Area has a low potential for buried prehistoric archaeological resources because the Project Area is situated on a terrace with soils associated with the Miocene-age (23.03 to 5.333 million years ago) Middle Petaluma Formation (geologic unit Tpm) that has little or no potential to contain buried prehistoric archaeological resources.
- The Sacred Sites inventory did not identify the presence of a Native American Sacred Site within or adjacent to the Project Area. EDS also consulted with the nine Native American organizations listed on the NAHC's Native American contact list, and one responded to our request for consultation. Lytton Band of Pomo Indians stated that the Project Area is within traditional Pomo territory and due to the potential for finding tribal cultural resources, they intend to consult further with the appropriate lead agency and will request a copy of the CRS report at that time. Lytton Rancheria also requested that all cultural resources found within the Project Area, including isolated prehistoric artifacts, be documented within this report even if the resource does not reach the level of significance under CEQA.
- The field survey did not result in the identification of any cultural resources, including prehistoric or historic period artifacts or other indications of an archaeological resource, within the Project Area.

In conclusion, the CRS did not result in the identification of any potentially significant cultural resources within the Project Area at 8270 Petaluma Hill Road, Penngrove, Sonoma County, California. Furthermore, there is a low potential to encounter buried archaeological resources during Project-related earth-disturbing activities. Therefore, no impacts to historical resources are expected as a result of the Project.

RECOMMENDATIONS

No project-specific recommendations are warranted at this time; however, general recommendations are provided in the event that buried archaeological resources are encountered during earth-moving activities.

GENERAL RECOMMENDATIONS

It is recommended that if a prehistoric or historic resource is encountered by equipment operators during Project-related ground-disturbing activities, that work be halted in the immediate vicinity of the discovery area until a qualified professional archaeologist is retained to inspect the material and provide further recommendations for appropriate treatment of the resource.

Prehistoric-era resources or artifacts that could be found include obsidian (shiny, black, glass-like stone) and chert flaked-stone tools (e.g., projectile points, knives, choppers), midden (culturally darkened soil containing heat-affected rock, charcoal, ash, artifacts, animal bone, or shellfish remains), stone milling equipment, such as mortars and pestles, and certain sites features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe. Prehistoric domestic features include hearths, fire pits, house floor depressions and mortuary features consisting of human skeletal remains. Historic-era resources include backfilled privies, wells, and refuse pits; concrete, stone, or wood structural elements or foundations; and concentrations of metal glass, and ceramic refuse.

If human remains are encountered within the Project Area, all work must stop in the immediate vicinity of the discovered remains and the Sonoma County Coroner must be notified immediately. If the remains are suspected to be those of a prehistoric Native American, then the Coroner must contact the NAHC so that a “Most Likely Descendant” (MLD) can be designated to provide further recommendations regarding treatment of the remains. An archaeologist should also be retained to evaluate the historical significance of the discovery following CEQA regulations and guidelines. The archaeologist should also assess the potential for additional cultural resources and provide further recommendations in consultation with the MLD.

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APPENDIX A:

CORRESPONDANCE WITH THE NATIVE AMERICAN HERITAGE COMMISSION AND LOCAL NATIVE AMERICAN TRIBES

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission

1550 Harbor Blvd, Suite 100

West Sacramento, CA 95691

916-373-3710

916-373-5471 – Fax

nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: _____

County: _____

USGS Quadrangle Name: _____

Township: _____ **Range:** _____ **Section(s):** _____

Company/Firm/Agency: _____

Street Address: _____

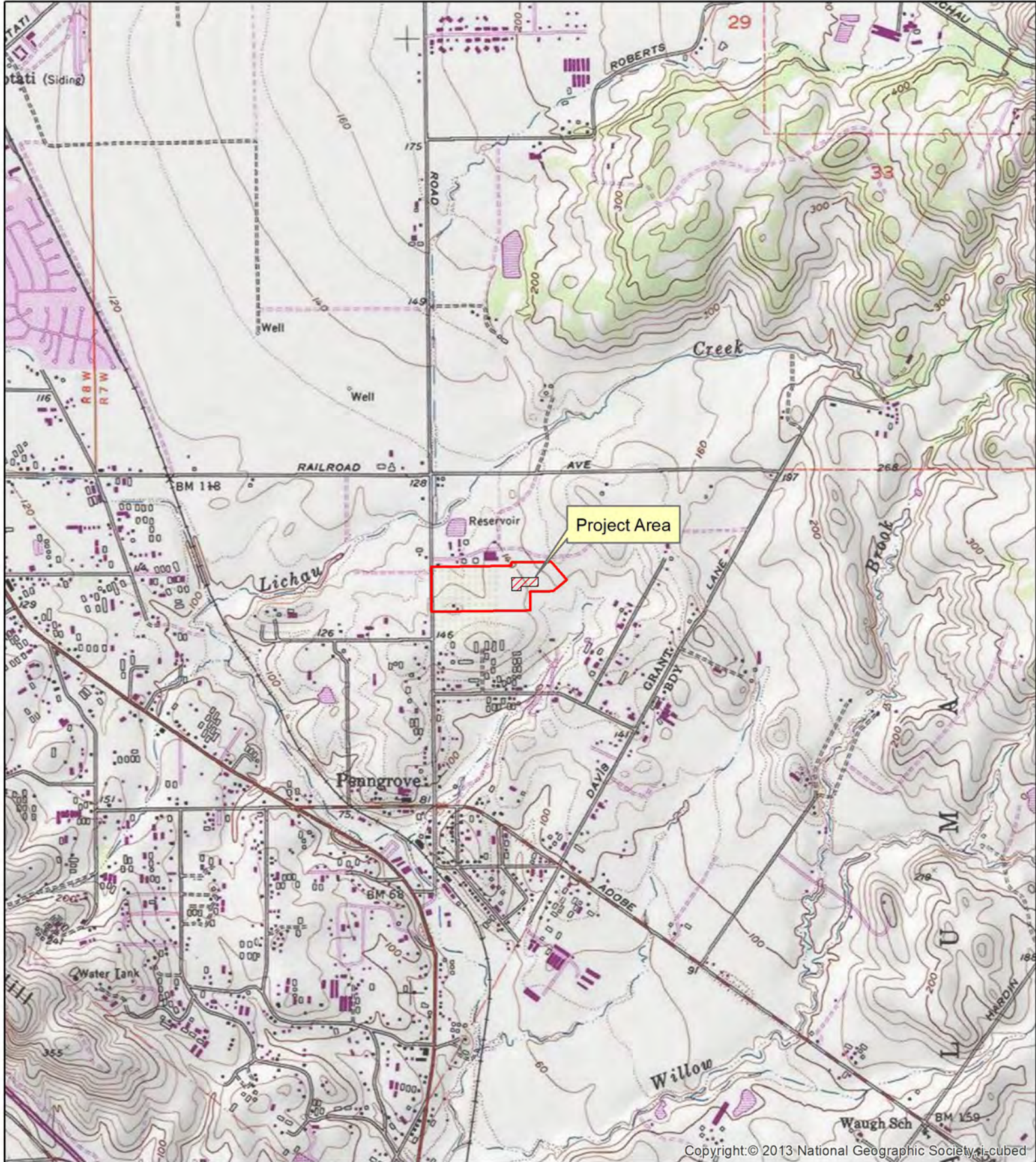
City: _____ **Zip:** _____

Phone: _____

Fax: _____

Email: _____

Project Description:



Sonoma
County



0 0.5 1 Miles

1:24,000

**8270 Petaluma Hill Road, Penngrove
Sonoma County, California
APN 047-101-019**

USGS 7.5' Cotati, Calif. (1980)
Township 5 North | Range 7 West | Section 30

Map Projection:
NAD 83 UTM Zone 10N

-  Subject Property
-  Project Area



EVANS & DE SHAZO, INC.
ARCHAEOLOGY HISTORIC PRESERVATION

NATIVE AMERICAN HERITAGE COMMISSION

June 18, 2020

Sally Evans, MA, RPA, Principal Archaeologist, Cultural Resource Specialist
Evans & De Shazo, Inc.

Via Email to: sally@evans-deshazo.com

Re: Cannabis Cultivation Project – 8270 Petaluma Hill Road, Penngrove Project, Sonoma County

Dear Ms. Evans:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Sarah.Fonseca@nahc.ca.gov.

Sincerely,



Sarah Fonseca
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
Sonoma County
6/18/2020**

Cloverdale Rancheria of Pomo Indians

Patricia Hermosillo, Chairperson
555 S. Cloverdale Blvd., Suite A Pomo
Cloverdale, CA, 95425
Phone: (707) 894 - 5775
Fax: (707) 894-5727
info@cloverdalerancheria.com

Dry Creek Rancheria of Pomo Indians

Chris Wright, Chairperson
P.O. Box 607 Pomo
Geyserville, CA, 95441
Phone: (707) 814 - 4150
lynnl@drycreekrancheria.com

Federated Indians of Graton Rancheria

Greg Sarris, Chairperson
6400 Redwood Drive, Ste 300 Coast Miwok
Rohnert Park, CA, 94928 Pomo
Phone: (707) 566 - 2288
Fax: (707) 566-2291
gbuvelot@gratonrancheria.com

Guidiville Indian Rancheria

Merlene Sanchez, Chairperson
P.O. Box 339 Pomo
Talmage, CA, 95481
Phone: (707) 462 - 3682
Fax: (707) 462-9183
admin@guidiville.net

Kashia Band of Pomo Indians of the Stewarts Point Rancheria

Dino Franklin, Chairperson
1420 Guerneville Road, Ste 1 Pomo
Santa Rosa, CA, 95403
Phone: (707) 591 - 0580
Fax: (707) 591-0583
dino@stewartspoint.org

Kashia Band of Pomo Indians of the Stewarts Point Rancheria

Loren Smith, Tribal Historic
Preservation Officer
1420 Guerneville Road, Ste 1 Pomo
Santa Rosa, CA, 95403
Phone: (707) 591 - 0580
Fax: (707) 591-0583

Lytton Rancheria

Marjorie Mejia, Chairperson
437 Aviation Boulevard Pomo
Santa Rosa, CA, 95403
Phone: (707) 575 - 5917
Fax: (707) 575-6974
margiemejia@aol.com

Middletown Rancheria of Pomo Indians

Jose Simon, Chairperson
P.O. Box 1035 Lake Miwok
Middletown, CA, 95461 Pomo
Phone: (707) 987 - 3670
Fax: (707) 987-9091
sshope@middletownrancheria.com

Middletown Rancheria

Sally Peterson, THPO
P.O. Box 1658 Lake Miwok
Middletown, CA, 95461 Pomo
Phone: (707) 987 - 3670
THPO@middletownrancheria.com

Mishewal-Wappo Tribe of Alexander Valley

Scott Gabaldon, Chairperson
2275 Silk Road Wappo
Windsor, CA, 95492
Phone: (707) 494 - 9159
scottg@mishewalwappotribe.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Cannabis Cultivation Project – 8270 Petaluma Hill Road, Penngrove Project, Sonoma County.



Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>
To: admin@guidiville.net

Tue, Jun 23, 2020 at 11:32 AM

Dear Ms. Sanchez,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

The methods being used to complete the CRS include a record search at the Northwest Information Center (NWIC), a Native American Sacred Sites inventory conducted by the Native American Heritage Commission (NAHC), and a field survey of the approximate 1-acre Project Area. A search of the Native American Sacred Lands file conducted by the NAHC for the Project on June 18, 2020 did not result in the identification of any Sacred Sites near to the Project Area; however, the NAHC recommended we contact you for further information about this and other Sacred Sites, or Tribal Cultural Resources, within or near the Project Area that should be considered in the study.

If you have any information or concerns about Native American issues related to the overall Project, please contact me at your earliest convenience at **(707) 823-7400**, or sally@evans-deshazo.com. Please know that your comments and concerns about the Project are especially important to EDS, as well as to successful completion of the Project. Thank you in advance for taking the time to review this letter. I look forward to hearing from you at your earliest convenience.

Respectfully,

Sally Evans

--

Sally Evans, M.A., RPA | *Principal Archaeologist / Cultural Resource Specialist*
Evans & De Shazo, Inc. - Archaeology • Historic Preservation

Main Office: 1141 Gravenstein Hwy S | Sebastopol | CA | 95472 |

New Office Phone Number: 707-823-7400 | Cell: 707-484-9628

Oregon: 5305 River Road N., Keizer, OR 97303

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Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>
To: Gene Buvelot <gbuvelot@gratonrancheria.com>

Tue, Jun 23, 2020 at 11:31 AM

Dear Mr. Sarris and Mr. Buvelot,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans

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Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>
To: lynn@drycreekrancheria.com

Tue, Jun 23, 2020 at 11:30 AM

Dear Mr. Wright,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans

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Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>

Tue, Jun 23, 2020 at 11:33 AM

To: dino <dino@stewartspoint.org>

Cc: elaini@stewartspoint.org

Dear Mr. Franklin,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans

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Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>
To: scottg@mishewalwappotribe.com

Tue, Jun 23, 2020 at 11:36 AM

Dear Mr. Gabaldon,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans

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June 23, 2020

Patricia Hermosillo, Chairperson
Cloverdale Rancheria of Pomo Indians
555 S. Cloverdale Blvd., Suite A
Cloverdale, CA 95425

Re: Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County, California.

Dear Ms. Hermosillo,

Evans & De Shazo, Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans, M.A., RPA
Principal Archaeologist | Cultural Resource Specialist
(707) 484-9628 (mobile)
sally@evans-deshazo.com



Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>
To: THPO@middletownrancheria.com

Tue, Jun 23, 2020 at 11:36 AM

Dear Ms. Peterson,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans

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Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County

1 message

Sally Evans <sally@evans-deshazo.com>

Tue, Jun 23, 2020 at 11:35 AM

To: Sierra Shope <sshope@middletownrancheria.com>

Dear Middletown Rancheria of Pomo Indians,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Respectfully,

Sally Evans

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Sally Evans <sally@evans-deshazo.com>

Cultural Resources Study – 8270 Petaluma Hill Road, Penngrove, Sonoma County3 messages

Sally Evans <sally@evans-deshazo.com>

Tue, Jun 23, 2020 at 11:34 AM

To: margiemejia@aol.com

Cc: "Brenda L. Tomaras" <btomaras@mtowlaw.com>

Dear Ms. Mejia,

Evans & De Shazo Inc. (EDS) was retained by All Good LLC to provide a Cultural Resource Study (CRS) for a proposed project that includes the outdoor cultivation of above-ground cannabis (Project) within an approximate 40,000 square foot (just under 1-acre) portion of the 30.84-acre property located at 8170 Petaluma Hill Road, Penngrove, Sonoma County, California (Project Area). A Project location map and an aerial of the property showing the Project Area are attached. The Project is subject to compliance with the California Environmental Quality Act (CEQA) and the Sonoma County Cannabis Land Use Ordinance Number 6245.

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Sally Evans

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Brenda L. Tomaras <btomaras@mtowlaw.com>
To: Sally Evans <sally@evans-deshazo.com>

Wed, Jul 1, 2020 at 9:19 AM

Good Morning Sally,

Thank you for the letter regarding the above-referenced project. While the Tribe has no specific information which it could provide to you for inclusion in your reports, it believes that the project land falls within traditional Pomo territory and that there is a potential for finding tribal cultural resources on the project site. The Lytton Rancheria is interested in the protection and preservation of Pomo artifacts and sites and believes that such cultural resources may be encountered during the project.

The Tribe will be consulting further on the project with the appropriate lead agency and will get a copy of the survey once completed. We would ask that in your report you note all resources (flakes, isolates, etc.) even if they may not reach a level of significance under CEQA.

Thank you.

Brenda L. Tomaras
Tomaras & Ogas, LLP
[10755-F Scripps Poway Parkway #281](#)
[San Diego, CA 92131](#)
(858) 554-0550
(858) 777-5765 Facsimile

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[Quoted text hidden]

Sally Evans <sally@evans-deshazo.com>
To: "Brenda L. Tomaras" <btomaras@mtowlaw.com>

Thu, Jul 2, 2020 at 10:07 AM

Hi Brenda,

Thank you very much for your response and comments. I will be sure to incorporate your comments into the report. Please don't hesitate to reach out to me if you have any questions.

Warm regards,

Sally
[Quoted text hidden]

