FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

GRAVENSTEIN HIGHWAY~~/MEIER ROAD~~

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

Prepared by: **ONTERRIS**

May 2026

1 Kaiser Plaza, Suite 340
Oakland, CA 94612
www.onterris.com

PAGE LEFT INTENTIONALLY BLANK

TABLE OF CONTENTS

1 Introduction and Purpose 1-1
1.1 Intent and Scope of this Document 1-1
1.1.1 Scope of the Analysis 1-1
1.1.2 Public Comment Period 1-2
1.2 Organization of This Document 1-2
1.3 Impact Terminology 1-3
1.4 Regulatory Background 1-4
1.5 Environmental Baseline of Analysis 1-5
2 Project Description 2-1
2.1 Overview 2-1
2.2 Proposed Project Purpose and Objectives 2-2
2.3 Proposed Project Location and Setting 2-3
2.4 General Description of Regulated Commercial Cannabis Cultivation Processes and Cannabis Business Activities 2-7
2.4.1 Overview of Cultivation Operations 2-7
2.4.2 State Cannabis Regulations 2-8
2.4.3 Local Cannabis Ordinances and Regulations 2-9
2.4.4 Project Site Development 2-10
2.5 Proposed Project Characteristics 2-13
2.5.1 Proposed Project Facilities 2-13
2.6 Construction Activities 2-16
2.7 Permits and Approvals 2-16
3 Environmental Checklist 3-1
3.1 Aesthetics 3.1-1
3.1.1 Regulatory Setting 3.1-1
3.1.2 Environmental Setting 3.1-4
3.1.3 Discussion of Checklist Responses 3.1-4
3.3 Air Quality 3.3-1
3.3.1 Regulatory Setting 3.3-1
3.3.2 Environmental Setting 3.3-11
3.3.3 Discussion of Checklist Responses 3.3-18
3.4 Biological Resources 3.4-1
3.4.1 Regulatory Setting 3.4-1
3.4.2 Environmental Setting 3.4-4
3.4.3 Discussion of Checklist Responses 3.4-12
3.5 Cultural Resources 3.5-1
3.5.1 Regulatory Setting 3.5-1

3.5.2 Environmental Setting 3.5-5
3.5.3 Discussion of Checklist Responses 3.5-9
3.6 Energy 3.6-1
3.6.1 Regulatory Setting 3.6-1
3.6.2 Environmental Setting 3.6-6
3.6.3 Discussion of Checklist Responses 3.6-6
3.7 Geology, Soils, and Seismicity 3.7-1
3.7.1 Regulatory Setting 3.7-2
3.7.2 Environmental Setting 3.7-4
3.7.3 Discussion of Checklist Responses 3.7-5
3.8 Greenhouse Gas Emissions 3.8-1
3.8.1 Regulatory Setting 3.8-1
3.8.2 Environmental Setting 3.8-10
3.8.3 Discussion of Checklist Responses 3.8-13
3.9 Hazards and Hazardous Materials 3.9-1
3.9.1 Regulatory Setting 3.9-2
3.9.2 Environmental Setting 3.9-10
3.9.3 Discussion of Checklist Responses 3.9-11
3.10 Hydrology and Water Quality 3.10-1
3.10.1 Regulatory Setting 3.10-2
3.10.2 Environmental Setting 3.10-8
3.10.3 Discussion of Checklist Responses 3.10-10
3.11 Land Use and Planning 3.11-1
3.11.1 Regulatory Setting 3.11-1
3.11.2 Environmental Setting 3.11-2
3.11.3 Discussion of Checklist Responses 3.11-2
3.12 Mineral Resources 3.12-1
3.12.1 Regulatory Setting 3.12-1
3.12.2 Environmental Setting 3.12-1
3.12.3 Discussion of Checklist Responses 3.12-2
3.13 Noise 3.13-1
3.13.1 Overview of Noise and Vibration Concepts and Terminology 3.13-1
3.13.2 Regulatory Setting 3.13-3
3.13.3 Environmental Setting 3.13-7
3.13.4 Discussion of Checklist Reponses 3.13-7
3.14 Population and Housing 3.14-1
3.14.1 Regulatory Setting 3.14-1
3.14.2 Environmental Setting 3.14-1
3.14.3 Discussion of Checklist Responses 3.14-1
3.15 Public Services 3.15-1

3.15.1 Regulatory Setting 3.15-1
3.15.2 Environmental Setting 3.15-4
3.15.3 Discussion of Checklist Responses 3.15-4
3.16 Recreation 3.16-1
3.16.1 Regulatory Setting 3.16-1
3.16.2 Environmental Setting 3.16-1
3.16.3 Discussion of Checklist Responses 3.16-2
3.17 Transportation 3.17-1
3.17.1 Regulatory Setting 3.17-1
3.17.2 Environmental Setting 3.17-3
3.17.3 Discussion of Checklist Responses 3.17-3
3.18 Tribal Cultural Resources 3.18-1
3.18.1 Regulatory Setting 3.18-1
3.18.2 Environmental Setting 3.18-3
3.18.3 Discussion of Checklist Responses 3.18-4
3.19 Utilities and Service Systems 3.19-1
3.19.1 Regulatory Setting 3.19-1
3.19.2 Environmental Setting 3.19-8
3.19.3 Discussion of Checklist Responses 3.19-9
3.20 Wildfire 3.20-1
3.20.1 Regulatory Setting 3.20-1
3.20.2 Environmental Setting 3.20-7
3.20.3 Discussion of Checklist Responses 3.20-8
3.21 Mandatory Findings of Significance 3.21-1
3.21.1 Discussion of Checklist Responses 3.21-1
4 Report Preparation 4-1
5 References 5-1

IN-TEXT FIGURES

Figure 2.3-1. Proposed Project Vicinity 2-4
Figure 2.3-2. Proposed Project Location 2-5
Figure 2.5-1. Proposed Project Site Plan: 2515 Gravenstein Highway 2-14
~~Figure 2.5-2. Proposed Project Site Plan: 2409 Meier Road (1) ..... 2-15~~
~~Figure 2.5-2. Proposed Project Site Plan: 2409 Meier Road (2) ..... 2-16~~

IN-TEXT TABLES

Table 2.1-1. Local and State Approvals 2-2
Table 2.3-1. Parcel ~~Parcels~~ 2-3

Table 2.4-1. Local Utilities Serving the Project Area 2-10
Table 2.4-2. Pesticides 2-12
Table 2.7-1. Applicable Permit and Regulatory Requirements 2-16
Table 3.3-1. California and National Ambient Air Quality Standards 3.3-2
Table 3.3-2. Criteria Air Pollutants and Precursors Screening Level Sizes 3.3-8
Table 3.3-3. Sonoma County Attainment Status for the SFAAB 3.3-12
Table 3.4-1. Special-status Plant and Wildlife Species Known to Occur in or near the Project Area 3.4-9
Table 3.8-1. Statewide GHG Emissions by Economic Sector (2022) 3.8-12
Table 3.8-2. Sonoma County GHG Emissions by Sector (2022) 3.8-13
Table 3.13-1. Examples of Common Noise Levels 3.13-2
Table 3.13-2. State Land Use Compatibility Standards for Community Noise Environment 3.13-5
Table 3.13-3. Maximum Allowable Exterior Noise Exposures for Non-transportation Noise Sources 3.13-6
Table 3.18-1. Native American Outreach 3.18-5

APPENDICES

Appendix A – Biological Resources Study
Appendix B – Cultural Resources and Tribal Cultural Resources Evaluation

ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AFVs	alternative fuel vehicles
ALUCP	Airport Land Use Compatibility Plan
Applicants	Cannabis Ag Management, Family Florals, Patchwork Farms, Hancock Luxury Provisions
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
CDPR	California Department of Pesticide Regulation
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
CUPAs	Certified Unified Program Agencies
CRHR	California Register of Historical Resources
CTR	California Toxics Rule
CWA	Clean Water Act
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
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	National 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

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

PAGE LEFT INTENTIONALLY BLANK

1 INTRODUCTION AND PURPOSE

The California Department of Cannabis Control (DCC) has prepared this initial study/ negative declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental impacts of the proposed Gravenstein Highway~~/Meier Road~~ project (Proposed Project). This document has been prepared in accordance with the requirements of the California Environmental Quality Act of 1970, as amended (CEQA) (Pub. Resources Code, § 21000 et seq.) and the CEQA Guidelines (Cal. Code Regs., tit. 14 [CEQA Guidelines], § 15000 et seq.).

DCC is evaluating the proposed development of an outdoor commercial cannabis cultivation operation ~~on two contiguous parcels~~ in unincorporated Sonoma County. The property located at 2515 Gravenstein Highway South (APN 063-150-024) is currently under seasonal cultivation on four 10,000 square foot commercial cannabis cultivation operations, for a total of 40,000 square feet of cultivation canopy under four state cultivation ~~L~~licenses. ~~The second property located at 2409 Meier Road (APN 063-150-010) would be developed with one 10,000 square foot cultivation operation, for a total of 10,000 square feet of cultivation canopy.~~ The total outdoor cultivation canopy for the Proposed Project is ~~50,000~~ 40,000 square feet. ~~Both~~ The ~~properties are~~ property is zoned Diverse Agriculture. Sonoma County approved the operations at 2515 Gravenstein Highway South ~~and 2409 Meier Road~~ by issuing four ministerial zoning permits.

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 Applicant's 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 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, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed Project on or with regard to the following topics:

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

1.1.2 Public Comment Period

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines sections 15073 and 15105, subdivision (b) 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~~David Strunk, Senior Environmental Scientist Supervisor
California Department of Cannabis Control
2920 Kilgore Rd. Rancho Cordova, CA 95670-6157
david.strunk@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 Study*
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. (l).)

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 purposes, including vegetable farming. 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 analyzes 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 between March 2019 and April 2021 upon issuance of a Use Permit. The Proposed Project received provisional commercial cultivation, nursery, and distribution licenses from the State of California between March 2021 and July 2021 (see **Table 2.1-1**). Based on these approvals, the Applicant began setup and operation of outdoor cultivation activities. Although it is possible that these activities may have resulted in impacts to the environment, there is no way to complete an analysis of every potential impact on the environment that could have occurred as a result of the site development or past activties.

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 on 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, analyzes the impacts of the site development (including already completed 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 are discussed in the individual resource sections.

PAGE LEFT INTENTIONALLY BLANK

2 PROJECT DESCRIPTION

2.1 Overview

The Department of Cannabis Control (DCC) is evaluating the proposed development of an outdoor commercial cannabis cultivation operation ~~on two contiguous parcels~~ in unincorporated Sonoma County. The property is located at 2515 Gravenstein Highway South (APN 063-150-024) and is currently under seasonal cultivation on four 10,000 square foot cultivation operations, for a total of 40,000 square feet of cultivation canopy under four state cultivation licenses. ~~The second property located at 2409 Meier Road (APN 063-150-010) would be developed with one 10,000 square foot cultivation operation, for a total of 10,000 square feet of cultivation canopy.~~ The total outdoor cultivation canopy for the Proposed Project is ~~50,000~~ 40,000 square feet. The property is ~~Both properties are~~ zoned Diverse Agriculture.

Between January 31, 2019, and April 13, 2020~~January 7, 2021~~, Applicants applied to the California Department of Food and Agriculture (CDFA)[1] and the DCC for annual outdoor commercial cannabis cultivation licences. CDFA and DCC issued State provisional licenses for these activities on the dates indicated in **Table 2.1-1**. The Proposed Project was approved by Sonoma County with respect to the 2515 Gravenstein Highway South property between March 2019 and April 2020. On the basis of those state and local approvals, the facility began legal operations at the 2515 Gravenstein Highway South property. ~~Between March 2021 and July 2021 DCC issued State provisional licenses for the legal operation at the 2409 Meier Road property for three of the four commercial cannabis cultivation licenses listed in Table 2.1-1. The Proposed Project was also approved by Sonoma County for 2409 Meier Road and permits were issued in March and April 2021 for Cannabis Ag Management (APC20-0019), Family Florals (APC20-11–0118), Patchwork Farms (APC20-0117), Hancock Luxury Provisions (APC20-0116). On the basis of the three licenses granted by the state, 30,000 (3 x 10,000) square feet of canopy were cultivated under Cannabis Ag Management, Family Florals and Patchwork Farms. The commercial cannabis cultivation occurred during the 2021 growing season only (July 2021 - Oct 2021). The licenses were not renewed after that time.~~ 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 31, 2019.

[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.

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
Cannabis Ag Management	063-150-024	2515 Gravenstein Hwy South	3/15/2019	2/7/2019	9/9/2019	CCL19-0000602
Family Florals, Inc.	063-150-024	2515 Gravenstein Hwy South	1/14/2020	1/31/2019	7/12/2019	CCL19-0000352
Hancock Luxury Provisions, LLC	063-150-024	2515 Gravenstein Hwy South	4/10/2020	4/13/2020	7/31/2020	CCL20-0000741
Patchwork Farms	063-150-024	2515 Gravenstein Hwy South	4/10/2020	2/7/2019	12/10/2019	CCL19-0000601
~~Family Florals~~	~~063-150-010~~	~~2409 Meier Road~~	~~4/02/2021~~	~~1/7/2021~~	~~6/11/2021~~	~~CCL21-0000059 (Expired)~~
~~Patchwork Farms~~	~~063-150-010~~	~~2409 Meier Road~~	~~4/02/2021~~	~~1/7/2021~~	~~7/14/2021~~	~~CCL21-0000058 (Expired)~~
~~Cannabis Ag Management~~	~~063-150-010~~	~~2409 Meier Road~~	~~4/06/2021~~	~~1/7/2021~~	~~7/5/2021~~	~~CCL21-0000057 (Expired)~~
~~Hancock Luxury Provisions, LLC~~	~~063-150-010~~	~~2409 Meier Road~~	~~3/26/2021~~	~~N/A~~	~~N/A~~	~~N/A~~

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 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 construction and operation of an outdoor commercial cannabis cultivation facility. The Proposed Project would encompass approximately 40,000 square feet on the property located at 2515 Gravenstein Highway South~~, and 10,000 square feet on the adjacent property at 2409 Meier Road~~.

Specific project objectives are as follows:

- Develop the project area into a commercial cannabis cultivation business;
- Establish a facility that meets all state and local requirements for commercial cannabis cultivation and business activities, including security and environmental standards required by the State of California, including issuance of one or more annual cultivation licenses;

- Develop 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).

2.3 Proposed Project Location and Setting

The Proposed Project is in unincorporated Sonoma County, approximately 1.3 miles southeast of the City of Sebastopol, California. The ~~29-acre~~ 16.4-acre project site is located ~~on two adjoining existing parcels (**Table 2.3-1**).~~ at 2515 Gravenstein Highway South, APN 063-150-024.

~~**Table 2.3-1. Parcels**~~

~~Address~~	~~APN~~	~~Acreage~~
~~2515 Gravenstein Highway S~~	~~063-150-024~~	~~16.4~~
~~2409 Meier Road~~	~~063-150-010~~	~~13.27~~
	~~***Total***~~	~~***29.67***~~

~~*Source: Sonoma County 2025a and 2025b.*~~

The site is currently zoned as Diverse Agriculture (DA), as are the parcels immediately to the direct east and west of the project site. 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 parcels to the south are zoned as Agriculture and Residential (AR), allowing one dwelling per 10 acres of land. The parcel to the north of the site is zoned as Land Extensive Agriculture (LEA).

Laguna de Santa Rosa Creek flows along the northern and northeastern borders of the property ~~properties~~. The property is bounded by rural and agricultural uses to the north, and by residential and commercial uses to the south. A horse arena is located immediately to the south of the project site.

The topography of the site is flat~~. There is~~ with a current commercial cannabis cultivation area ~~on the 2515 Gravenstein property~~. There are mature trees and existing structures on ~~each~~ the property, none of which are included in the Proposed Project. The project site became a certified organic farm in 2015, growing crops including vegetables, flowers, and cannabis. Applicants began cultivating commercial cannabis under four provisional cultivation licenses, issued by DCC for different parts of the cultivation area on July 12, 2019, September 9, 2019, December 10, 2019, and July 31, 2020. Applicants have instituted farming practices similar to those used in their organic farming operation, including the following:

- Drip irrigation for all cultivated crops
- Cover cropping of the entire cultivation site during the winter season
- Planting native pollinator habitat between cannabis rows
- Integrated pest management practices
- Prevention of irrigation runoff entering nearby waterways

~~The previous use of the 2515 Gravenstein Hwy S property was livestock grazing and vegetable production. The previous use of the 2409 Meier Road property was a pasture for donkeys and horses, cultivated fields for organic vegetable production, as well as a licensed commercial cannabis cultivation site in 2021. Currently the proposed area is a fallow field.~~ **Figure 2.3-1** shows the vicinity of the Proposed Project. **Figure 2.3-2** shows the location of the Proposed Project.

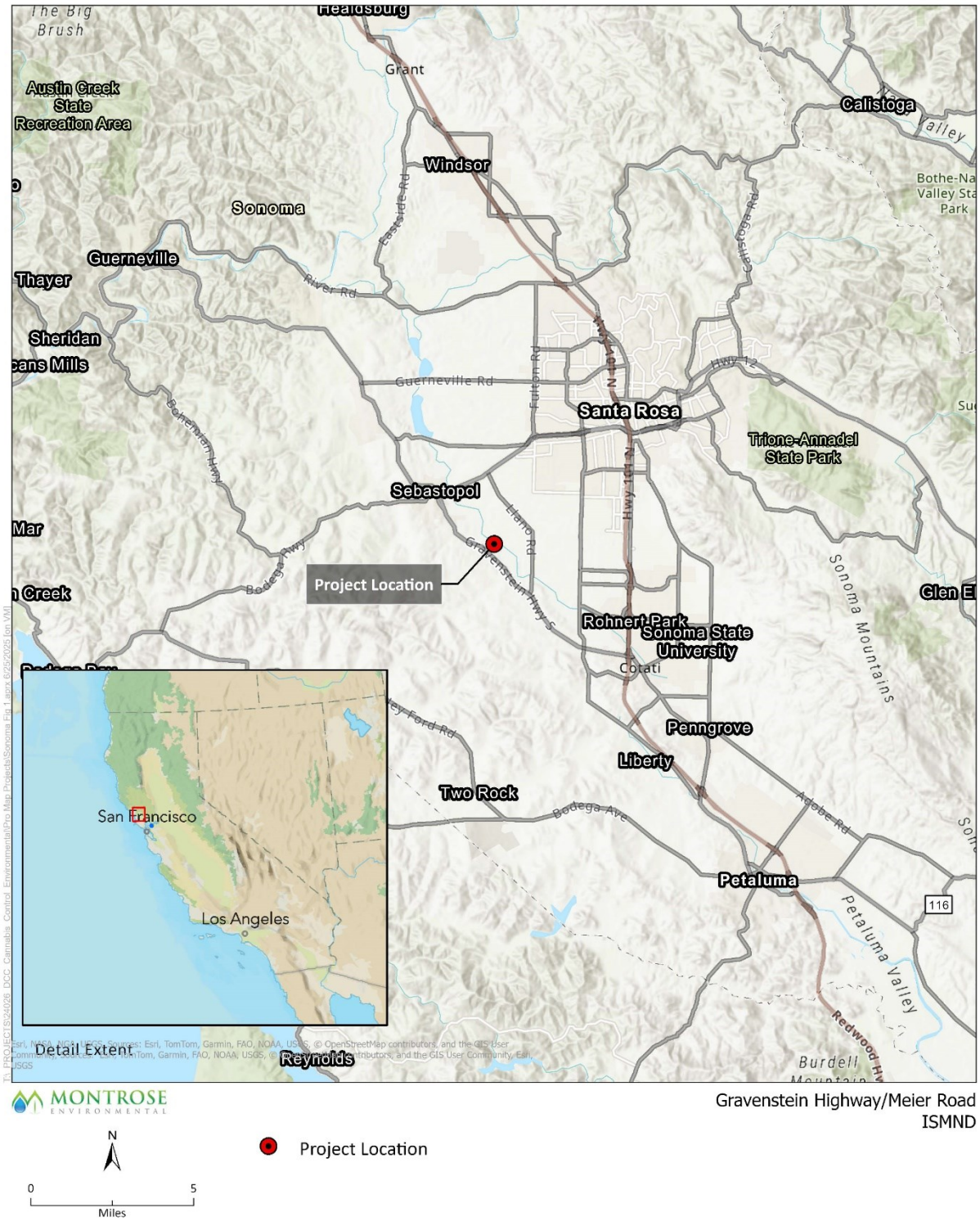


Figure 2.3-1
Proposed Project Vicinity



Figure 2.3-2
Proposed Project Location

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 Applicant 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 Checklist*, 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 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 trichomes[2] have changed from clear to either a light amber or cloudy white color. The primary portion of

[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.

the plant that is harvested is the cannabis flowers, which are generally located at the top of the plant. Flowers are removed using 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 cannabis 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 includes a number of requirements for state-licensed

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

cultivation sites. These provisions include best management practices for cultivation businesses related to the protection of water quality.

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 commercial medicinal outdoor 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 (PEIR) to amend the Cannabis Land Use Ordinance and related regulations. Preparation of the PEIR 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 Project Site Development

Utilities

The Proposed Project site has existing access to water infrastructure. No other utility connections would be required for operations. The local utilities that serve the Proposed Project are listed in **Table 2.4-1.**

Table 2.4-1. Local Utilities Serving the Project Area

Utility Service	Utility Agency
Water Supply	City of Santa Rosa
Sanitary Sewer	None; Portable Restrooms
Electrical Service	PG&E
Fire Protection Service	Gold Ridge Fire Protection District
Police Protection Service	Sonoma County Sheriff

Water

The Proposed Project would use reclaimed water from the City of Santa Rosa (Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b);). The water would go directly from the reclaimed water supply to a drip irrigation system. No other water storage or distribution systems would be part of the Proposed Project.

During commercial cannabis cultivation months (June - October) the average water use for irrigation purposes is 35,000 gallons per license, per month. The total water use for the projected ~~50,000~~ 40,000 square feet of canopy anticipated at full build out is approximately 700,000 ~~875,000~~ gallons annually. *(*Cannabis Ag Management et al. 2025).~~For the 2515 Gravenstein Highway parcel, c~~ Commercial cannabis cultivation replaced vegetable farming which has been determined to use up to five times more water, so there was a net lowering of water usage. *(*Cannabis Ag Management et al. 2025).

~~For the 2409 Meier Road parcel, there would be a net increase of water to roughly 175,000 gallons per year. (Cannabis Ag Management et al. 2025).~~

No runoff containing sediment or other waste or byproducts would drain into the storm drain system, waterways or adjacent land. Erosion and sediment controls in accordance with County and State mandated BMPs would be utilized. Any greywater produced on site, such as from handwashing, would be contained in a vessel and then pumped, removed, and disposed of in accordance with local and state codes, laws and regulations. Operators would follow BMPs listed in the SWRCB Cannabis Cultivation Order to address issues of the use and storage of agrichemicals, water quality protection measures including nutrient leaching to groundwater, spill prevention and secondary containment. *(*Cannabis Ag Management et al. 2025).

Sewer

The Proposed Project is not connected to a municipal sewer system. The project would use ADA compatible portable restrooms~~; one portable restroom would be provided for each of the two adjacent properties.~~ (Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b)).

Communications

No hard-wired communications infrastructure (e.g., telephone, internet) would be required for the Proposed Project ~~on either parcel~~. Operations would utilize Wi-Fi and cellular communications.

Stormwater Drainage

The Proposed Project would not result in any new permanent impervious surfaces. The only new impervious surfaces would be the portable trailers that would be used for storage and processing. The ~~Gravenstein~~ site would have 2,750 square feet of temporary impervious surfaces ~~and the Meier site would have 2,750 square feet of temporary impervious surfaces~~. (Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b).) The Applicants are utilizing runoff and storm water controls in accordance with County and State-specified BMPs.

Site Access and Circulation

The entrance and exit for all employees and deliveries ~~for the Gravenstein site~~ would be via an existing gated entrance to the property located at 2515 Gravenstein Highway S. ~~The entrance and exit for all employees and deliveries for the Meier site would be via an existing entrance to the property located at 2409 Meier Road.~~ There would be no changes to the entrances of either the project site.

Other Site Elements

The following site elements of the Proposed Project would support project operations:

Staffing

The Proposed Project would be operated by the Applicants and the Applicants would be the sole employee for the facility. The hours of operation would be Monday through Friday from 8:00 a.m. to 5:00 p.m. (Cannabis Ag Management 2021.)

Deliveries

Operation of the Proposed Project would require regular deliveries of commercial cannabis cultivation and maintenance equipment and materials (e.g., soil and soil amendments, equipment, fertilizers, chemicals, and fuel) in addition to disposal of waste and hazardous materials generated on site. The facility would dispatch regular deliveries of products from the facility. Hazardous materials stored on site (e.g., used oils and fuels, pesticides, chemicals used for testing and research) would be transported approximately quarterly to an appropriate local hazardous waste facility for disposal or recycling. Outdoor commercial cannabis cultivation materials deliveries would be approximately two to three times per week during the commercial cannabis cultivation period. Shipping of cannabis products ~~out of both property locations~~ would be in the range of 8 to 10 trips per growing season ~~combined~~.

Waste Storage

All waste generated from cannabis operations would be properly stored and secured to prevent access by the public. All waste product management activity must be recorded in the waste product logbook. Plants and cannabis materials deemed not to meet the standards of cannabis as set forth by the organization would be immediately removed from areas where cannabis is handled in an effort to promote good handling practices. Commodity cannabis green waste would be disposed of by composting on site. Prior to composting, any storage of commodity cannabis green waste would be stored in designated storage containers. (Family Florals n.d.(a))

The Applicants would comply with the Agricultural Commissioner's best management practices. All garbage and refuse would be accumulated or stored in non-absorbent, water-tight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with tight-fitting lids~~, to be located on each parcel~~. No refuse container would be filled beyond capacity to completely close the lid. All waste, including refuse, garbage, green waste and recyclables, would be disposed of within 7 days and in accordance with local and state codes, laws and regulations. (Family Florals n.d.(a))

Hazardous Materials

The Applicants would comply with all pesticide laws and regulations as enforced by the California Department of Pesticide Regulation. For pesticides with the signal word CAUTION that have listed food uses, ~~operator~~ the Applicants will comply with all pesticide label directions as they pertain to personal protective equipment, application method, and rate, environmental hazards, longest reentry intervals and greenhouse and indoor use directions. For all other pesticides, use must comply with all label requirements including site and crop restrictions. Operator has obtained Pesticide Operator Identification Number 494872 through Sonoma County Department of Agriculture, Weights and Measures. Monthly pesticide use reports would be submitted to the County Agricultural Commissioner through the CalAg Permits online interface. (Family Florals n.d.(b).)

Table 2.4-2 contains a list of pesticides that could be used in the Proposed Project. The Proposed Project may not use all of the pesticides listed and would use pesticides only as needed.

Table 2.4-2. Pesticides

Product Name	Active Ingredient
MilStop	Potassium Bicarbonate
Grandevo	Chromobacterium subtsugae
Regalia CG	Reynoutria sachalinensis
Venerate	Heat-Killed Burkholderia spp. Strain A396 cells and spent fermentation media
Serenade	QST 713 strain of Bacillus subtilis
Covaset-DF	Sulfur
M-PEDE	Potassium salts of fatty acids
AzaMax	Azadirachtin
DiPel DF	Bacillus thuringiensis subsp. kurstaki

Source: Family Florals n.d.(b)

Hazardous materials, including pesticides and fuels, would be stored in temporary storage trailers ~~located on each parcel,~~ measuring 10 feet by 40 feet.

Ancillary Improvements

Fencing

The entire perimeter of the ~~Gravenstein~~ property which includes the commercial cannabis cultivation project area is surrounded with security fencing. Secure, passcode-protected steel sliding gates are installed at vehicle and pedestrian entrances to the site to prevent unauthorized entry into the facility. ~~For the Meier Road property, the commercial cannabis cultivation area would be enclosed by a 6-foot field fence. Field fence is standard in the ranching and rural communities and is composed of a woven wire fence and T-posts. The site would also be screened with native fire-resistant vegetation that would be consistent with the surrounding area.~~ The project area contains a natural willow thicket, eucalyptus groves, and annual Sudan grass.

Motion sensor lights would be used ~~at both parcels~~. They would be located around the fence line of the commercial cannabis cultivation site ~~on each property~~. All lighting would be fully shielded, downward casting and not spill over onto structures, other properties or the night sky. All light operations are fully contained so that little to no light would escape.

2.5 Proposed Project Characteristics

This section describes the facilities and construction activities that would be part of the Proposed Project.

2.5.1 Proposed Project Facilities

The Proposed Project would involve outdoor commercial cannabis cultivation ~~of cannabis on two adjoining properties.~~

~~*Gravenstein Highway Cultivation Area*~~

The Applicants ~~property located at 2515 Gravenstein Highway S~~ would cultivate up to 40,000 square feet of mature canopy within the commercial cannabis cultivation area. This would not be expanded to a full acre when the new ordinance comes into effect. There are current cannabis operations ongoing at this site. Outdoor commercial cannabis cultivation beds were developed for the purpose of commercial cannabis cultivation, following local and state approvals of the project. Cannabis plants are planted directly in the soil within these commercial cannabis cultivation beds. There would be no separate nursery facilities; immature plants would be grown on site in immature plant areas.

Processing and storage would take place within four portable on-site trailers, each measuring approximately 55 feet by 10 feet. There would be a compost area, and administrative hold area, and a chemical storage area on site, within temporary structures. All of the portable structures have been installed on site. No additional construction would be required. **Figure 2.5-1** is a site plan showing the locations of the project facilities located at 2515 Gravenstein Highway South.

~~***Meier Road Cultivation Area***~~

~~The property located at 2409 Meier Road would cultivate up to 10,000 square feet of mature canopy within the commercial cannabis cultivation area. The previous use of the 2409 Meier Road property was a pasture for donkeys and horses, cultivated fields for organic vegetable production, as well as a licensed commercial cannabis cultivation in 2021. Currently the proposed area is a fallow field.~~

~~The Applicant would plant cannabis plants directly in the soil. Processing and storage would take place within one portable on-site trailer, measuring approximately 30 feet by 10 feet. There would be a compost area, an administrative hold area, and a chemical storage area on site, within temporary structures. No construction of permanent structures would be required.~~ **~~Figure 2.5-2~~** ~~and~~ **~~Figure 2.5-3~~** ~~are site plans showing the locations of the project facilities located at 2409 Meier Road.~~

*[**Note:** Figure 2.5-2, "Proposed Project Site Plan: 2409 Meier Road (1)," and Figure 2.5-3, "Proposed Project Site Plan: 2409 Meier Road (2)," have been deleted.]*

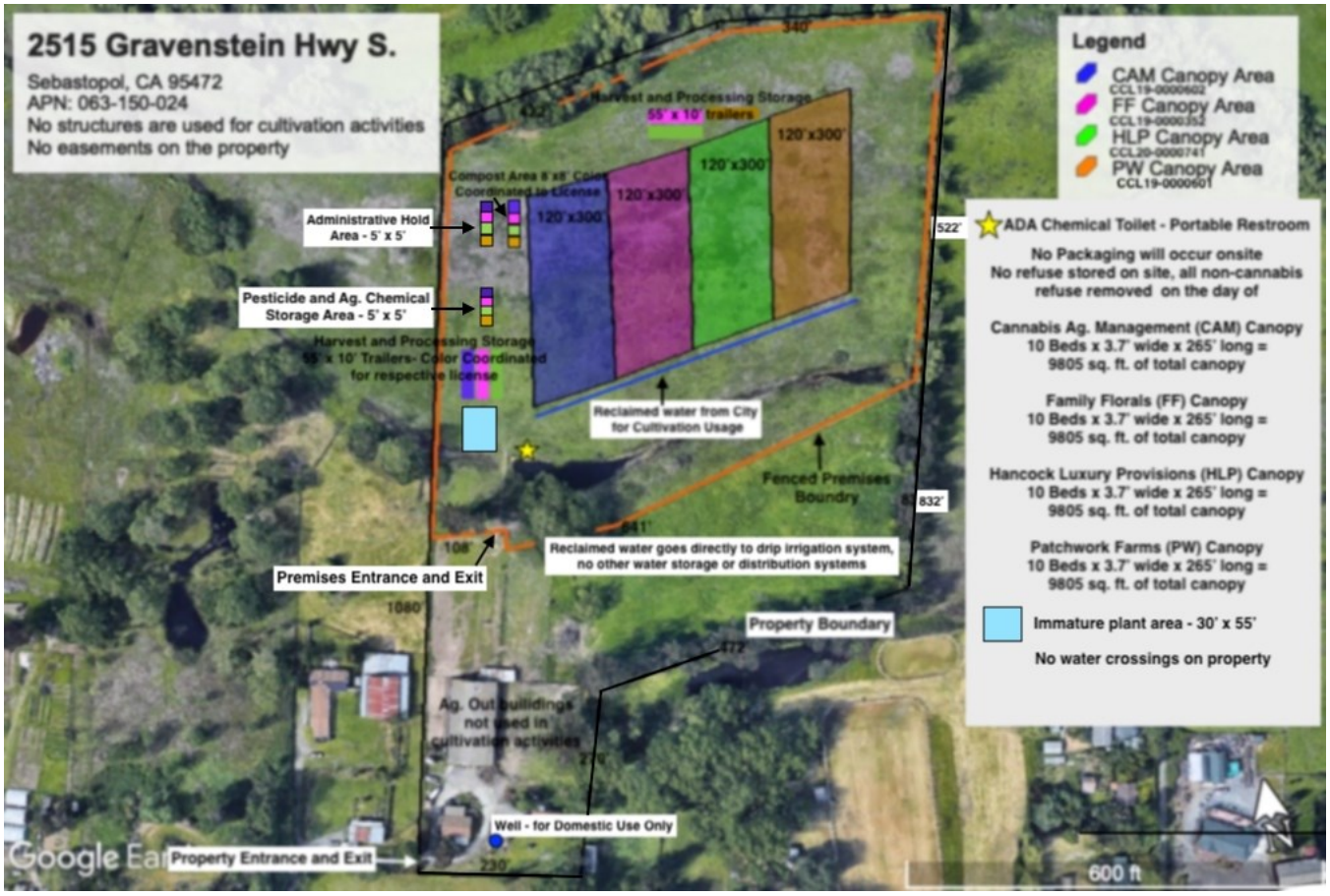


Figure 2.5-1. Proposed Project Site Plan: 2515 Gravenstein Highway

~~**Figure 2.5-2. Proposed Project Site Plan: 2409 Meier Road (1)**~~

~~**Figure 2.5-3. Proposed Project Site Plan: 2409 Meier Road (2)**~~

2.6 Construction Activities

The Gravenstein facility has already commenced cultivation operations and no new construction would be required.

~~The Meier facility would also have no new construction. Cannabis cultivation operations were present at the site in the existing footprint during the 2021 growing season. The cultivation area would be lightly tilled prior to planting. The Proposed Project would use the existing soil to rowcrop. No existing structures would be demolished, no grading would occur, and no new permanent structures would be built.~~

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, is considered a trustee agency. Responsible agencies for the Proposed Project are DCC and Sonoma County.

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 drainage plans; establish water supply	Cannabis cultivation permit

3 ENVIRONMENTAL CHECKLIST

This chapter of the Initial Study/Mitigated Negative Declaration (IS/MND) assesses the environmental impacts of the Gravenstein Highway~~/Meier 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	Gravenstein Highway~~/Meier Road~~ Cannabis Cultivation Project
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~~David Strunk, Senior Environmental Scientist Supervisor, (916) 247-1659, ~~kevin.ponce@cannabis.ca.gov~~ david.strunk@cannabis.ca.gov
4.	Project Location and Assessor's parcel number (APN)	2515 Gravenstein Highway South, Sebastopol, CA 95472 ~~2409 Meier Road, Sebastopol, CA 95472~~
5.	Property Owner(s)	B. Fossell (2515 Gravenstein Highway South)~~; M. Moldonado (2409 Meier Road)~~
6.	General Plan Designation	Diverse Agriculture (DA)
7.	Zoning	Diverse Agriculture (DA)
8.	Description of Project	DCC is evaluating the proposed development of an outdoor cannabis cultivation operation ~~on two contiguous parcels~~ in unincorporated Sonoma County. The property is located at 2515 Gravenstein Highway South (APN 063-150-024) and is currently under seasonal cultivation on four 10,000 square foot cultivation plots, for a total of 40,000 square feet of mature canopy under four state cultivation licenses. ~~The second property located at 2409 Meier Road (APN 063-150-010) would be developed with one 10,000 square foot cultivation operation, for a total of 10,000 square feet of mature canopy. The total outdoor mature canopy for the Proposed Project is 50,000 square feet.~~

9. Surrounding Land Uses and Setting	Laguna de Santa Rosa Creek flows along the northern and northeastern borders of the ~~properties~~property. The property is bounded by rural and agricultural uses to the north, and by residential and commercial uses to the south. A horse arena is located immediately to the south of the project site.
10. Other Public Agencies whose Approval or Input May Be Needed	Sonoma County
11. Native American Consultation	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 January 11, 2025. The results of the Sacred Lands database review were negative for any sacred sites within the project area. On April 24, 2025, and May 1, 2025, letters were sent to the 31 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 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. 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.

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

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.

Signature David Strunk Digitally signed by David Strunk Date: 2026.06.10 14:30:32 -07'00' Date 6/10/26

~~Kevin Ponce~~ David Strunk
Senior Environmental Scientist Supervisor
Department of Cannabis Control

This page intentionally left blank.

3.1 Aesthetics

	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?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

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). The 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 2024). 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 (600') 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 (300') 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 (300') from residences on surrounding properties.

Mixed light structures in all zones 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)(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 site area is visually defined by the low-density buildings, open fields, and large number of trees. The project site is also in close proximity to the Laguna de Santa Rosa.

The ~~parcels~~ parcel underlying the project site ~~have~~ 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

The project site is located approximately 1,000 ft from State Route 116 (SR-116) which is eligible for scenic designation (Caltrans 2018). The closest officially designated scenic highway is another segment of SR-116 located approximately 1.3 miles northwest of the project site (Caltrans 2018). Furthermore, SR-116 has a buffer of approximately 180 feet on each side which is designated as "SR Scenic Resource" scenic corridor overlay by Sonoma County (Sonoma County 2025).

Viewer Groups and Viewer 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 1000 feet from a highway which is eligible for scenic designation, and is located on a parcel which has ~~two parcels which have~~ a scenic zoning overlay classification of "Community Separators." Despite the relatively close proximity of the project site to SR-116, existing development and vegetation in the area would screen the Proposed Project from view. Further, the nature of the Proposed Project with plants in plant beds, and structures clustered together, would be generally consistent with the aims of the zoning overlay. The

zoning overlay does also require that should structures be visible from public roads, screening with 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 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 an officially designated California Scenic Highway approximately 1.3 miles away from the project site. Due to existing vegetation and development in the area, the project site would not likely be visible from the highway. There is also a segment of highway eligible for designation within 1,000 feet of the Proposed Project. However, given the distance, existing vegetation, and existing development, the project site is unlikely to be visible from the eligible state scenic highway. Further, as parts of the project site have previously been used for agricultural purposes, and no trees were removed as part of the Proposed Project, there are no 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 area, approximately 1.9 miles southeast of the City of Sebastopol. While the project site is in relatively close proximity to both a designated and eligible state scenic highway (SR-116), the distance, existing agricultural vegetation and existing buildings in conjunction with the speed of travel would reduce potential visual impacts. The ~~p~~Proposed ~~p~~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. Further, the Proposed Project facilities are temporary structures which would not be excessively tall. 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 would 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 ~~at both parcels~~ around the fence line of the commercial cannabis cultivation site on ~~each~~ the property. All lighting would be fully shielded, downward

casting and would not spill over onto structures, other properties or the night sky and little to no light would escape. Existing on-site development and vegetation would help to screen the lights and any glare generated by metal components that are part of the facility. 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?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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 Statewide Importance," and "Farmland of Local Importance." (DOC, 2022.) The Proposed Project is not identified as being under a Williamson Act contract (Sonoma County 2025a). There is no timberland or forest zoning designation which applies to the project site. However, it is classified as Valley Oak Habitat (Sonoma County 2025b).

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 2022a.) 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, or a Williamson Act Contract (No Impact)

The project site has an agricultural zoning classification. The Proposed Project, as it involves growing 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, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production (No Impact)

There is no timberland or forest zoning designation which applies to the project site. However, it is classified as Valley Oak Habitat (Sonoma County 2025b). While there are mature trees in the vicinity, none are included in 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

	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Regulatory Setting

Federal Laws, Regulations, and Policies

US Environmental Protection Agency

The US 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 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 six common air pollutants found all over the United States, referred to as criteria air pollutants. EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}), 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 would 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

Pollutant	Averaging Time	California (CAAQS)[a, b]	National (NAAQS)[c]	
			Primary[b, d]	Secondary[b, e]
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/m^3 = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million.

[a] California standard for ozone, carbon monoxide, SO_2 (1- and 24-hour), NO_2, 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 PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. The $PM_{2.5}$ 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 affects, 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 (MACT) 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 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, carbon monoxide, SO_2, and NO_2 standards. 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—ROG and 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 BAAQMD's efforts to reduce emissions of $PM_{2.5}$ and TACs (BAAQMD 2017b).

Senate Bill 656 (Chapter 738, Statues 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 PM_{10} 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 PM_{10} 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 BAAQMD also complied with this legislation; staff developed a Particulate Matter Implementation Schedule that was adopted by BAAQMD in November 2005, and BAAQMD adopted the measures identified in the Implementation Schedule (BAAQMD 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 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 (Cal. Code Regs., tit. 13, § 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 in order 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: BAAQMD 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. BAAQMD covers the southern portion of Sonoma County, including, Bloomfield, Cotati, Glen Ellen, Graton, Kenwood, Penngrove, Petaluma, Rohnert Park, Santa Rosa, and Sonoma. The project is located within BAAQMD's boundaries and is thus subject to its jurisdictions, rules, and policies (discussed below).

Bay Area Air Quality Management District

BAAQMD attains and maintains air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of BAAQMD 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. BAAQMD 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, BAAQMD adopts rules and regulations. All projects are subject to BAAQMD'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 BAAQMD 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 BAAQMD, state, or national law. The limitations of this regulation shall not be applicable until BAAQMD 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.

BAAQMD 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 BAAQMD CEQA Guidelines (April 2022), 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 BAAQMD 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 BAAQMD 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
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

Land Use Category	Land Use Subcategory	Land Use Unit	Construction Screening Level	Operation Screening Level
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 p roject-specific traffic data or a more land use-specific trip generation rate.

Source: BAAQMD 2022

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 BAAQMD 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 project is located in the southern portion of Sonoma County 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 3.2-2 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 suspectable 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 reactive organic gases (ROG) and nitrogen oxides (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 (PM_{10})	Attainment	Nonattainment
Fine particulate matter ($PM_{2.5}$)	Attainment (2012 standard)	Nonattainment

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
	Nonattainment – Moderate (2006 standard)	
Carbon monoxide (CO)	Maintenance – Moderate <= 12.7ppm	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 reactive organic gases (ROG) and oxides of nitrogen (NO_X). ROG and NO_X are known as precursor compounds of ozone. Mobile 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

NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 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 NO_2. The combined emissions of NO and NO_2 are referred to as NO_X and are reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with photochemical smog (ozone), the NO_2 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 NO_2 comes from on-road motor vehicles. Since the year 2010, the Bay Area has had three exceedances

of the national NO_2 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. Coarse PM, or PM_{10}, refers to particles less than or equal to 10 microns in diameter (about one-seventh the diameter of a human hair). PM_{10} 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. $PM_{2.5}$ refers to particles less than or equal to 2.5 microns in diameter, and it contains particles formed in the air from primary gaseous emissions. Examples include sulfates formed from SO_2 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 PM_{10} 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).

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

Carbon monoxide is an odorless and invisible gas. It is a nonreactive pollutant that is a product of incomplete combustion of gasoline in automobile engines. Carbon monoxide is a localized pollutant, and the highest concentrations are found near the source. Ambient carbon monoxide concentrations generally follow the spatial and temporal distributions of vehicular traffic and are influenced by wind speed and atmospheric mixing. Carbon monoxide concentrations are highest in flat areas on still winter nights when temperature inversions trap the carbon monoxide near the ground. When inhaled at high concentrations, carbon monoxide 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 carbon monoxide 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 PM_{10} database, ambient PM_{10} 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 discussed 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 project site is ~~Both project sites are~~ surrounded by existing agricultural uses, with the nearest uses being located directly against the site boundaries ~~of both the 2515 Gravenstein Hwy S and 2409 Meier Road sites~~.

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 (Office of Environmental Health Hazard Assessment 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. Sensitive receptors near the project site include multiple residences within 1,000 feet located to the southeast, south, and southwest of the project site. The nearest receptor is a residence 400 feet southwest of the project site. The nearest sensitive receptor is a residence located approximately 200 feet southwest 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 (i.e., the SFBAAB).

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 NO_X) and reduce the transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Clean Air Plan builds upon and enhances BAAQMD's efforts to reduce emissions of $PM_{2.5}$ and TACs.

The SFBAAB is currently designated as nonattainment for the ozone, $PM_{10,}$ 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 sites currently zoned 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 future 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. Cause 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. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred if they cannot be mitigated.

Operation

Operation of the proposed project could result in operational emissions of ROG, NO_X, $PM_{2.5}$, and PM_{10} related to activities such as maintenance, fertilizer application, and use of on road or offroad vehicles such as light-duty pickups and ATVs. Operation of the project would involve maintenance using a combination of machine and hand tools as needed. Harvesting operations would primarily be accomplished using hand tools.

As stated above, 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, which would consist of a total of ~~50,000~~ 40,000 square feet of agricultural use ~~(40,000 square feet on the property located at 2515 Gravenstein Highway S and 10,000 square feet on the adjacent property at 2409 Meier Road)~~, would not result in operational emissions in excess of the Bay Area Air District's thresholds. Therefore, operation of the 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. Operational air pollutant emissions would be **less than significant.**

Conclusion

Because the Proposed Project would not include any construction activities, the 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 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 the no construction activities are required for the project, the lack of newly introduced major sources of TACs, and the setback requirements, the operation of ~~new~~ commercial 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 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). Operational activities associated with the Proposed Project would not be anticipated to generate traffic volumes at this level based on the extent of cannabis uses identified in Chapter 2, *Project Description*. 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 Consultant 2025). Previous to this conclusion, in March 2015, 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 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/m^3) 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 in 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/m^3 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 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/m^3 (23 percent of REL) and 0.3 mg/m^3 (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/m^3 for a 1-acre site and 0.1 mg/m^3 for a 10-acre site. As stated in Section 3.3.2.5, "Sensitive Receptors," the nearest receptor to the 2515 Gravenstein Hwy S. site is a residence 400 feet southwest of the project site~~, while the nearest sensitive receptor to the 2409 Meier Rd site is a residence located approximately 200 feet south of the project site~~. The total grow area ~~on each individual site~~ (based on canopy area) would be one acre or less. Thus, based on the findings of the toxics risk and community exposure study, the nearest receptors to ~~each of the sites under~~ the Proposed Project 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 sites under~~ the Proposed Project would expose the nearest receptors 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)

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, Bay Area Air District Regulation 7-110.5 specifies that agricultural operations as described in the Health and Safety Code, section 41705, are exempt from this regulation. Health and Safety Code section 41705 (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 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.

On the basis of state and local approvals, the facility began legal operations at the 2515 Gravenstein Highway South property ~~and the 2409 Meier Road property~~ in 2019. The Proposed Project site is currently zoned for agricultural use and has been used for commercial cannabis cultivation operations since receiving state and local approvals. During this time, 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, project implementation would not result in a substantial change in cannabis-related odor

emissions nor would the project introduce substantial new odors within the site and surrounding area. For these reasons, impacts related to odors would be **less than significant**.

3.4 Biological Resources

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state HCP?	☐	☐	☐	☒

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 Native Plant Protection Act (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 two adjoining parcels~~ in unincorporated Sonoma County at 2515 Gravenstein Highway S<u>outh</u> ~~and 2409 Meier Road~~. The project site is located on approximately ~~29.67 acres, with~~ 16.4 acres ~~on Gravenstein parcel and 13.27 acres on the Meier parcel~~. The property ~~on Gravenstein~~ includes <u>a</u> single-family residence, numerous outbuildings and agricultural barn, all of

which are associated with the landowner's existing agricultural operation. The predominant land use at the time of the 2019 baseline was organic farmed agricultural fields, pasture and developed areas. ~~The Meier parcel includes a single-family residence, several ranch buildings, barns and sheds, fenced livestock areas and concrete pad that is the proposed commercial cannabis cultivation area, all of which are associated with the landowner's existing agricultural operation. The predominant land use on the property for the past 60 years and has been grazed and actively disked on an annual basis (Pinecrest Environmental Consulting 2020).~~ As part of the cultivation operation, the Applicants have utilized farming practices similar to their previous organic agriculture operations, including the following:

- Drip irrigation for all cultivated crops
- Cover cropping of the entire cultivation site during the winter season
- Planting native pollinator habitat between cannabis rows
- Integrated pest management practices
- Prevention of irrigation runoff entering nearby waterways

Land uses in the immediate vicinity of the project parcel are predominantly rural residences, orchards, vineyards, and dairies.

The parcel ~~two adjoining parcels (APN 063-150-010 and 063-150-024)~~ falls within County-designated Valley Oak Habitat, Biotic Habitat and Riparian Corridor (Laguna de Santa Rose) that runs through the northern and northeastern borders of the property ~~properties~~. The property is ~~properties are~~ bounded by rural and agricultural uses to the north, and by residential and commercial uses to the south. A horse arena is located immediately to the south of the project site. The previous use of the ~~Gravenstein~~ property was livestock grazing and vegetable production ~~and Meier Rd property was a pasture for donkeys and horses, cultivated fields for organic vegetable production, as well as a licensed commercial cannabis cultivation facility in 2021. Currently the proposed project area is a fallow field.~~ There are mature trees and existing structures on the ~~each~~ property, none of which are included in the Proposed Project.

Within the ~~Gravenstein~~ parcel the northern portion consists of agricultural fields with disturbed ruderal grassland, the southern portion occupies developed areas with pastures. Between the pasture and the agricultural fields is a seasonal wetland that follows an abandoned stream channel. This depression supports hydrophilic vegetation and algae and is filled by stormwater. There is also a large berm between the agricultural field and the seasonal wetland, that berm prevents any overland sediment transport from the field to the seasonal wetland. (Pinecrest Environmental Consulting 2018). Proposed Project commercial cannabis cultivation would only occur within the northern agricultural fields and the project site would not include Riparian Corridor of Laguna de Santa Rose or the seasonal wetland (depression area) south of the agricultural field.

~~The Meier parcel consists of upland grazed annual grassland throughout the majority of the property, riparian corridor to the north, isolated Valley oak (*Quercus lobata*) individuals within the western fence line and developed areas in the southern area of the project site. There is also a large berm on the northeast side of the field that would block any overflow form the laguna de Santa Rosa during normal flow (Pinecrest Environmental Consulting, 2020).~~

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]).

Reconnaissance-level Biological Assessments (Biological Assessment) were completed for ~~both~~ the ~~Gravenstein and Meier~~ project site~~s~~ to evaluate for Special-Status Species (Pinecrest Environmental Consulting 2018; Pinecrest Environmental Consulting 2020). ~~were prepared for the commercial cannabis cultivation activities for Proposed Project.~~ The Biological Assessments generated a list of 92 special-status plant species and 56 special-status wildlife species at the ~~Gravenstein~~ project site ~~and generated a list of 154 special-status plant species and 84 special-status wildlife species at the Meier project site~~ 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:

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 (Pinecrest Environmental Consulting 2018; Pinecrest Environmental Consulting 2020);
- California Natural Diversity Database (CNDDB) queries for the U.S. Geological Survey (USGS) 7.5-minute quadrangle containing the project area and the quadrangles immediately adjacent to it: Guerneville, Healdsburg, Market West Springs, Camp Meeker, Sebastopol, Santa Rosa, Valley Ford, Two Rock, and Cotati (Pinecrest Environmental Consulting 2018; Pinecrest Environmental Consulting 2020); and

- California Native Plant Society's (CNPS's) *Inventory of Rare and Endangered Plants of California* (Pinecrest Environmental Consulting 2018; Pinecrest Environmental Consulting 2020) 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

A 2009 CNDDB occurrence and known occurrence (since 1990s) of Sebastopol meadowfoam *(Limnanthes vinculans)* has been previously observed within the central seasonal wetland occurring along the abandoned secondary channel to the Laguna de Santa Rosa that runs east-west through the center of the property (Pinecrest Environmental Consulting 2018). The water features of Laguna de Santa Rosa and the seasonal wetland (depression area) are located outside the proposed commercial cannabis cultivation area and would not be impacted by proposed commercial cannabis cultivation activities. Further, there is a large berm between the agricultural field and the potential wetland which would prevent any overland sediment transport from the field to the wetland. The Proposed Project would maintain a required 50-foot buffer on all sides of any potential wetlands on site, including the central wetland to avoid direct impacts or discharge of sediments or pollutants to these potential wetlands. Additionally, no plant individuals were positively observed at the time of the survey during the reconnaissance-level Biological Assessment conducted in the project site of Gravenstein in December 2017 and the reconnaissance-level Biological Assessment noted that any future activities on site that seek to alter wetlands should be preceded by protocol-level surveys before any disturbance of the potential wetlands on site due to the potential for Sebastopol meadowfoam to exist in the seasonal wetland. (Pinecrest Environmental Consulting 2018). There is no suitable wetland or vernal pool habitat in the project commercial cannabis cultivation site ~~or within the Meier property~~ to support this species (Pinecrest Environmental Consulting 2020).

Based on the review and site characteristics of the project site, no special-status wildlife and plant species are anticipated to occur within the proposed cultivation area as it previously has had significant historical alteration of the natural landscape, and the Proposed Project would take place on land which has been used for agricultural purposes of cattle grazing, hay production, as well as the agricultural areas are routinely disked, and other various types of agricultural operations occurring. Similarly, no special-status

reptiles, bird species, invertebrates, fish, amphibians, or mammals are anticipated to occur at the project site due to the previous and historical alterations of the natural landscape.

Reconnaissance-level Biological Assessments were conducted within the ~~Gravenstein and Meier~~ project site (Pinecrest Environmental Consulting 2018; Pinecrest Environmental Consulting 2020)~~, and a follow up site visit was conducted by Pinecrest for the Meier project site on December 14, 2025, to confirm the results of the Biological Assessment conducted in 2020~~. A follow-up survey of the property was conducted in April 2026, and is described below. The reconnaissance-level Biological Assessments (Pinecrest Environmental Consulting 2018; Pinecrest Environmental Consulting 2020; Pinecrest Research Corporation 2025) **(**Appendix A**)** provide~~s~~ tables 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.

Table 3.4-1 lists the special-status wildlife species that are known to occur in or near the project area (Appendix A). Species that are possible or known to be present are discussed further below; species with no suitable habitat or that are not expected 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
Plants			
Hemizonia congesta ssp. congesta Congested-headed hayfield tarplant	- / - / 1B.2	Coastal scrub, valley and foothill grassland. Grassy valleys and hills, often in fallow fields. 25-200m. Blooms April through November.	**Not expected.** ~~Grassland habitat is present on Meier project site.~~ Nearest known occurrence is 2.1 miles Southwest of the project site near Blucher Creek. However, adjacent areas of the Project site and the proposed Project area have had significant historical alteration of the natural landscape, and the Proposed Project would take place on land which has been used for agricultural purposes of cattle grazing and various types of agriculture.
Limnanthes vinculans Sebastopol meadowfoam	FE/ SE / 1B.1	Mesic meadows, vernal pools, valley and foothill grassland; Swales, wet meadows and marshy areas in valley oak savanna; on poorly drained soils of clays and sandy loam. 15-115m. Blooms April through March.	**Present.** ~~No vernal pool or wetland habitat exists on the Meier project site.~~ The nearest CNDDB observation overlaps the Gravenstein project site, a seasonal wetland that follows an abandoned stream channel. The depressional areas where this species may occur are between the pasture and the agricultural fields of the Gravenstein project site but do not overlap the agricultural area. Additionally, a secondary occurrence (two adjacent colonies; including Gravenstein parcel) is within the eastern adjacent property but also does not overlap the project area.
Rhynchospora globularis Round-headed beaked-rush	- / - /2.1	Marshes and swamps; Freshwater marsh. 45-60m.	**Possible.** Some wetland habitat exists at Gravenstein parcel. ~~No wetland habitat on project site on Meier.~~ Nearest CNDDB occurrence from 1947 observed south of the Project site in Cunningham marsh.

Blennosperma bakeri Sonoma sunshine	FE / SE /1.B	Valley and foothill grassland (mesic), vernal pools. 10-110m. Blooms March through May.	**Not expected.** The project site contains highly disturbed grassland habitat and a seasonal wetland that follows an abandoned stream channel. The depressional areas where this species may occur are between the pasture and the agricultural fields of the Gravenstein project site but do not overlap the agricultural area. Nearest CNDDB occurrence from 2012 observed northeast of the Project site along Todd road, east of Sebastopol. A protocol level rare plant survey was conducted by Montrose Environmental during the month of April 2026 (March – April blooming period) at the project site. Sonoma sunshine (no seedlings or flowers) was not detected within the seasonal wetland or the project site during the protocol-level plant survey.

Scientific name	Listing status* (Federal/ State)	Habitat	Potential to Occur in the Project Area
Invertebrates			
Bombus caliginosus Obscure bumble bee	- / - / SSC	Grassland, foothill woodland, and chapparal. Food plant *Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.*	**Possible.** Grassland habitat exists at Gravenstein ~~and Meier~~ project site. However, one CNDDB record from 1947 has been observed approximately 4.73 miles northeast from the Project site in vicinity of Santa Rosa. Additionally, adjacent areas of the Project site and the proposed project area have had significant historical alteration of the natural landscape, and the Proposed Project would take place on land which has been used for agricultural purposes of cattle grazing and various types of agriculture.
Bombus occidentalis Western bumble bee	- / SCE	Open grasslands, shrublands, chaparral, desert margins, including Joshua tree and creosote scrub, and semi-urban settings. Food plant include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum*. Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease. Western bumble bee populations in California are currently largely restricted to high elevation sites in the Sierra Nevada and a few records on the northern California coast (Xerces Society et al. 2018).	**Not expected.** Grassland habitat exists at Gravenstein project site. The project site~~s are~~ is within the historic range of this species; however, it is not within the mapped current range (CDFW 2023). Additionally, adjacent areas of the project site and the proposed project area have had significant historical alteration of the natural landscape, and the Proposed Project would take place on land which has been used for agricultural purposes of cattle grazing and various types of agriculture.

Source: Pinecrest Environmental Consulting. 2018, 2020, 2025.

* 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

The project site contains one jurisdictional watercourse, Laguna de Santa Rosa,~~.~~ ~~W~~which runs through the northern and northeastern borders of the property~~properties~~.

There is one location at the project site on the Gravenstein parcel that may qualify as jurisdictional wetland, a seasonal wetland occurs in the center of the parcel. A depression was formed by an abandoned stream channel from Laguna de Santa Rosa, and this depression supports hydrophytic vegetation and algae, and is filled by stormwater (Pinecrest Environmental Consulting 2018). ~~No jurisdictional wetlands are in the Meier parcel.~~ The water features of Laguna de Santa Rosa and the seasonal wetland (depression area) are located outside the proposed commercial cannabis cultivation area and would not be impacted by proposed commercial cannabis cultivation activities. Further, there is a large berm between the agricultural field and the potential wetland which would prevent any overland sediment transport from the field to the wetland.

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 Assessments that were completed for the Proposed Project, no special-status plant and wildlife species are anticipated to occur within the proposed commercial cannabis cultivation area as it is located in a previously disturbed cultivated landscape with a predominant land use of cattle grazing and agricultural fields. 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 Proposed Project would not include any construction activities or site modifications such as grading, new roads, vegetation removal, and modifying or creating new drainage systems. ~~Both parcels have~~ The parcel has historically been utilized for agricultural uses and operations (e.g., cattle grazing, hay production, and existing agricultural operations). The Gravenstein facility has already commenced commercial cannabis cultivation operations, and no new construction would be required. ~~The Meier facility would also have no new construction.~~ Commercial cannabis cultivation operations were present at the site in the existing footprint during the 2021 growing season.

Onterris biologists conducted an additional site survey of the Gravenstein site on April 6, 2026. The survey area consisted of the project area, as well as an additional 500-foot radius where possible. In some cases the 500-foot radius area extended beyond the property line; the biologists did not survey such areas due to concerns with trespass on neighboring properties. The results of the survey are summarized below:

1. **Rare Plants.** A protocol-level rare plant survey was conducted by Onterris on April 6, 2026 in accordance to the Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (California Department of Fish and Wildlife [CDFW] 2018) and CNPS (2001) protocols during the month of April 2026 (March – April blooming period) for Sonoma sunshine and Sebastopol meadowfoam on the project site and seasonal wetland area. A best effort was made to ensure maximum feasible coverage at the project site

and the seasonal wetland, including a 500-foot buffer where feasible and accessible. Sonoma sunshine and Sebastopol meadowfoam (seedlings or flowers) were not detected within the seasonal wetland or the project site during the protocol-level plant survey.

2. **Vernal Pools and Seasonal Wetlands.** A site visit and survey was conducted by Onterris on April 6, 2026 to asses the existing seasonal wetland (depression area) and project site. Additionally, a wetland delineation of the seasonal wetland, a hydrologic evaluation of the seasonal wetland (depression area), and assessment of whether Laguna de Santa Rosa is hydrologically connected to the property and the seasonal wetland area was conducted during the site visit.

   Onterris biologists determined that the depression area meets the criteria for being classified as a seasonal wetland. The seasonal wetland follows an abandoned stream channel that contains aggressive and highly invasive floating primrose-willows (*Ludwigia peploides*), and other hydrophytic vegetation. There is a thick vegetated buffer between the agricultural area and the depressional area. The seasonal wetland does not have surface connection, nor continuous hydrologic connection, nor direct nexus to Laguna de Santa Rosa. Additionally, the Proposed Project would not alter any wetlands, and the Applicant will maintain required 50-foot buffers on all sides of any potential wetlands including the seasonal wetland (central abandoned channel) to avoid direct impacts or discharge of sediments or pollutants to these potential wetlands.

3. **California Tiger Salamander (CTS).** Marginal breeding habitat (i.e., seasonal pond, seasonal wetland) was observed during the site visit by Onterris on April 6, 2026. The depressional areas where this species may occur are between the pasture and the agricultural fields of the Gravenstein project site but do not overlap the agricultural area. Highly disturbed grassland habitat may provide marginally suitable upland habitat. However, underground refugia from small mammal burrows were not observed to occur within the project site, grassland habitat or in the agricultural area. The Onterris site visit occurred during the CTS life cycle of larvae being potentially present in the seasonal ponds (February through mid-May) and breeding ponds beginning to dry out for the season (mid-April through mid-May), and metamorphosis beginning to occur within the seasonal ponds. The seasonal wetland was observed to have extensive overgrowth of floating primrose-willows and observance of Louisiana red swamp crayfish (*Procambarus clarkii*) and the Pacific signal crayfish (*Pacifastacus leniusculus*). No observations of CTS larvae or metamorphs were observed during the survey.

   The seasonal wetland within the project site may provide a suitable hydroperiod for CTS, as the water depth within the seasonal wetland varied from 6 inches to 1 to 1.5 feet during the site visit in April 2026 (holds water through late spring). The nearest CNDDB record for CTS from 2004 has been observed approximately .53 miles northeast from the project site in the vicinity of Todd Road, east of Sebastopol. Additionally, adjacent areas of the project site and the project area have had significant historical alteration of the natural landscape, and the project activities would take place on land which has been used for agricultural purposes, cattle grazing, and various types of agriculture. Although unlikely, there is a low potential for CTS to occur in underground refugia in marginal and disturbed annual grassland habitat within the project site or within the marginal seasonal wetland area that contains floating primrose willows that can negatively impact water

quality, decrease biodiversity, and interfere with native wildlife, along with high predator activity of Louisiana red swamp crayfish and the Pacific signal crayfish that can displace and predate on native species. The Proposed Project would have a very low likelihood of supporting and impacting CTS, as there were no suitable aquatic breeding habitat or upland areas for estivation within the project site.

Based on the reconnaissance-level and protocol-level Biological Assessments completed for the Proposed Project and because the Proposed Project would not include habitat modifications of existing aquatic areas (Laguna de Santa Rosa, and seasonal wetland), ground disturbance or any structural building modifications, the project conditions would be the same as existing conditions. Additionally, the Applicant's farming practices that are typically associated with organic farming would help prevent any impacts that would result from ongoing operations. As described in Section 1.5, this IS/MND does not analyze impacts that may have already occurred if they cannot be mitigated. Additionally, the Proposed Project would not alter special-status habitat or alter existing drainage conditions on- or off-site and would not result in exposed areas susceptible to significant erosion, siltation, and runoff. SWPPP BMPs for storm water control would prevent sediment-laden runoff from areas of ground disturbance. No substantial adverse effect to any special-status species or its habitat would occur. Ongoing project operations would not impact special status species or habitats. Therefore, there would be **no impact** on these resources.

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

Based on the Biological Assessments completed for the Proposed Project there is no sensitive natural community within the footprint of the Pproposed commercial cannabis cultivation. While the project site contains the riparian area of Laguna de Santa Rosa, the proposed commercial cannabis cultivation areas within Gravenstein and Meier are is away and set back from the riparian habitat of Laguna de Santa Rosa. 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** on these resources.

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

The Biological Assessments conducted in 2018 and 2020 indicated that no wetlands or other Waters of the United States were present on site, as no wetland hydrology, no wetland vegetation, and no hydric soils were present during the biological assessment for the Meier parcel (Pinecrest Environmental Consulting 2020). A depression was formed by an abandoned stream channel from Laguna de Santa Rosa, and this depression supports hydrophytic vegetation and algae, and is filled by stormwater (Pinecrest Environmental Consulting 2018); however, a protocol-level wetland delineation was not performed within the project area. The biological assessment conducted in April 2026 found that the depression would be classified as a seasonal wetland. Furthermore However, the project footprint does not include Laguna de Santa Rosa or and the depression area, as these are located outside the proposed commercial cannabis cultivation area and would not be impacted by proposed commercial cannabis cultivation activities. Further, there is a large berm between the agricultural field and the potential wetland

which would prevent any overland sediment transport from the field to the wetland. The biological assessment conducted in April 2026 confirmed that the depression is not hydrologically connected to Laguna de Santa Rosa. In addition, the Proposed Project would implement BMPs as appropriate to control erosion and sedimentation during operation activities.

The Proposed Project would not alter existing drainage conditions on- or off-site and would not result in exposed areas susceptible to significant erosion, siltation, and runoff. SWPPP and operation BMPs for storm water control would prevent sediment-laden runoff from areas of ground disturbance. Therefore, no state or federally protected wetlands would be impacted on the project site; therefore, there would be **no impact** 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 in a rural area surrounded by agriculturally zoned parcels in unincorporated Sonoma County. The area surrounding the project site contains a mixture of agricultural uses, rural residences, and open grassy hills.

The Gravenstein facility has already commenced commercial cannabis cultivation operations, and no new construction would be required. ~~The Meier facility would also have no new construction.~~ Commercial cannabis cultivation operations were present at the site in the existing footprint during the 2021 growing season. The commercial cannabis cultivation area would be lightly tilled prior to planting. No existing structures would be demolished, no grading would occur, and no new permanent structures would be built. ~~Currently the proposed commercial cannabis cultivation area on the Meier Road property is a fallow field.~~

Due to its developed nature, the project site limits native habitat with ecological features and lacks suitable 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 and protocol-level Biological Assessments completed for the Proposed Project and because the Proposed Project would not include ground disturbance, new roads, vegetation removal, 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. 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 of any 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 (NCCP). There would be **no impact** related to conflicts with an adopted HCP or NCCP.

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?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒

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. (2010:114-118) 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 Present[4] (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.

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

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 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 people indigenous to the project area are known as the Southern Pomo. Southern Pomo is one of seven distinct and mutually unintelligible languages collectively known as the Pomo language family. The seven languages are geographically delineated, with the Southern Pomo language territory extending from the coast of the Russian River to Sebastopol (McLendon and Oswalt 1978). The Southern Pomo continue to reside throughout the San Francisco Bay Area and strive to maintain their cultural traditions.

McLendon and Oswalt (1978) state that comparatively little is known of South Pomo culture as the Southern Pomo population was decimated early due to missionization, Mexican slave raids, disease, and settler encroachment. Most Southern Pomo groups referred to themselves with locational descriptors followed by –hčamay, “people.” Like neighboring Pomo groups, the Southern Pomo had a cyclical subsistence economy that was primarily based on acorns, fish, and game (McLendon and Oswalt 1978).

Neighboring groups referred to the bands around Santa Rosa and Sebastopol as ɔiy·oko-hčamay, “southerners” (McLendon and Oswalt 1978:280). The current project area lies within the ethnographic territory of the Livantolomi tribelet of the Southern Pomo linguistic affiliation (Milliken 2009). Livantolomi is the name given to the group by Franciscan missionaries, and Milliken (2009) suggests that the Pomo name is Konhomtara. Milliken (2009) places the tribelet along the southern portion of the Laguna de Santa Rosa in the Sebastopol area. The Southern Pomo village of bati’klētcawī, “at elderberry house,” was located in the southern portion of Sebastopol and is the closest known ethnographic village to the project area (Alta Archaeological Consulting 2020).

History

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). Juan Francisco de la Bodega y Cuedra became the first European to explore Sonoma County in 1775. By the early 1800s, Spain began colonizing Sonoma County and missionizing its indigenous people (Alta Archaeological Consulting, 2020).

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 2002, Lightfoot et al. n.d.).

Founded in present-day Sonoma in 1823 by Father Jose Altamira, Mission San Francisco Solano was the only mission built after Mexico gained independence from Spain. The mission was built primarily to deter Russia's expansion into California. In 1833, General Mariano Guadalupe Vallejo was tasked with secularizing Mission San Francisco Solano and establishing a pueblo in its place with the hope of facilitating the development of present-day Sonoma and Marin counties. Vallejo founded the Pueblo de Sonoma next to Mission San Francisco Solano in 1835. The pueblo was laid out with a grid that included streets, a central plaza, and building lots (Kyle 2002).

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. In 1845, James Black was granted the 10,787-acre Rancho Canada de Jonive. The rancho occupied the area west of present-day Sebastopol (Alta Archaeological Consulting 2020). The California Gold Rush of 1849 brought an influx of settlers to the region, resulting in the establishment of the town of Sebastopol during the 1850s. Agriculture became the primary industry of the Sebastopol region. Apples, particularly the Gravenstein variety, emerged as the dominant crop in the 1900s. Agriculture continues to be a large industry in the Sebastopol area, with many of the apple orchards now replaced by vineyards (Visit Sebastopol 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. 24-1144).

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 (OHP 2025).

No resources have been previously recorded within the project area. ~~Five~~ Three resources, P-49-000606, and P-49-002805, and P-49-003201, have been previously recorded within the 0.25-mile search radius. ~~Three of the resources~~ (P-49-000606~~, -49-001022, and -49-002278) are~~ is a pre-contact site~~s~~ containing habitation debris. P-49-002805 is a historic-era water tower and P-49-003201 is a historic-era small wood residence. Both P-49-002805 and P-49-003201 have been previously recommended as ~~have been previously~~ ineligible for listing in the NRHP; ~~the~~ the CRHR/NRHP evaluation status~~es~~ of P-49-000606~~, -49-001022, and -49-002278 are~~ is unknown.

According to the record search results, the boundaries of four ~~five~~ previous studies intersect with the project area. An additional eight ~~ten~~ previous studies have boundaries that intersect with the 0.25-mile search radius. A cultural resource study~~ies~~ was ~~are~~ conducted for the Proposed Project by Alta Archaeological Consulting in 2018 ~~and 2020~~ to ensure compliance with CEQA and Sonoma County Cannabis Land Use Ordinance No. 6245. ~~The 2018 study (S-051649) focused on the Gravenstein Highway project area, while the 2020 study (S-05532) encompassed the Meier Road location.~~

Native American Consultation

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 January 11, 2025. The results of the Sacred Lands database review were negative for any sacred sites within the project area.

On April 24, 2025, and May 1, 2025, letters were sent to the 31 tribal contacts provided by the NAHC. The letters requested any additional information regarding tribal resources and to notify the Agency if they wished to initiate consultation regarding the project actions. Responses have been received from Lytton Rancheria, the Cahto Tribe, and Sherwood Valley Rancheria of Pomo Indians. These Tribes did not request further consultation. 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. Coordination with tribes is described further in Section 3.18, "Tribal Cultural Resources."

Archaeological Survey and Results

Alta Archaeological Consulting, LLC, conducted a cultural pedestrian surveys of the Gravenstein ~~and Meier facilities~~ site on June 6, 2018~~, and December 2, 2020, respectively~~. (**Appendix B**.) The ~~combined~~ survey area totaled approximately ~~10.44~~ 7.44 acres. ~~Both~~ The surveys reported that soils in the project area are previously disturbed due to agricultural activities. No cultural resources or archaeological deposits were identified as a result of ~~either~~ the survey (Alta Archaeological Consulting 2018~~, 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 its implementing guidelines 21082 and 21083.2. As stated above, no historical resources were identified within the project area. Two historic-era resources (P-49-002805 and P-49-003201) have been recorded within the 0.25-mile search radius; both resources have been previously recommended as ineligible for listing in the NRHP and would not be affected by project activities. All construction activities are complete and 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 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 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?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

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 (EPAct) of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas1. EPAct 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 EPAct. 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 EPAct 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 (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

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, Statues 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 (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; and the final 2021 Integrated Energy Policy Report Volume I Building Decarbonization (CEC 2021).

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.

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 connected to the utility grid and does not require any additional onsite energy sources for project operations.

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 and product shipments for commercial cannabis cultivation operations would include only two to three round trip vehicle trips per week during the growing season. 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 does not require supplemental lighting for commercial cannabis cultivation operations 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.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

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 2018):

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 permit, 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

The project area is located in the North Coast Ranges geomorphic province of California, characterized by predominantly northwest trending mountains and valleys. 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 site is located in the Santa Rosa Plain. The Sonoma Mountains separate the area from the Petaluma Valley and Santa Rosa Plain to the west and are of moderate relief, sloping gently from a few hundred feet in the southern part to greater than 2,000 feet southwest of Glen Ellen and reaching a maximum elevation of about 2,295 feet on Sonoma Mountain. The area is bounded on the east by the Mayacamas Mountains that range from less than 100 feet elevation in the Carneros area, increasing from south to north to a maximum elevation of 2,730 feet at Hood Mountain northeast of the Subbasin (Sonoma Valley 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 loam (Wright loam, wet, 0 to 2 percent slopes, WhA and Wright loam, shallow, wet, 0 to 2 percent slopes, WoA) (NRCS 2025a). According to the Natural Resources Conservation Service (NRCS), the soils underlying the project site are not classified as an expansive soil. The California Department of Conservation (DOC) classified BcA as prime farmland if either protected from flooding or not frequently flooded during the growing season, PaA as prime farmland if drained, and HcC as farmland of statewide importance (NRCS 2025b).

Seismicity

Similar to most of California, Sonoma County is a seismically active region. According to the Sonoma County General Plan, Public Safety Element, the project site is not located within an Alquist-Priolo Earthquake Fault Zone; however, San Andres Fault is delineated as an Alquist-Priolo Fault Zone and is located approximately 13 miles to the west of the project site. The Rodgers Creek Fault is located approximately eight miles to the east 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. The General Plan Public Safety Element suggests that the site could be subject to "very strong" ground shaking from potential future earthquakes as designated on the Modified Mercalli Intensity Scale (VIII – Very Strong) (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). According to the General Plan Public Safety Element, the project area is susceptible to liquefaction hazards. According to the Association of Bay Area Government's Hazard Viewer Map, the project site is in a liquefaction susceptibility area designated as "moderate." (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.

The topography of the ~~Gravenstein and Meier parcels are~~ parcel is relatively level; the site~~s~~ and wider area are not steeply sloped. According to the General Plan Public Safety Element, the project area is located an area with moderate to low susceptibility to deep-seated landslides. According to the According to the Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG'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 an Alquist-Priolo

Earthquake Fault Zone; however, San Andres Fault is delineated as an Alquist-Priolo Fault Zone and is located approximately 13 miles to the west of the project site. The Rodgers Creek Fault is located approximately eight 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, 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 "very strong" according to the County's General Plan Public Safety Element. (Sonoma County 2014). While the project area could experience very strong motion, resulting in negligible damage to buildings with proper design and construction to considerable damage in poorly designed structures (USGS 2025), the outdoor commercial 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 result in an increase in seismic hazards related to ground shaking. 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 result in an increase in seismic hazards related to liquification. There would be **no impact.**

iv. Landslides *(No Impact)*

The topography of the ~~Gravenstein and Meier parcels are~~ parcel is relatively level; the project site and wider area are not steeply sloped. According to the General Plan Public Safety Element, the project area is designated as moderate to low susceptibility to deep-seated landslides. In addition, the site is designated as "few landslides" by MTC/ABAG. As such, the likelihood of landslides on or near project site is considered to be moderate to 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 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 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 (No 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 fine sandy loam and loam soils. The soils underlying the project site are not classified as an expansive soil (NRCS 2025). Project conditions at full build out would be the same as existing conditions and no new buildings or structures would be constructed. There would be **no impact**.

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)

The project would use ADA compatible portable restrooms; one portable restroom would be provided for the project site. ~~each of the two adjacent properties.~~ 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 septic or wastewater systems.

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 cannabis commercial 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

	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?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

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 (CO_2) and other greenhouse gases (GHGs) are pollutants under the federal Clean Air Act (CCA), which the U.S. 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).

DCC Commercial Cannabis Business Regulations

The California Code of Regulations, title 4, division 19 includes the following requirements regarding energy use for commercial cannabis uses.

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 16305: 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.

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.

Sonoma County Zoning Ordinance

The following Sonoma County Code ordinances describe the existing County cannabis regulations. These ordinances would be repealed if the Cannabis Program Update is approved.

Section 26-88-254: Cannabis Cultivation—Commercial

(g) Operating Standards.

(3) Energy Use. Electrical power for indoor cultivation, mixed light operations, and processing including but not limited to illumination, heating, cooling, and ventilation, shall be provided by any combination of the following:

(i) on-grid power with one hundred percent (100 percent) renewable source;

(ii) on-site zero net energy renewable source; or

(iii) purchase of carbon offsets of any portion of power not from renewable sources. The use of generators for indoor and mixed light cultivation is prohibited, except for portable temporary use in emergencies only.

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 CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). 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 CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 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 CO_2 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 CO_2 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. N_2O is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water) and are two of the most common processes for removing CO_2 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 CO_2-equivalent (CO_2e) $MMTCO_2e$, which is 10.2 $MMTCO_2e$ lower than 2021 levels and 59.9 $MMTCO_2e$ below the 2020 GHG limit of 431 $MMTCO_2e$ (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	$MTCO_2e$	Percent
Transportation	1,794,818	58
Buildings	732,091	24
Agriculture	392,185	13
Solid waste	176,877	6
Water	16,402	1
Total	**3,112,373**	**100**

Note: $MTCO_2e$ = 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 type and frequency of operational activities would be ~~largely similar to~~ the same as ~~existing~~ conditions, as the site currently cultivates, processes, and transports cannabis. ~~As the Proposed Project involves implementing additional canopy space to expand commercial cannabis cultivation operations, there would be some increase in GHG emissions associated with the Proposed Project.~~ Operation of the Proposed Project would generate GHG emissions associated with landscaping and fertilizer use, water consumption, and waste and wastewater generation. Any use of on-site off-road equipment, such as a utility vehicle (e.g., John Deere Gator) would also generate GHG emissions. No electricity would be consumed on site, but would be consumed off-site to transport water from the utility to the areas to be irrigated. GHG emissions would also occur from outgoing cannabis product transportation during operations. Cannabis product would be transported offsite by refrigerated truck or van by a licensed transporter. Implementation of the Proposed Project would result in outdoor commercial cannabis cultivation material deliveries approximately two to three times per week during the commercial cannabis cultivation period. Shipping of cannabis products ~~out of both property locations~~ would be in the range of 8 to 10 trips per growing season ~~combined~~. 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). The Proposed Project would not include additional employees and would not result in additional trips per day attributed to commuting. Operation of the Proposed Project would two to three times per week during the commercial cannabis cultivation period. Shipping of cannabis products ~~out of both property locations~~ would be in the range of 8 to 10 trips per growing season ~~combined~~. Therefore, total daily vehicle 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 project would not support any natural gas infrastructure, would not generate vehicle trips resulting in a transportation impact (see 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 on-site 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 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 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 project (approximately 40,000 ~~50,000~~ sf of growing area in total), no additional construction activities, minor 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

	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

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 (Cal. Code Regs., tit. 19, § 5050.1 et seq.) 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 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 (DTSC 2025) within 5000 feet of the project site. Geotracker lists three LUST Cleanup Sites and two Cleanup Program Sites within 5000 feet of the project site, but all of them are listed 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), and which is generally represented by the EnviroStor database (DTSC 2025).

Airports

The nearest airport to the project site is the Charles M. Schulz-Sonoma County Airport, which is located approximately 9 miles to the north. The Petaluma Municipal Airport is located approximately 13 miles southeast of the project site.

Wildfire Hazards

The project site is in a rural area of unincorporated Sonoma County. There is a current commercial cannabis cultivation area on the~~ Gravenstein~~ project site in addition to mature trees and existing structures, none of which are included in the Proposed Project. The site was previously used for livestock grazing, vegetable production, ~~a pasture for donkeys and horses,~~ as well as a licensed commercial cannabis cultivation site. ~~Currently the Meier project area is a fallow field.~~ The property is bounded by rural and agricultural uses to the north, and by residential and commercial uses to the south. A horse arena is located immediately to the south of the project site. Vegetation in the wider area largely consists of pasturelands, agricultural crops, and open grassy fields. (Cannabis Ag Management 2021).

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 not classified as being located within a FHSZ. The closest FHSZ are approximately 0.9 miles to the south (Sonoma County 2025a).

The Proposed Project would be in an area in the jurisdiction of Gold Ridge Fire Protection District (Sonoma County 2025b), with the nearest fire station located approximately 2 miles southeast 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 site is currently zoned as Diverse Agriculture (DA), as are the parcels immediately to the direct east and west of the project site. The parcels to the south are zoned as Agriculture and Residential (AR) and the parcel to the north is zoned as Land Extensive Agriculture (LEA). (Cannabis Ag Management 2021). The nearest daycare is Ely's Daycare, approximately 0.8 miles to the west of the site. Apple Pi Preschool and Childcare is located approximately 1.6 miles to the southeast of the site. Mt. Vernon Gardens Residential Care Facility is approximately ~~1.1~~ 1.2 miles to the southeast of the project site. Sonoma Specialty Hospital is the closest hospital, located approximately 2 miles to the northwest. The nearest school is SunRidge Elementary School, located approximately 2 miles northwest from the site. The nearest church is Sebastopol Christian Church, approximately 2.5 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 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 Commercial 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 Applicant will comply with all pesticide laws and regulations as enforced by the California Department of Pesticide Regulation (Pest Management Plan). The operators will follow the BMPs they have established to address issues of the use and storage of agrichemicals, water quality protection measures including nutrient leaching to groundwater, spill prevention, and secondary containment.

The operator will inspect planting stock for pests and diseases prior to planting to avoid planting stock with pests and disease. They will also perform Integrated Pest Management techniques as outlined by

UC Davis IPM including but not limited to the following practices: crop rotation, clean planting stock, intercropping with beneficial attracting flowers, proper scoping, and pest identification. (Family Florals n.d. (a)).

There are no hazardous materials, as defined by Health and Safety Code section 25260, that are stored, used, or disposed of at the project site (Cannabis Ag Management 2021). For pesticides with the signal word CAUTION that have listed food uses, the Applicant will comply with all pesticide label directions as they pertain to personal protective equipment, application method, and rate, environmental hazards, longest re-entry intervals and greenhouse and indoor use directions. For all other pesticides, use will comply with all label requirements including site and crop restrictions. The operator has obtained a Pesticide Operator Identification Number through Sonoma County Department of Agriculture, Weights and Measures. Monthly pesticide use reports will be submitted to the County Agricultural Commissioner through CalAg Permits online interface. The following pesticides will be used at the site: MilStop (Potassium Bicarbonate), Grandevo (Chromobacterium subtsugae), Regalia CG (Reynoutria sachalinensis), Venerate (Heat-Killed Burkholderia spp. Strain A396 cells and spent fermentation media), Serenade (QST 713 strain of Bacillus subtilis), Covaset-DF (Sulfur), M-PEDE (Potassium salts of fatty acids), AzaMax (Azadirachtin), and DiPel DF (Bacillus thuringiensis subsp. kurstaki). (Family Florals n.d. (a)).

This Applicant has prepared a waste materials management plan, which characterizes 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 the BMPC standards (Family Florals n.d. (b)). The Proposed Project would not increase the quantity and type of solid or hazardous waste. (Cannabis Ag Management 2021). The facility operations anticipate producing human and universal waste, non-cannabis green waste, commodity cannabis green waste, and non-commodity cannabis waste. The Applicant estimates less than 0.125 cubic yards of molded flowers cannabis waste, 1.5 cubic yards of leftover stems, and a maximum of 1 cubic yard of garbage/refuse. All waste, including refuse, garbage, green waste and recyclables, would be disposed of within 7 days and in accordance with local and state codes, laws and regulations. (Family Florals n.d. (b)).

Accurate records would be kept of the amount of cannabis waste and the time and date of destruction, as well as its final destination. All waste material would be stored in non-absorbent, watertight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with fitting lids. At no time would the containers be filled beyond their capacity. All cannabis waste would be properly stored, locked, and secured without access to the public. All garbage and refuse on this site would be stored no longer than seven days. All waste~~,~~ will be disposed of in accordance with local and state codes, laws and regulations. All waste generated by the facility will be in compliance with SCAWMD BMPs and Sonoma County standards. (Family Florals n.d. (b)).

All commodity cannabis waste would be stored and locked while awaiting its final disposition. It would be recorded based on state and local tracking protocols and handling based on those procedures. Once reporting protocols are met, the waste will be disposed of per local and state protocols. The method to render non-commodity cannabis waste is by grinding and incorporating the cannabis plant waste back into the soil by tillage. (Family Florals n.d. (b)).

Disposal and destruction of cannabis waste would be done only by properly trained and approved staff. All waste product management activity would be recorded in the Waste Product logbook. Plants and cannabis materials deemed not to meet the standards of cannabis as set forth by the organization would be immediately removed from areas where cannabis is handled to promote good handling practices. The Applicant would comply with the Agricultural Commissioner's best management practices. (Family Florals n.d. (b)).

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 Applicant does not intend to store, use, or dispose of any hazardous materials, as defined by Health and Safety Code section 25260 at the project site. BMPs would be implemented to address issues nutrient leaching to groundwater, spill prevention, and secondary containment. The Applicant would also follow the BMPs in the SWRCB Cannabis Order (Cannabis Ag Management 2021).

All waste material would be stored in non-absorbent, watertight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with fitting lids. All waste generated from cannabis operations would be properly stored and secured to prevent access by the public. Proper safety equipment would be worn by staff performing waste product management activities. Waste processing activities would happen only in dedicated areas of the facility or after being transferred back to commercial cannabis cultivation facilities. Staff performing waste product management activities would wear coveralls, gloves, and face masks during the process, and would change before re-entering non-waste product areas to avoid any contamination. (Family Florals n.d. (b)).

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 is SunRidge Elementary School, located approximately 2 miles northwest from the site. 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 Charles M. Schulz-Sonoma County Airport, which is located approximately 9 miles to the north. 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 project site would be accessed via Gravenstein Hwy South, which is also called Hwy 116. There is a long driveway, and the commercial cannabis cultivation site is at the back end of the property. (Cannabis Ag Management 2021). The project site is in Sonoma County evacuation zone SON-3L1 - Unincorporated southeast Sebastopol (Sonoma County 2025c).

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.

As discussed in more detail in Section 3.17 "Transportation," 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 substantially affect 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)

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 not classified as being located within a FHSZ. The closest FHSZ are approximately 0.9 miles to the south (Sonoma County 2025a).

The Proposed Project would be in an area in the jurisdiction of Gold Ridge Fire Protection District (Sonoma County 2025b), with the nearest fire station located approximately 2.1 miles southeast 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 Proposed 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

	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?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
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;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
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	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

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 (MEP), 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 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 project area is generally characterized by gentle slopes and hills, rather than steep mountains or flat plains. The project site is relatively flat across the site. The climate in the area is characterized by distinct temperature zones. Along the coast, the climate is moderate and foggy, and the temperature variation is minimal. However, inland temperatures can range widely with seasonal variations in temperatures sometimes exceeding 100 degrees Fahrenheit. Precipitation over the North Coast Region is greater than for any other part of California, and floods can pose a hazard. (North Coast RWQCB 2025).

Surface Water Hydrology and Quality

The project area is located within the North Coast Hydrologic Region. The North Hydrologic Region covers approximately 12.46 million acres (19,470 square miles) and includes all or portions of Modoc, Siskiyou, Del Norte, Trinity, Humboldt, Mendocino, Lake, and Sonoma counties. Small areas of Shasta, Tehama, Glenn, Colusa, and Marin counties are also within the region. Extending from the Oregon border south to Tomales Bay, the region includes portions of four geomorphic provinces. Significant geographic features include basin areas such as the Klamath River Basin, the Eureka/Arcata area, Hoopa Valley, Anderson Valley, and the Santa Rosa Plain. Other significant features include Mount Shasta, forming the southern border of Shasta Valley, and the rugged north coastal shoreline (DWR 2003).

The water system of the North Coast Hydrologic Region is characterized by abundant surface water, a diverse range of beneficial uses, and a mix of surface and groundwater resources. The region is divided into two natural drainage basins: the Klamath River Basin and the North Coastal Basin. Water resources are used for a variety of purposes, including environmental protection, agriculture, urban areas, and industrial activities (California Water Board 2025).

The quality of surface water resources in the North Coast Region is generally good, supporting beneficial uses, but faces several water quality issues such as sedimentation, siltation, bacterial contamination, and the presence of contaminants like dioxin. The region also faces challenges from human activities stormwater runoff, erosion, and agricultural activities (California Water Board 2025).

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 North Coast Regional Water Quality Control Board, Region 1.

Stormwater

The cultivation area is primarily composed of pervious surfaces the only new impervious surfaces would be the portable trailers that would be used for storage and processing. The ~~Gravenstein~~ site would have 2,750 square feet of temporary impervious surfaces ~~and the Meier site would have 2,750 square feet of temporary impervious surfaces~~. Runoff and storm water controls would be applied in accordance with County and State-specified BMPs.

Groundwater Levels, Flows, and Quality

The Santa Rosa Plain Groundwater Basin is one of the largest groundwater basins in the North Coast Hydrologic Region. The Santa Rosa Plain Groundwater Basin has three sub-basins: Healdsburg, Santa Rosa Plain, and the Rincon Valley. The project site is located within the Santa Rosa Plain Groundwater Basin. This basin is approximately 22 miles long and 0.2 miles wide at the northern end; approximately 9 miles wide through the Santa Rosa area; and about 6 miles wide at the south end of the valley near the City of Cotati. Surface area encompasses approximately 80,000 acres (125 square miles) and bounded on the northwest by the Russian River plain approximately one mile south of the City of Healdsburg and the Healdsburg subbasin; mountains of the Mendocino Range flank the remaining western boundary. The southern end of the subbasin is consists of a series of low hills, which form a drainage divide that separates the Santa Rosa Valley from the Petaluma Valley basin south of Cotati. The eastern sub basin boundary is flanked by the Sonoma Mountains south of Santa Rosa and the Mayacmas Mountains north of Santa Rosa. The Rincon Valley subbasin is situated east of the City of Santa Rosa and is separated from the Santa Rosa Plain subbasin by a narrow constriction formed in rocks of the Sonoma Volcanics (DWR 2004).

Groundwater flow in the Santa Rosa Plain subbasin generally flows westward. Specifically, groundwater within the subbasin tends to move from areas closer to the Sonoma Mountains and Mayacmas Mountains towards the Laguna de Santa Rosa tributary of the Russian River. The Santa Rosa Plain Groundwater subbasin generally has good groundwater quality, but natural occurrences like iron, manganese, boron, and arsenic can pose challenges in some areas. Additionally, southern portions of the basin exhibit increasing chloride concentrations. While most wells tested for water quality meet drinking water standards, some wells may produce water issues such as high iron, or manganese. (Santa Rosa Plain GSA 2025).

As designated by DWR, the project site is located with a medium-priority groundwater basin (DWR 2025a). The Santa Rosa Plain Groundwater Sustainability Agency (GSA) prepared the Groundwater Sustainability Plan for the Santa Rosa Plain Groundwater Subbasin.

Floodplains and Tsunamis

The northern portion of the ~~Gravenstein~~ cultivation site is located within a FEMA Flood Zone AE (FEMA 2023). FEMA's Flood Zone AE designation on a flood map indicates areas in high-risk flood areas. These zones have a 1 percent chance of flooding annually (also known as the 100-year flood). Properties in Zone AE may be subject to detailed flood studies, Base Flood Elevations, and mandatory flood insurance requirements. The southern portion of the ~~Gravenstein~~ cultivation site is located within FEMA's Flood Zone X (FEMA 2023). FEMA's Flood Zone X is a indicates an area with moderate-to-low risk for flood. ~~The Meier cultivation site is also located in FEMA's Flood Zone AE (FEMA 2023).~~

According to the California Department of Conservation Tsunami Hazard Area Map, the project site is not located with a tsunami hazard area (DOC 2025). However, the site is 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)

The Proposed Project would involve outdoor cultivation of commercial cannabis ~~on two adjoining properties~~. There would be no separate nursery facilities; cannabis plants are planted directly in the soil within these cultivation beds. The ~~Gravenstein~~ facility has commenced commercial cultivation operations, and no new construction would be required. ~~The Meier facility would also have no new construction. Commercial cannabis cultivation operations were present at the site in the existing footprint during the 2021 growing season.~~ The cultivation area would be lightly tilled prior to planting; using the existing soil to row crop. Because the Proposed Project would not include ground disturbance or any structural building modifications, 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. Because no further ground disturbing construction activities would be required, the Proposed Project would have no construction related water quality impact.

The ~~two adjoining parcels fall~~ parcel falls within County-designated Valley Oak Habitat, Biotic Habitat and Riparian Corridor (Laguna de Santa Rosa) that runs through the northern and northeastern borders of the propertyproperties. As discussed in Section 3.4, "Biological Resources," there is one location ~~at the Gravenstein parcel~~ that may qualify as jurisdictional wetland, a seasonal wetland occurs in the center of the parcel. A depression was formed by an abandoned stream channel from Laguna de Santa Rosa, this depression supports hydrophytic vegetation and algae and is filled by stormwater (Pinecrest Environmental Consulting 2018). ~~No jurisdictional wetlands are in the Meier parcel (Pinecrest Environmental Consulting 2020; Pinecrest Research Corporation 2025).~~

The water features of Laguna de Santa Rosa and the seasonal wetland (depression area) are located outside the ~~Gravenstein~~ cultivation area and would not be impacted by proposed cultivation activities. Further, there is a large berm between the agricultural field and the potential wetland which would prevent any overland sediment transport from the field to the wetland. In addition, the existing low rise and abundant understory and riparian vegetation would prevent sediment transport off the field into the

Laguna de Santa Rosa. Other on-site ditches and drainage features are limited, and there are no overland connections with blue-line creeks (Pinecrest Environmental Consulting 2018).

The Proposed Project would not result in an increase in impervious surfaces and no wetlands or waters would be altered. In addition, the Proposed Project would maintain the required 50-foot buffers on all sides of any potential wetlands including the central abandoned channel to avoid direct impacts or discharge of sediments or pollutants to potential wetland.

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 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 BMPs designed to prevent impacts to water resources. Therefore, the Proposed Project is not expected to violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. The impact during project operations 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 (No Impact)

The Proposed Project would use reclaimed water from the City of Santa Rosa via an existing connection. (Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b)).) The water would go directly from the reclaimed water supply to a drip irrigation system. The project parcel has historically been used for agricultural purposes, land was used for grazing and various types of agriculture.

The site is located within the Santa Rosa Plain groundwater basin; a medium priority basin. (Santa Rosa Plain GSA 2022.) However, the Proposed Project does not use a well to irrigate crops; rather it uses reclaimed water from the City of Santa Rosa. In one of the largest recycled water systems in the world, about 98% of the City's tertiary-treated recycled water is used to irrigate approximately 6,400 acres of agricultural lands and public and private urban landscaping, and for the Geysers Recharge Project to generate electricity. (City of Santa Rosa 2025.)

Due to the small size of the Proposed Project, its reliance on recycled water for irrigation, and the previous agricultural uses, **no impact** would occur related to groundwater supplies or recharge.

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 (Less than Significant Impact)

The project site is relatively flat, with minimal elevation change across the site. The cultivation site is primarily pervious. The only new impervious surfaces would be the portable trailers that would be used for storage and processing. All construction activities are complete; no additional grading or trenching would occur.

As discussed above, the Laguna de Santa Rosa Riparian Corridor runs through the northern and northeastern borders of the propertyproperties but is not within the commercial cannabis cultivation areas. There is a potential seasonal jurisdictional wetland in the center of the Gravenstein parcel. The water features of Laguna de Santa Rosa and the seasonal wetland (depression area) are located outside the Gravenstein cultivation area and would not be impacted by proposed cultivation activities. No jurisdictional wetlands are in the Meier parcel.

The Proposed Project would maintain the required 50-foot buffers on all sides of any potential wetlands including the central abandoned channel to avoid direct impacts or discharge of sediments or pollutants to a potential wetland. Further, there is a large berm between the agricultural field and the potential wetland which would prevent any overland sediment transport from the field to the wetland. In addition, the existing low rise and abundant understory and riparian vegetation would prevent sediment transport off the field into the Laguna de Santa Rosa. Other on-site ditches and drainage features are limited, and there are no overland connections with blue-line creeks (Pinecrest Environmental Consulting 2018). In addition, the Proposed Project would implement BMPs as appropriate to control erosion and sedimentation during operation activities.

The Proposed Project would not alter existing drainage conditions on- or off-site and would not result in exposed areas susceptible to significant erosion, siltation, and runoff. SWPPP and operation BMPs for storm water control would prevent sediment-laden runoff from areas of ground disturbance. The impact would be **less than significant.**

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. The cultivation site is primarily pervious. The only new impervious surfaces would be the portable trailers that would be used for storage and processing. With respect to existing drainage patterns and the potential for the Proposed Project to generate stormwater pollutants, the site is flat with with minimal elevation change across the site. As discussed the the Laguna de Santa Rose Riparian Corridor runs through the northern and northeastern borders of the property ~~properties~~ but is not within the commercial cannabis cultivation areas. There is a potential seasonal jurisdictional wetland in the center of the ~~Gravenstein~~ parcel.

~~The Meier parcel features abundant ruderal weeds and grasses, and thus there are no pathways for erosion and sediment transport offsite into Laguna de Santa Rosa (Pinecrest Environmental Consulting 2025).~~ The large berm between the ~~Gravenstein parcel~~ agricultural field and the potential wetland provides an adequate buffer against sediment discharge or disturbance of the seasonal wetland. The low rise and abundant understory and riparian vegetation at the ~~Gravenstein~~ site would prevent sediment transport off the field into the Laguna de Santa Rosa as well (Pinecrest Environmental Consulting 2018).

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 flooding 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 (Less than Significant Impact)

As shown on FEMA's flood hazard map, the northern portion of the ~~Gravenstein~~ cultivation site is located within is located within a 100-year flood hazard area and the southern portion of the site is in an an area of minimal flood hazard (FEMA 2023). ~~The Meier cultivation site is located within a 100-year flood hazard area.~~ All project construction is complete and no additional grading or trenching would occur. 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 result in an increase in flood hazards over existing conditions. In addition, the project site is not located with a tsunami hazard area (DOC 2025). There would be **no impact** with respect to flood hazard, tsunami, or seiche zones.

However, the site is located within a dam failure inundation area as delineated in the County's Hazard Mitigation Plan (Sonoma County 2011). Dam failure is generally a result of structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam. The California Department of Water Resources, Division of Safety of Dams (DSD) regulates dams that meet specific size criteria. Generally, a dam is under DSD jurisdiction if it is 25 feet or more in height and impounds 50 acre-feet or more of water. Dams are also regulated if they are 6 feet or more in height and impound 50 acre-feet or more of water (DWR 2025b). Senate Bill 92 requires dam owners in

California to submit Emergency Action Plans (EAPs) to the California Office of Emergency Services (Cal OES) EAPs contain information regarding inundation maps and preplanned actions, to minimize property damage and loss of life. The EAPs, ensure that Cal OES, coordinates state and federal resources during emergencies, has the necessary information to respond (Cal OES 2018). Dams also go through regular inspections by DSD and maintenance by the dam owners ensure that the dams are kept in safe operating condition. As such, failure of these dams is considered to have an extremely low probability of occurring.

In addition, Sonoma County has developed a Multi-Jurisdictional Hazard Mitigation Plan. The Multi-Jurisdictional Hazard Mitigation Plan contains detailed information on the various types of safety hazards and mitigation strategies to help reduce risk and prevent future losses in Sonoma County, including dam inundation. (Sonoma County 2021.) The County is currently updating the 2021 Multi-Jurisdictional Hazard Mitigation Plan.

In the unlikely event of a dam failure that would generate floodwaters with the volume and velocity capable of flooding the intervening agricultural lands, residential neighborhoods, and commercial uses resulting in the release of associated the pollutants (e.g. fertilizer, pesticides, residential and commercial cleaning supplies, and the contents of flooded sewage lines). Pollutants from the Proposed Project as a result of inundation due to dam failure would be negligible in consideration of the amount of pollutants already released into the water from upstream sources in the inundation zone. Therefore, the impact related to risk of release of pollutants due to any possible inundation of the project site from dam failure would be **less than significant.**

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 Santa Rosa Plain Subbasin. The Water Quality Control Plan (Basin Plan) for the North Coast Regional Water Quality Control Board, Region 1 is applicable to the Santa Rosa Plain Basin. The State Water Resource Control Boards 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. Further, the project would adhere to requirements outlined in the Santa Rosa Plain Groundwater Subbasin Groundwater Sustainability 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Physically divide 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?	☐	☐	☐	☒

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 outdoor commercial cannabis cultivation operation is located ~~on two contiguous parcels (APNs 063-150-024 and 063-150-010). The property located~~ at 2515 Gravenstein Highway South and consists of a total of 40,000 square feet of commercial cannabis cultivation canopy ~~under~~. ~~The second property located at 2409 Meier Road would be developed with one 10,000 square foot commercial cannabis cultivation operation. The total outdoor commercial cannabis cultivation canopy for the Proposed Project is 50,000 square feet.~~ Access for all employees and deliveries ~~for the Gravenstein site~~ would be via an existing gated entrance to the property located at 2515 Gravenstein Highway South. ~~Access for all employees and deliveries for the Meier site would be via an existing entrance to the property located at 2409 Meier Road.~~ There would be no changes to the entrances ~~of either project site~~.

The General Plan designation and zoning for ~~both parcels comprising~~ the project site is Diverse Agriculture (DA). Under the Sonoma County Code, the purpose of the DA zone is to "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 Section 26-06-020.). This designation allows a variety of agricultural uses including commercial cannabis cultivation. The property is not within any Williamson Act contract.

The previous use of the 2515 Gravenstein Hwy South property was livestock grazing and vegetable production. ~~The previous use of the 2409 Meier Rd property was a pasture for donkeys and horses, cultivated fields for organic vegetable production, as well as a licensed commercial cannabis cultivation beginning in 2021. Currently the proposed area at the Meier property is a fallow field.~~

The parcels to the south are zoned as Agriculture and Residential (AR), allowing one dwelling per 10 acres of land. The parcel to the north of the site is zoned as Land Extensive Agriculture (LEA).

3.11.3 Discussion of Checklist Responses

a. Physically divide an established community (No Impact)

The outdoor commercial cannabis cultivation areas are located on ~~two contiguous parcels~~ a parcel zoned DA which allows for diverse agricultural uses. Land uses surrounding the site are zoned for diverse agricultural and residential, and LEA. Access to the commercial cannabis cultivation site would be via existing 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

	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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 (CDOC 2018. 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 2025). 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

	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?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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 (Lmin) 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 (Lxx) is the sound level exceeded during *x* percent of a given measurement period. For example, L_{10} is the sound level exceeded 10 percent of the measurement period.

Day-night sound level (Ldn) 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. **Table 3.13-1** 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							
Residential – Multi-Family							
Transient Lodging – Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

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. 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 Sources[5]

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 ~~on two adjoining parcels~~ in unincorporated Sonoma County at 2515 Gravenstein Highway South~~. and 2409 Meier Road, in unincorporated Sonoma County~~, approximately 1.3 miles southeast of the City of Sebastopol. The project site is in a rural area surrounded by surrounded by agriculturally zoned properties. The Proposed Project ~~would begin~~began development and operation of the commercial cannabis cultivation between March 2019 and April 2021 upon issuance of a Use Permit. The previous use of the ~~Gravenstein~~ property was livestock grazing and vegetable production. ~~The previous use of the Meier property was a pasture for donkeys and horses, and cultivated fields for organic vegetable production.~~

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 site is more than ~~3~~200 feet from all occupied residences on adjacent parcels and is also more than 1000 feet away from sensitive uses including schools, care facilities, and daycare facilities (Pinecrest Environmental Consulting 2018). The nearest sensitive receptors to the project site are: residences on adjacent parcels; Ely's Daycare, approximately 0.8 miles to the west of the site; Apple Pi Preschool and Childcare, approximately 1.6 miles to the southeast of the site; and Mt. Vernon Gardens Residential Care Facility, approximately ~~1.1~~ 1.2 miles to the southeast of the project site. Sonoma Specialty Hospital is the closest hospital, approximately 2 miles northwest; Hillcrest Middle School is approximately 1.7 miles to the southwest; and Sebastopol Christian Church is approximately 2.5 miles to the northwest.

3.13.4 Discussion of Checklist Reponses

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 include outdoor commercial cannabis cultivation ~~at both Gravenstein and Meier sites~~. Cannabis plants would be planted directly in the soil within cultivation beds. Processing and storage would take place within portable on-site trailers. There would be a compost area, and administrative hold area, and a chemical storage area on site, within temporary structures.

The Proposed Project would be operated by the Applicant and the Applicant would be the sole employee for the facility. Hours of operation would be 8:00 a.m. to 5:00 p.m., Monday through Friday. Operation of the Proposed Project would require regular deliveries of commercial cannabis cultivation related materials (e.g., soil and soil amendments, equipment, fertilizers, chemicals, and fuel). Outdoor commercial cannabis cultivation materials deliveries would be approximately two to three times per week during the cultivation period. The facility would dispatch regular deliveries of products from the facility. Shipping of cannabis products ~~out of both property locations~~ would be in the range of 8 to 10 trips per growing season ~~combined~~. Hazardous materials stored on site (e.g., used oils and fuels, pesticides, chemicals used for testing and research) would be transported approximately quarterly to an appropriate local hazardous waste facility for disposal or recycling.

The Proposed Project would generate noise during the operating hours from delivery vehicle traffic and the transport of waste materials and hazardous materials offsite. There would not be any substantial change in vehicle traffic as compared to the previous uses of the facility. Commercial cannabis cultivation activities would occur between 8:00 a.m. to 5:00 p.m. and would be consistent with previous agricultural activities on the property ~~properties~~. The project site is over ~~3~~200 feet from the nearest sensitive residential receptor. The site is zoned as Diverse Agriculture (DA), as are the parcels immediately to the east and west of the project site. The parcels to the south are zoned as Agriculture and Residential (AR and the parcel to the north of the site is zoned as Land Extensive Agriculture (LEA). 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 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.

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 Charles M. Schulz-Sonoma County Airport, which is located approximately nine miles to the north. 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

	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)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

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 (No Impact)

The Proposed Project would have no additional construction associated with development of commercial cannabis operations. Proposed Project would be operated by the Applicant and would have no additional employees. The small business size would not result in substantial unplanned population growth in the area. There would be **no impact**.

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, there would be **no impact**.

3.15 Public Services

	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?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

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 US 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 insure 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 Gold Ridge Fire District. The nearest fire station is Station 81 - Hessel approximately ~~2.6~~2.1 miles away. It is located at Hessel Rd, Sebastopol, CA 95472.

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 Hillcrest Middle School. It is approximately 1.7 miles to the southwest at 725 Bloomfield Rd, Sebastopol, California 95472.

Parks

As described in section 3.16, Recreation, the closest park to the Proposed Project is Laguna Wildlife Area - Blucher Creek Unit Wildlife Refuge at approximately 700 feet away. The Proposed Project would not be adjacent to, nor physically impact any park.

Other Public Facilities

There were 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 land development that would add portable on-site trailers that could generate the possible need for fire protection services. These portable on-site trailers would be

constructed with electrical and fire prevention systems that are assembled and installed in compliance with building and electrical codes.

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 there would not be the need to add fire stations, personnel, or fire fighting equipment. Adherence to the above listed laws, regulations, and policies, as applicable, would aid in avoiding and minimizing the Proposed Project's impact on fire protection services. 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 commercial 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.

[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.

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.

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

	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?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

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 apply 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 Laguna Wildlife Area - Blucher Creek Unit Wildlife Refuge at approximately 700 feet away. 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

	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?	☐	☐	☐	☒
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☒	☐

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 Sonoma 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 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 CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved the updated 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 CEQA Guidelines and lead agencies had an opt-in period until July 1, 2020, to implement the updated guidelines regarding VMT. Per 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 property is bounded by rural and agricultural uses to the north, and by residential and commercial uses to the south. A horse arena is located ~~immediately~~ to the south of the project site. There is a current commercial cannabis cultivation area on the ~~Gravenstein Highway~~ property, surrounded by fencing. The previous use of the property was livestock grazing and vegetable production. ~~The Meier Road property is currently a fallow field.~~

Existing Transportation Access

The entrance and exit for all employees and deliveries for the ~~Gravenstein~~ site would be via an existing entrance to the property located at 2515 Gravenstein Highway South. ~~The entrance and exit for all employees and deliveries for the Meier site would be via an existing entrance to the property located at 2409 Meier Road.~~ There would be no changes to the entrances ~~of either project site~~.

The project site is not served by mass transit, sidewalks, bicycle lanes, or similar non-automobile mode facilities.

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 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) (No Impact)

The Applicant would be the sole employee, and therefore employee vehicle trips generated by project operations would not increase over the baseline during operations. Thus, there would be no increase in vehicle miles traveled (VMT) over the baseline condition. The Proposed Project would cause **no impact**.

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 would be via an existing entrance to the property located at 2515 Gravenstein Highway South. ~~The entrance and exit for all employees and deliveries for the Meier site would be via an existing entrance to the property located at 2409 Meier Road~~. There would be no changes to the entrance~~s of either project site~~.

During operations, there would be no physical changes to roadways and only a small increase in the volume of 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**.

3.18 Tribal Cultural Resources

	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)	☐	☒	☐	☐
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.	☐	☒	☐	☐

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 TCRs within the project 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. However as described in section 3.18.3(a)(ii) below, there is a possibility that TCRs may be located in the project area. Implementation of **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)** would minimize potential impacts to TCRs, 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 TCRs.

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) (No Impact)

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 31 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 and May 1, 2025, by DCC to elicit any concerns or information regarding any known tribal cultural resources within the Proposed Project area. A summary of the Native American Outreach contacts is included at **Table 3.18-1.**

Table 3.18-1. Native American Outreach

Organization/Tribe	Name of Contact	Letter Date	Tribal Response	Follow Up
Big Valley Band of Pomo Indians of the Big Valley Rancheria	Flaman McCloud, Jr., Chairperson	4/24/25	Responded on 5/29/25; Stated that the Tribe declines consultation as the Proposed Project is outside of the Tribe's traditional territory.	5/29/25
Cahto Tribe	Mary Norris, Chairperson	4/24/25	See response for Kendra Campbell.	5/29/25
Cahto Tribe	Tasheena Sloan, Vice Chairperson	4/24/25	See response for Kendra Campbell.	5/29/25
Cahto Tribe	Kendra Campbell, Secretary-Treasurer	4/24/25	Responded on 5/29/25; Stated that the Tribe has no input on the Proposed Project.	5/29/25
Cloverdale Rancheria of Pomo Indians	Patricia Hermosillo, Chairperson	5/01/25	No response received to date.	N/A
Coyote Valley Band of Pomo Indians	Richard Campbell, Acting Chairperson	4/24/25	No response received to date.	5/29/25
Dry Creek Rancheria of Pomo Indians	Sherrie Smith-Ferri, THPO	4/24/25	No response received to date.	5/29/25
Elem Indian Colony Pomo Tribe	Agustin Garcia, Chairperson	5/01/25	No response received to date.	5/29/25
Estom Yumeka Maidu Tribe of the Enterprise Rancheria	Glenda Nelson, Chairperson	4/24/25	No response received to date.	5/29/25
Estom Yumeka Maidu Tribe of the Enterprise Rancheria	Nelson Smith, Tribal Historic Preservation Officer	4/24/25	No response received to date.	5/29/25
Federated Indians of Graton Rancheria	Greg Sarris, Chairperson	4/24/25	Tribe requested formal consultation on June 6, 2025. Results of consultation described below.	5/29/25
Guidiville Rancheria of California	Michael Derry, Historian	4/24/25	Email was not deliverable.	N/A
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
Hopland Band of Pomo Indians	Sonny Elliott, Chairperson	4/24/25	No response received to date.	5/29/25
Koi Nation of Northern California	Robert Morgan, Tribal Historic Preservation Officer	4/24/25	No response received to date.	5/29/25
Koi Nation of Northern California	Dino Beltran, Vice Chairperson	4/24/25	No response received to date.	5/29/25
Lytton Rancheria	Brenda Tomaras, Attorney	4/24/25	Responded on 5/01/25; Stated that Tribe is not requesting further consultation based on the information provided.	N/A
Lytton Rancheria	Andy Mejia, Chairperson	4/24/25	See response for Brenda Tomaras.	N/A
Manchester Band of Pomo Indians of the Manchester Rancheria	Jaime Cobarrubia, Chairperson	5/01/25	No response received to date.	N/A
Middletown Rancheria of Pomo Indians of California	Jose Simon III, Tribal Chairman	4/24/25	No response received to date.	5/29/25
Middletown Rancheria of Pomo Indians of California	Michael Rivera, Tribal Historic Preservation Officer	4/24/25	No response received to date.	5/29/25
Middletown Rancheria of Pomo Indians of California	Tribal Historic Preservation Department,	4/24/25	No response received to date.	5/29/25
Noyo River Indian Community		5/01/25	No response received to date.	N/A
Pinoleville Pomo Nation	Leona Willams, Chairperson	5/01/25	No response received to date.	N/A
Potter Valley Tribe	Salvador Rosales, Chairperson	4/24/25	No response received to date.	5/29/25
Redwood Valley or Little River Band of Pomo Indians	Debra Ramirez, Chairperson	4/24/25	No response received to date.	5/29/25

Organization/Tribe	Name of Contact	Letter Date	Tribal Response	Follow Up
Robinson Rancheria of Pomo Indians	Beniakem Cromwell, Chairperson	4/24/25	No response received to date.	5/29/25
Round Valley Reservation/ Covelo Indian Community	James Russ, President	4/24/25	No response received to date.	5/29/25
Scotts Valley Band of Pomo	Shawn Davis, Chairperson	4/24/25	No response received to date.	5/29/25
Sherwood Valley Rancheria of Pomo	Valerie Stanley, THPO	4/24/25	Responded on 4/28/25; State that Tribe has no further input and that Proposed Project is outside of traditional territory.	N/A
Yokayo Tribe	Yokayo Tribe, Chairperson	5/01/25	No response received to date.	N/A

Responses have been received from Lytton Rancheria, the Cahto Tribe, and Sherwood Valley Rancheria of Pomo Indians. These Tribes did not request further consultation. 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 activites 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 any additional ground disturbance occur 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 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 a 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

	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?	☐	☐	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

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, division 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, § 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 CoIWMP 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 2008).

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 2024):

- 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 is served by reclaimed water from the City of Santa Rosa.

Sewer

The site is not connected to the municipal sewer system nor septic system.

Stormwater

In the baseline condition, the land adjacent to the project site generated stormwater runoff due to the impervious surfaces resulting from greenhouses and other structures existing near the Proposed Project site.

Solid Waste

Under the baseline condition, the project site produced minimal solid waste, which was associated with existing pasture and agricultural activities.

Electricity and Natural Gas

The project site is not served by electricity or natural gas.

Telecommunications

The project site is not served by physical telecommunication infrastructure.

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 (No Impact)

Water

The Proposed Project would use reclaimed water from the City of Santa Rosa via an existing connection. (Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b)).) The water would go directly from the reclaimed water supply to a drip irrigation system. The Proposed Project 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. Portable toilets with a handwashing station would be provided and would be serviced weekly. Therefore, there would be **no impact**.

Stormwater

No new drainage systems are proposed for the Proposed Project. The Proposed Project would result in minimal impervious surfaces. The only new impervious surfaces would be the portable trailers that would be used for storage and processing. The ~~Gravenstein~~ site would have 2,750 square feet of temporary impervious surfaces~~ and the Meier site would have 2,750 square feet of temporary impervious surfaces~~. The Applicant is utilizing runoff and storm water controls in accordance with County and State-specified BMPs. Therefore, there would be **no impact**.

Electricity and Natural Gas

The project's commercial cannabis cultivation site would 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

Telecommunication lines (i.e., for telephone, cable, and internet) would not need to be installed. No hard-wired communications infrastructure (e.g., telephone, internet) would be required for the Proposed Project on either parcel. Operations would utilize Wi-Fi and cellular communications. The Proposed Project does not require communications infrastructure improvements. 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)

The Proposed Project would use reclaimed water from the City of Santa Rosa via an existing connection. (Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b)). The water would go directly from the reclaimed water supply to a drip irrigation system. The project parcel has historically been used for agricultural purposes. Prior to the Proposed Project, land was used for grazing and various types of agriculture.

The site is located within the Santa Rosa Plain groundwater basin; a Medium priority basin. (Santa Rosa Plain GSA 2022.) However, the Proposed Project does not use a well to irrigate crops; rather it uses reclaimed water from the City of Santa Rosa. In one of the largest recycled water systems in the world, about 98% of the City's tertiary-treated recycled water is used to irrigate approximately 6,400 acres of agricultural lands and public and private urban landscaping, and for the Geysers Recharge Project to generate electricity. (City of Santa Rosa 2025.)

Due to the small size of the Proposed Project, its reliance on recycled water for irrigation, and the previous agricultural uses, the impact 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. All waste generated from cannabis operations would be properly stored and secured to prevent access by the public. Commodity cannabis green waste would be disposed of by composting on site. Prior to composting, any storage of commodity cannabis green waste would be stored in designated storage containers. (Family Florals n.d.)

The Applicant would comply with the Agricultural Commissioner's best management practices. All garbage and refuse would be accumulated or stored in non-absorbent, water-tight, vector resistant, durable, easily cleanable, galvanized metal or heavy plastic containers with tight-fitting lids~~, to be located on each parcel~~. No refuse container would be filled beyond capacity to completely close the lid. All waste, including refuse, garbage, green waste and recyclables, would be disposed of within 7 days and in accordance with local and state codes, laws and regulations. (Family Florals n.d.)

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 City'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.) **No impact** would occur.

3.20 Wildfire

	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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

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 PEIR, 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 would 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 Pub. 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., tit. 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 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.

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 2024a).

The project area is used for agriculture and is located in a rural residential area within unincorporated Sonoma County. The project is not classified as being located within a FHSZ, the closest FHSZ is classified as “moderate” approximately 0.85 miles to the south, with the closest “very high” FHSZ located approximately 8.1 miles to the northeast (CAL FIRE 2024b).

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 project site is accessed via Gravenstein Highway South, a paved two-lane road, with a turning lane and a shoulder on both sides 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 this 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**.

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, all 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 Gold Ridge Fire District. The nearest fire station is Station 81 - Hessel approximately ~~2.6~~ 2.1 miles away. Therefore, this impact 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 and preventative measures required under the Public Resources Code and CFC as discussed above, would reduce potential impacts of remaining construction activities. 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 would be included for security lighting, 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, as discussed above, the Proposed Project is not within a state or locally designated FHSZ and although the Laguna de Santa Rosa is located to the north of the Proposed Project, the topography of the site and wider area is not steeply sloped. During operation, commercial cannabis operations would take place within structures and cleared space within the fenced area. Overall, it 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

	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 plan 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?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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 commercial 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 commercial cannabis projects, the impacts to aesthetic and visual resources of this 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 BAAQMD thresholds. 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 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 BAAQMD 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 BAAQMD thresholds would be subject to standard BAAQMD 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 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 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 virutally no impacts to biological resources. All surrounding proposed commercial cannabis development projects would undergo evaluation for potential to impact biological resources. Proposed commercial 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.

The Proposed Project would use reclaimed water from the City of Santa Rosa Cannabis Ag Management et al. n.d.(a); Cannabis Ag Management et al. n.d.(b)). via an existing connection. The water supplier would be required to comply with all local and state plans and requirements related to water supply and sustainability. 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 with recycled water by a water provider that would be required to comply with local and state requirements, 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 project's contribution to traffic, and associated noise levels, would not represent an audible contribution to cumulative traffic noise levels. Therefore, the project's contribution to regional traffic noise impacts would be **less than cumulatively considerable**.

Transportation

As discussed in Section 3.16, "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 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 project's potential impacts associated with the following issue areas would be less than cumulatively considerable:

- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Land Use Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Conclusion

Based on the project's less-than-significant impacts for all resource areas and the discretionary review of all surrounding reasonably foreseeable future commercial cannabis cultivation projects, the project's potential impacts would be **less than cumulatively considerable**.

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 would cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be **less than significant.**

PAGE LEFT INTENTIONALLY BLANK

4 REPORT PREPARATION

The following organizations and individuals assisted with preparation of the Initial Study/Mitigated Negative Declaration:

California Department of Cannabis Control

2920 Kilgore Road
Rancho Cordova, CA 95670

~~Kevin Ponce~~ David Strunk	Senior Environmental Scientist Supervisor

Montrose Environmental Solutions

1 Kaiser Plaza, Suite 340
Oakland, CA 94612

Tom Engels, Ph.D.	Principal-in-Charge
Susan Pearce	Project Director
Kim Quinn	Senior Associate
Harry Boxler	Senior Associate
Alexandria Fraser	Associate
Jessica Gonzales	Associate
Dean Martorana	Senior Associate
Bridget Parry	Associate
Diana Roberts	Senior Associate, Technical Editor

Subconsultants/Contributors

Brady & Peavey, P.C.	
Kevin E. Vickers	Special Counsel
Ecotech	
Paige Herbert	Hazards and Hazardous Materials
Ascent	
Julia Wilson	Senior Air Quality Specialist: Air Quality and Greenhouse Gas Analysis
Matt Brehmer	Air Quality Specialist: Air Quality and Greenhouse Gas Analysis

PAGE LEFT INTENTIONALLY BLANK

5 REFERENCES

CHAPTER 1, INTRODUCTION

No references cited.

CHAPTER 2, PROJECT DESCRIPTION

California Department of Pesticide Regulation (CDPR). 2021. Cannabis Legal Pesticide Use Guide. January 15, 2021. Available at: https://www.cdpr.ca.gov/wp-content/uploads/2024/08/can_use_pesticide.pdf. Accessed April 2025.

Cannabis Ag Management. 2021. Project Description Questionnaire. Submitted to the Department of Cannabis Control. Dated February 10, 2021.

Cannabis Ag Management, Family Florals, Hancock Luxury Provisions, Patchwork Farms. (Cannabis Ag Management et. al.) n.d. (a) Premises Diagram for 2515 Gravenstein Highway S. Submitted to the Department of Cannabis Control. No date.

~~Cannabis Ag Management, Family Florals, Patchwork Farms. (Cannabis Ag Management et. al.) n.d. (b) Premises Diagram for 2409 Meier Road. Submitted to the Department of Cannabis Control. No date.~~

Cannabis Ag Management, Family Florals, Hancock Luxury Provisions, Patchwork Farms (Cannabis Ag Management et. al.). 2025. Edits and comments submitted by Cannabis Ag Management, Family Florals, Hancock Luxury Provisions, Patchwork Farms to DCC regarding CEQA Project Description, March 18, 2025.

Family Florals Inc. n.d. (a) Waste Management Plan. Submitted to the Department of Cannabis Control. No Date. Cannabis Ag Management, n.d. Waste Management Plan.

Family Florals Inc. n.d. (b) Pest Management Plan. Submitted to the Department of Cannabis Control. No Date.

How to Marijuana. 2016. Growing Marijuana Outdoors. Available at: www.howtomarijuana.com/ growingmarijuanaoutdoors.html. Accessed July 12, 2016.

Ingham, E. 2014. Brewing Compost Tea. Fine Gardening, Kitchen Gardener Issue 29. Available at: www.finegardening.com/brewing-compost-tea?tid=982. Accessed December 8, 2016.

Sonoma County 2025a. Sonoma County Planning Department (“Permit Sonoma”), Zoning and Parcel Report, APN 063-150-024. Available at: https://parcelsearch.permitsonoma.org/ParcelReport?APN=063-150-024&RP=parcelSearch. Accessed January 2025.

~~Sonoma County 2025b. Sonoma County Planning Department (“Permit Sonoma”). Zoning and Parcel Report, APN 063-150-010. Available at: https://parcelsearch.permitsonoma.org/ParcelReport?APN=063-150-010&RP=parcelSearch. Accessed January 2025.~~

CHAPTER 3, ENVIRONMENTAL ANALYSIS

Section 3.1, Aesthetics

California Department of Transportation. [Caltrans] 2018. California State Scenic Highway System Map. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed February 2025.

Caltrans. 2024. California State Scenic Highway Program. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed February 2025. https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

Sonoma County. 2016. Open Space and Resource Conservation Element. Available at: https://permitsonoma.org/Microsites/Permit%20Sonoma/Documents/Archive/_Documents/General-Plan-Open-Space-and-Resource-Conservation-Element.pdf. Accessed February 2025.

Sonoma County 2025. Sonoma County Planning Department ("Permit Sonoma"), Zoning and Land Use. Available at: https://sonomacounty.maps.arcgis.com/apps/webappviewer/index.html?id=06ac7fe1b8554171b4682dc141293962. Accessed February 2025.

Section 3.2, Agriculture and Forestry Resources

California Department of Conservation, [DOC]. 2022. Important Farmland Finder. Farmland Mapping and Monitoring Program. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/ Accessed February 2025.

DOC, 2024a. Program Overview. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Program_Overview.aspx

DOC, 2024b. Division of Land Resource Protection, Farmland Conservancy Program. https://www.conservation.ca.gov/dlrp/grant-programs/cfcp Accessed February 2025.

California Department of Forestry and Fire Protection, [CAL FIRE]. 2020. California Forest Practice Rules. Available at: https://bof.fire.ca.gov/media/9478/2020-forest-practice-rules-and-act_final_ada.pdf Accessed February 2025.

Sonoma County 2025a. Sonoma County Planning Department ("Permit Sonoma"), Williamson Act Contract. Available at: https://www.arcgis.com/apps/mapviewer/index.html?layers=5a444addd36b4648acb67bca4195e795 Accessed February 2025.

~~Sonoma County 2025b. Sonoma County Planning Department ("Permit Sonoma"), Zoning and Land Use. Available at: https://sonomacounty.maps.arcgis.com/apps/webappviewer/index.html?id=06ac7fe1b8554171b4682dc141293962 Accessed February 2025.~~

Section 3.3, Air Quality

BAAQMD. *See* Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2012. *Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area*.

———. 2017. *2017 Clean Air Plan*. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf. Accessed: June 9, 2025.

———. 2023a. CEQA Thresholds and Guidelines Update. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: June 9, 2025.

California Air Resources Board. 2010. Estimate of Premature Deaths Associated With Fine Particle Pollution ($PM_{2.5}$) in California Asing a U.S. Environmental Protection Agency Methodology. Available: https://files.ceqanet.opr.ca.gov/123569-2/attachment/3lcSqR6hLwyRICV4jbcrXHCv2c76odg0hcmQ2Ovnlw7u4NnmfqqzcCo2ms5kyx250Dg_eZvrHjx_3iRU0. Accessed June 2, 2025.

———. 2023. Maps of State and Federal Attainment Areas. Available: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed June 2, 2025.

———. 2024. Table of Ambient Air Quality Standards. Available: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed May 19, 2025.

———. N.d.. Overview: Diesel Exhaust and Health. Available: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed: June 9, 2025.

CARB. *See* California Air Resources Board.

City of Denver. 2018 (August 9). *Cannabis Environmental Best Management Practices*. Draft Section for Review: Air Quality. Department of Public Health & Environment.

EPA. *See* US Environmental Protection Agency.

First Canadian Odour Conference. 2018. *Odour Nuisance, Odour Assessment, Measurement and Control*. Calgary, AB.

Kern County. 2017 (July). *Kern County Cannabis Land Use Ordinance Project Draft Environmental Impact Report*. State Clearinghouse No. 2017011058. Bakersfield, CA.

OEHHA. *See* Office of Environmental Health Hazard Assessment.

Office of Environmental Health Hazard Assessment. 2012 (February). Request for Information on Chemicals Being Considered for Listing: Isopyrazam, Beta-Myrcene, Pulegone, and 3, 3', 4, 4' – Tetrachloroazobenzene.

Rice, Somchai and Jacek A. Koziel. 2015. *Characterizing the Smell of Marijuana by Odor Impact of Volatile Compounds: An Application of Simultaneous Chemical and Sensory Analysis*. Available: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0144160. Accessed May 7, 2025.

Safebridge. Consultants, Inc. 2025. *Occupational Exposure Limit (OEL) Monograph for Beta-Myrcene*. Prepared for: Sonoma County. Prepared by: Olive Ngalame, Ph.D. and Matthew J. Linman, Ph.D.

Sonoma County 2025. Sonoma County Comprehensive Cannabis Program Update Draft EIR. Available: https://ceqanet.opr.ca.gov/2023020144/2. Accessed: June 9, 2025.

US Environmental Protection Agency. 2025a. Greenbook. Available: https://www3.epa.gov/airquality/greenbook/jbcs.html#CA. Accessed October 11, 2024.

———. 2025b. Criteria Air Pollutants. Available: https://www.epa.gov/criteria-air-pollutants. Accessed June 9, 2025.

Western Regional Climate Center. 2023. Prevailing Wind Direction. Available: https://wrcc.dri.edu/Climate/comp_table_show.php?stype=wind_dir_avg. Accessed October 11, 2024.

WRCC. *See* Western Regional Climate Center.

Yolo County. 2019 (October). *Yolo County Cannabis Land Use Ordinance Draft EIR*. State Clearinghouse No. 2018082055. Woodland, CA.

Section 3.4, Biological Resources

California Department of Fish and Wildlife. (CDFW). 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. June 6, 2023.

California Native Plant Society (CNPS). 2018. Rare and Endangered Plant Inventory. Available at: http://www.rareplants.cnps.org. Accessed 2018.

California Native Plant Society (CNPS). 2020. Rare and Endangered Plant Inventory. Available at: http://www.rareplants.cnps.org. Accessed November 2020.

Pinecrest Environmental Consulting. 2018. Biotic Assessment. 2515 Gravenstein Highway South [APN 063-150-024] Sonoma, California. January 2018 (Revised July 25 & December 2018).

~~Pinecrest Environmental Consulting. 2020. Biotic Assessment. 2409 Meier Road [APN 063-150-010] Sonoma County, California. November 2020.~~

~~Pinecrest Research Corporation. 2025. Memorandum. Biological Resources Report Update for 2409 Meier Road Sonoma County, California [APN 063-150-010]. January 2025.~~

U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Consultation (IPaC) Resource List. Provided by ECOS – the Environmental Online Conservation System. U.S. Fish and Wildlife Service. Available at: https://ipac.ecosphere.fws.gov/. Accessed November 2020.

Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety. 2018. A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act. October 2018.

Section 3.5, Cultural Resources

Alta Archaeological Consulting. 2018. Archaeological Survey Report: 2515 Gravenstein Hwy South Cannabis Cultivation Project, Sebastopol, Sonoma County, California. Prepared for Family Florals, Sebastopol, California.

~~Alta Archaeological Consulting. 2020. Archaeological Survey Report: Family Florals, 2409 Meier Road, Sebastopol, California. Prepared for Family Florals, Sebastopol, California.~~

Kyle, D. E., M. B. Hoover, H. E. Rensch, E. G. Rensch, and W. N. Abeloe. 2002. *Historic Spots in California.* Stanford University Press, Stanford, California.

McLendon, S. and Oswalt, R. 1978. Pomo: Introduction. In *California* edited by R. Heizer, pp. 414-425. Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Milliken, Randall, Laurence H. Shoup, and Beverly R. Ortiz. 2009. Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today. Prepared for National Park Service, Golden Gate National Recreation Area, San Francisco, California.

Milliken, Randall. 2009. Ethnohistory and Ethnogeography of the Coast Miwok and their Neighbors, 1783-1840. Prepared for National Park Service, Golden Gate National Recreation Area, San Francisco, California.

Milliken, Randall, Richard T. Fitzgerald, Mark. G. Hylkema, Randy Groza, Tome Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson. 2010. Punctuated Culture Change in the San Francisco Bay Area. In *California Prehistory*, edited by Terry L. Jones and Kathryn A. Klar. Lanham, MD: Altamira Press.

Parker, P. L., and T. F. King. 1990. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Publication 38. National Park Service, Washington, DC. Revised 1998.

Visit Sebastopol. 2025. History and Culture. Available at https://visitsebastopolnow.com/history . Accessed June 2025.

Section 3.6, Energy

California Public Utilities Commission, California Energy Commission. CEC 2008. 2008 update Energy Action Plan. February 2008. Available: https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf. Accessed November 2024

CEC and the California Air Resources Board (CARB), Reducing California's Petroleum Dependence. CEC and CARB 2003. Available: https://ww2.arb.ca.gov/sites/default/files/classic/fuels/carefinery/ab2076final.pdf. Accessed November 2024.

California Energy Commission. 2023 Integrated Energy Policy Report. CEC 2023. Available: https://efiling.energy.ca.gov/GetDocument.aspx?tn=254463https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf. Accessed November 2024.

California Energy Commission. 2019 California Energy Efficiency Action Plan. CEC 2019. Available: https://efiling.energy.ca.gov/GetDocument.aspx?tn=231261&DocumentContentId=62916https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf. Accessed November 2024.

California Energy Commission. 2021 California Energy Efficiency Action Plan. CEC 2021. Available: https://www.energy.ca.gov/programs-and-topics/programs/energy-efficiency-existing-buildingshttps://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_-_electricity_and_natural_gas/2008-energy-action-plan-update.pdf. Accessed November 2024.

California Air Resources Board. 2022 Scoping Plan for Achieving Carbon Neutrality. CARB 2022. Available: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf. Accessed November 2024.

Section 3.7, Geology, Soils, and Seismicity

Department of Conservation (DOC). 2002. California Geologic Survey, California Geomorphic Provinces, Note 36. Available at: https://www.conservation.ca.gov/cgs/documents/publications/cgs-notes/CGS-Note-36.pdf. Accessed April 2025.

National Earthquake Hazards Reduction Program (NEHRP). 2021. About Us: Background & History. Available at: www.nehrp.gov/about/history.htm. Accessed March 2025.

Natural Resources Conservation Service (NRCS). 2025a. Web Soil Survey. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed April 2025.

_____. 2025b. Soil Candidate Listing for Prime Farmland and Statewide Importance Sonoma County. Available at: https://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/soils/Sonoma_gSSURGO.pdf. Accessed April 2025.

Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG). 2025. MTC/ABAG Hazard View Map. Available at: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8. Accessed April 2025.

Sonoma County Water Agency. 2021. Groundwater Sustainability Plan for the Sonoma Valley Subbasin. Available at: https://sonomavalleygroundwater.org/gsp/. Accessed April 2025.

Sonoma County. 2014. Sonoma County General Plan 2020. Public Safety Element. Available at: https://permitsonoma.org/regulationsandlongrangeplans/longrangeplans/generalplan/organizationandoverview/publicsafety. Accessed April 2025.

Section 3.8, Greenhouse Gas Emissions

BAAQMD. *See* Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2023. CEQA Thresholds and Guidelines Update. Available at: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: June 2025.

California Air Resources Board. 2008. Climate Change Scoping Plan. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 25, 2025.

———. 2017. Final Short-Lived Climate Pollutant Reduction Strategy. Available at: https://ww2.arb.ca.gov/resources/documents/slcp-strategy-final. Accessed February 2025.

———. 2020. LCFS Basics. Available: https://ww2.arb.ca.gov/resources/documents/lcfs-basics. Accessed February 25, 2025.

———. 2021. 2020 Mobile Source Strategy. Available at: https://ww2.arb.ca.gov/resources/documents/2020-mobile-source-strategy. Accessed February 25, 2025.

———. 2022a. Final 2022 Scoping Plan Update and Appendices. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed February 25, 2025.

———. 2022b. Advanced Clean Cars II. Available at: https://ww2.arb.ca.gov/rulemaking/2022/advanced-clean-cars-ii. Accessed: June 9, 2025.

———. 2023. *California approves groundbreaking regulation that accelerates the deployment of heavy-duty ZEVs to protect public health.* Available at: https://ww2.arb.ca.gov/news/california-

approves-groundbreaking-regulation-accelerates-deployment-heavy-duty-zevs-protect. Accessed: June 2025.

———. 2024. *California Greenhouse Gas Emissions from 2000 to 2022: Trends of Emissions and Other Indicators.* Available at: https://ww2.arb.ca.gov/sites/default/files/2024-09/nc-2000_2022_ghg_inventory_trends.pdf. Accessed March 2025.

———. 2025a. Notice to the US Environmental Protection Agency of California Air Resources Board's Withdrawal of the Transportation Refrigeration Units Waiver Request. Available at: https://www.epa.gov/system/files/documents/2025-01/tru-carb-waiver-withdraw-resp-2025-1-14.pdf. Accessed March 2025.

———. 2025b. Advanced Clean Fleets Regulation information webpage. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets. Accessed: March 17, 2025. California Energy Commission. 2025*. 2024-2025 Investment Plan Update for Clean Transportation Program Commission Report.* Available: https://efiling.energy.ca.gov/GetDocument.aspx?tn=261539 . Accessed March 2025.

CARB. *See* California Air Resources Board.

EPA. *See* US Environmental Protection Agency.

Governor's Office of Planning and Research, California Energy Commission, and California Natural Resources Agency. 2018. *California's Fourth Climate Change Assessment*. Available at: https://www.energy.ca.gov/sites/default/files/2019-07/Statewide%20Reports-%20SUM-CCCA4-2018-013%20Statewide%20Summary%20Report.pdf. Accessed November 2019.

International Panel on Climate Change. 2014. Climate Change 2014 Synthesis Report, Summary for Policymakers. Geneva, Switzerland. Available at: https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf. Accessed January 2017.

———. 2019. *Special Report on the Ocean and Cryosphere in a Changing Climate.* Available at: https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08_SROCC_Ch04_FINAL.pdf. Accessed May 2025.

———. 2021. Human Influence on the Climate System. In *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 423–552, doi: 10.1017/9781009157896.005*.

———. 2023. Climate Change 2023 Synthesis Report. Available at: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf. Accessed April 2025.

IPCC. *See* International Panel on Climate Change.

OPR et al. *See* Governor's Office of Planning and Research, California Energy Commission, and California Natural Resources Agency.

Sonoma County. 2024. *Sonoma County Greenhouse Gas Inventory: 2022 Update*. Available at: https://rcpa.ca.gov/wp-content/uploads/2024/06/RCPA-GHG-Inventory-Update-2022-Full-Report-FINAL-2024-07-08.pdf. Accessed October 2024.

US Environmental Protection Agency. 2016. Final Rule for Phase 2 Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. 2016. Available at: https://www.govinfo.gov/content/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed June 2025.

———. 2025. Final Rule: Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-greenhouse-gas-emissions-standards-heavy-duty. Accessed: June 2025.Section 3.9, Hazards and Hazardous Materials

California Department of Pesticide Regulation. CDPR 2021. Cannabis: Pesticides That Are Legal To Use. Available at: www.cdpr.ca.gov/docs/cannabis/can_use_pesticide.pdf. Accessed November 2024.

California Office of Environmental Health Hazard Assessment. OEHHA 2023. Safe Drinking Water and Toxic Enforcement Act of 1986: Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. Available at: https://oehha.ca.gov/media/downloads/proposition-65//p65chemicalslist.pdf. Accessed November 2024.

Section 3.9, Hazards and Hazardous Materials

California Department of Pesticide Regulation. CDPR 2021. Cannabis: Pesticides That Are Legal To Use. Available at: www.cdpr.ca.gov/docs/cannabis/can_use_pesticide.pdf. Accessed November 2024.

California Department of Toxic Substances Control (DTSC). 2025. EnviroStor Public Map. Available: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=2515+Gravenstein+Hwy+S%2C+Sebastopol%2C+CA+95472. Accessed April 2025.

California Office of Environmental Health Hazard Assessment. OEHHA 2023. Safe Drinking Water and Toxic Enforcement Act of 1986: Chemicals Known to the State to Cause Cancer or Reproductive Toxicity. Available at: https://oehha.ca.gov/media/downloads/proposition-65//p65chemicalslist.pdf. Accessed November 2024.

Cannabis Ag Management. 2021. Project Description Questionnaire. Submitted to the Department of Cannabis Control. Dated February 10, 2021.

Family Florals Inc.. n.d. (a) Waste Management Plan. Submitted to the Department of Cannabis Control. No Date. Cannabis Ag Management, n.d. Waste Management Plan.

Family Florals Inc.. n.d. (b) Pest Management Plan. Submitted to the Department of Cannabis Control. No Date.

Sonoma County. 2025a. Fire Hazard Severity Zone Viewer. Available at: https://experience.arcgis.com/experience/572b187fa97e4153a8e1b8347c5e3687. Accessed April 2025.

Sonoma County 2025b. ARC GIS, Sonoma County Fire Districts. Available at: https://www.arcgis.com/home/webmap/viewer.html?url=https://socogis.sonomacounty.ca.gov/map/rest/services/BASEPublic/Fire_Districts/FeatureServer/0&source=sd. Accessed April 2025.

Sonoma County. 2025. Know your Zone. Available at: https://sonomacounty.maps.arcgis.com/apps/instant/lookup/index.html?appid=58500b81c61148279263bed52403c81a&find=2515%2520Gravenstein%2520Hwy%2520S%252C%2520Sebastopol%252C%2520CA%252095472. Accessed April 2025.

State Water Resources Control Board (SWRCB). 2025. GeoTracker Database Map. Available at: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=2515+Gravenstein+Hwy+S%2C+Sebastopol%2C+CA+95472%2C+USA. Accessed April 2025.

Section 3.10, Hydrology and Water Quality

California Department of Conservation (DOC). 2025. Tsunami Hazard Area Map. Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/ . Accessed May 2025.

California Office of Emergency Services. 2017. Cal OES. Dam Safety Planning Unit. Information Sheet Available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.caloes.ca.gov%2Fwp-content%2Fuploads%2FHazard-Mitigation%2FDocuments%2FDam-Safety-Planning-Information-Sheet.docx&wdOrigin=BROWSELINK. Accessed May 2025.

California Department of Water Resources (DWR) 2023. Sustainable Groundwater Management Act, Overview Brochure. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Files/SGMA-Brochure-Gate-Fold_FINAL-updated.pdf. Accessed November 2024.

———. DWR. 2003. California's Groundwater. Bulletin 118 Update 2003. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin_118_Update_2003.pdf. Accessed April 2025.

———. DWR. 2025a. California Department of Water Resources - SGMA Basin Prioritization Dashboard. Available at: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed May 2025.

———. DWR 2025b. Jurisdictional Sized Dams. Available at: https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams/Jurisdictional-Sized-Dams#:~:text=If%20the%20dam%20height%20is,for%20determining%20the%20annual%20fee. Accessed May 2025.

———. DWR. 2003. California's Groundwater Bulletin 118. Available at https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/1_055_01_Santa-RosaPlainSubbasin.pdf. Accessed May 2025.

Cannabis Ag Management, Family Florals, Hancock Luxury Provisions, Patchwork Farms. (Cannabis Ag Management et. al.) n.d. (a) Premises Diagram for 2515 Gravenstein Highway S. Submitted to the Department of Cannabis Control. No date.

~~Cannabis Ag Management, Family Florals, Patchwork Farms. (Cannabis Ag Management et. al.) n.d. (b) Premises Diagram for 2409 Meier Road. Submitted to the Department of Cannabis Control. No date.~~

City of Santa Rosa. 2025. Recycled Water. Available at: https://www.srcity.org/1061/Recycled-Water Accessed May 2025.

Federal Emergency Management Agency (FEMA). 2023. FEMA's National Flood Hazard Layer (NFHL) Viewer. Available at: https://www.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed May 2025.

Pinecrest Environmental Consulting. 2018. Biotic Assessment. 2515 Gravenstein Highway South [APN 063-150-024] Sonoma, California. January 2018 (Revised July 25 & December 2018).

~~Pinecrest Environmental Consulting. 2020. Biotic Assessment. 2409 Meier Road [APN 063-150-010] Sonoma County, California. November 2020.~~

~~Pinecrest Research Corporation. 2025. Memorandum. Biological Resources Report Update for 2409 Meier Road Sonoma County, California [APN 063-150-010]. January 2025.~~

North Coast Regional Water Quality Control Board (RWQCB). 2025. Draft Water Quality Control Plan for the North Coast Region. Available at: https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/#:~:text=An%20Introduction%20to%20the%20Basin,(Resolution%2068%2D16). Accessed April 2025.

Santa Rosa Plain Groundwater Sustainability Agency. 2025. GSA. Santa Rosa Plain Groundwater Basin Information. Available at: https://santarosaplaingroundwater.org/wp-content/uploads/Santa-Rosa-Plain-Groundwater-Basin-Information-ada.pdf. May 2025.

Sonoma County. 2021. Sonoma County Planning Department ("Permit Sonoma"), Multi-Jurisdictional Hazard Plan 2021 Update. Available at: https://permitsonoma.org/hazard-mitigation. Accessed May 2025.

State Water Resources Control Board. SWRCB 2019. Cannabis Cultivation Policy. Available at: https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy/final_cannabis_policy_with_attach_a.pdf. Accessed November 2024.

State Water Resources Control Board. SWRCB 2023. Cannabis Cultivation Policy. Available at: https://water.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2023/wqo2023-0102-dwq.pdf. Accessed November 2024.

U.S. Environmental Protection Agency. USEPA 2024a. Summary of the Clean Water Act. September. Available at: www.epa.gov/laws-regulations/summary-clean-water-act. Accessed November 2024.

———. 2024b. What Are Water Quality Standards? November. Available at: www.epa.gov/standards-water-body-health/what-are-water-quality-standards. Accessed November 2024.

———. 2024c. Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (California Toxics Rule). June. Available at: www.epa.gov/wqs-tech/water-quality-standards-establishment-numeric-criteria-priority-toxic-pollutants-state. Accessed November 2024.

———. 2024d. What is nonpoint source pollution? November. Available at: https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution. Accessed November 2024.

Section 3.11, Land Use and Planning

Sonoma County. 2025. Sonoma County Planning Department (“Permit Sonoma”), GIS Zoning and Land Use. Available at: https://sonomacounty.maps.arcgis.com/apps/webappviewer/index.html?id=06ac7fe1b8554171b4682dc141293962. Accessed April 2025.

Section 3.12, Mineral Resources

California Department of Conservation. DOC 2022. California Statute and Regulations for the Office of Mine Reclamation. Available at: Division of Mine Reclamation Statutes & Regulations January 2022. Accessed January 2025.

Sonoma County. 2020. Sonoma County General Plan 2020. Open Space and Resource Conservation Element. Available at: https://permitsonoma.org/Microsites/Permit%20Sonoma/Documents/Archive/_Documents/General-Plan-Open-Space-and-Resource-Conservation-Element.pdf. Accessed April 2025.

Sonoma County 2025. Sonoma County Planning Department (“Permit Sonoma”), Aggregate Resource Management Plan. Available at: https://permitsonoma.org/regulationsandlongrangeplans/longrangeplans/aggregateresourcemanagement. Accessed April 2025.

Section 3.13, Noise

California Department of Transportation. Caltrans 2013. Technical Noise Supplement. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed November 2024.

California Department of Transportation. Caltrans 2020. Transportation and Construction Vibration Guidance Manual. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed March 2025.

California Governor's Office of Planning and Research. OPR 2017. General Plan Guidelines-Appendix D Noise Element Guidelines: 2017. Available at: opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf. Accessed July 16, 2018.

Federal Transit Administration. FTA 2018. Transit Noise and Vibration Impact Assessment Manual (Report 0123). Available at: www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123. Accessed: November 2024.

Sonoma County. 2012. Sonoma County Noise Element. Available at: https://permitsonoma.org/Microsites/Permit%20Sonoma/Documents/Long%20Range%20Plans/General-Plan-Noise-Element.pdf. Accessed May 2025.

Section 3.14, Population and Housing

Sonoma County, 2023. Housing Element. Available at: https://permitsonoma.org/Microsites/Permit%20Sonoma/Documents/Long%20Range%20Plans/Housing%20Element/Sonoma-County-Certified-Housing-Element-Adopted-2023-08-22.pdf Accessed February 2025.

U.S. Census Bureau, 2024. Quickfacts Sonoma County, CA. Available at: https://www.census.gov/quickfacts/fact/table/sonomacountycalifornia/PST045224. Accessed February 2025.

Section 3.15, Public Services

California Department of Food and Agriculture. CDFA 2017. Final Program EIR: CalCannabis Cultivation Licensing. (SCH No. 2016082077). Certified November 13, 2017. Sacramento, CA. Prepared by Horizon Water and Environment, Oakland, CA.

Sonoma County 2025. Sonoma County Sheriff's Office Website. Available at: https://www.sonomasheriff.org/ . Accessed May 2025.

Section 3.16, Recreation

No references cited.

Section 3.17, Transportation

California Department of Transportation. Caltrans 2020. Vehicle Miles Traveled-Focused Transportation Impact Study Guide. Available at: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf. Accessed November 2024.

Governor's Office of Planning and Research (Office of Land Use and Climate Innovation [LCI]) OPR 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Available at: https://lci.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed November 2024.

Section 3.18, Tribal Cultural Resources

Parker, P. L., and T. F. King. 1990. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Publication 38. National Park Service, Washington, DC. Revised 1998.

Section 3.19, Utilities and Service Systems

Cannabis Ag Management, Family Florals, Hancock Luxury Provisions, Patchwork Farms. (Cannabis Ag Management et. al.) n.d. (a) Premises Diagram for 2515 Gravenstein Highway S. Submitted to the Department of Cannabis Control. No date.

~~Cannabis Ag Management, Family Florals, Patchwork Farms. (Cannabis Ag Management et. al.) n.d. (b) Premises Diagram for 2409 Meier Road. Submitted to the Department of Cannabis Control. No date.~~

City of Santa Rosa. 2025. Recycled Water. Available at: https://www.srcity.org/1061/Recycled-Water Accessed May 2025.

Family Florals Inc.. n.d. (a) Waste Management Plan. Submitted to the Department of Cannabis Control. No Date.

Santa Rosa Plain Groundwater Sustainability Agency (GSA). 2022. Santa Rosa Plain Groundwater Sustainability Plan. Available at: https://santarosaplaingroundwater.org/gsp/ Accessed May 2025.

State Water Resources Control Board. SWRCB 2019. Cannabis Cultivation Policy, Principles and Guidelines for Cannabis Cultivation. Available at: https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy/final_cannabis_policy_with_attach_a.pdf Accessed November 2024.

State Water Resources Control Board. SWRCB 2023. Cannabis Cultivation Policy. Available at: https://water.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2023/wqo2023-0102-dwq.pdf . Accessed November 2024.

Section 3.20, Wildfire

California Department of Conservation (DOC). 2010. CGS Map Sheet 58. Deep-Seated Landslide Susceptibility. Available at: https://maps-cnra-cadoc.opendata.arcgis.com/maps/cadoc::cgs-map-sheet-58-deep-seated-landslide-susceptibility/explore?location=37.705895%2C-120.997797%2C15.72. Accessed March 2025.

California Department of Forestry and Fire Protection. CAL FIRE 2024a. CAL FIRE Strategic Plan 2024. Available at: https://www.paperturn-view.com/cal-fire-communications/cal-fire-strategicplan24-web?pid=ODg8828162&v=2. Accessed November 2024.

California Department of Forestry and Fire Protection (CAL FIRE). 2024b. Fire Hazard Severity Zones. Available at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones . Accessed December 2024.

California Department of Forestry and Fire Protection (CAL FIRE). 2024c. Fire Hazard Severity Zone Viewer. Available at: https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/. Accessed March 2025.

Section 3.21, Mandatory Findings of Significance

Sonoma County 2025. Draft Environmental Impact Report, Sonoma County Comprehensive Cannabis Program Update, May 2025. Available at: https://share.sonoma-county.org/link/rjgXuJTsO-k/. Accessed June 2025.

Sonoma County Transportation Authority (SCTA). 2023. Sonoma County Development and Travel Behavior Update. November 6, 2023. Available at: https://scta.ca.gov/wp-content/uploads/2023/11/5.0a-Presentation-Development-and-Travel.pdf. Accessed May 2025.

PAGE LEFT INTENTIONALLY BLANK

Appendix A – Biological Resources Study

Pinecrest Research Corporation

PINECREST RESEARCH CORPORATION, INC.
6425 TELEGRAPH AVENUE #8
OAKLAND, CA 94609

WWW.PINECRESTENVIRONMENTAL.ORG
INFO@PINECRESTENVIRONMENTAL.ORG
510-881-3039

M E M O R A N D U M

Date: January 14, 2025

To: Dawne Gilmore, Patchwork Farms

From: Dr. Christopher T. DiVittorio, Pinecrest Research Corp., Inc. (PRC)

Subject: Biological Resources Report Update for 2409 Meier Road (Sonoma County, CA APN 063-150-010)

Dawne Gilmore,

This memorandum describes the results of a site visit on December 14, 2025, as well as desktop analysis of aerial photos and other sources of information, in order to determine whether conditions and project plans at the above-referenced property have changed since the previous Biological Assessment (BA) dated November 29, 2020 was prepared and whether the previous BA is still applicable. The previously prepared BA by Pinecrest Research Corporation (PRC) analyzed site conditions and performed a single site visit to determine the presence of biological resources and sensitive habitats that may be impacted by commercial cultivation of 10,000 square feet of *Cannabis* canopy on the above-referenced property. The previously prepared BA considered impacts from outdoor cultivation that were to be performed on leased land within a subset of the 13.27 acre property located at the above-referenced address. The previously prepared BA concluded that there would be no impacts to sensitive habitats including wetlands or native grasslands, and found no special-status species of animals or plants onsite.

This memorandum analyzes the current proposed *Cannabis* cultivation plans and footprint provided by Patchwork Farms to determine changes in the proposed cultivation plan, and whether these changes alter the conclusions of the previously prepared BA. This memorandum furthermore documents current conditions onsite to determine whether site conditions have changed significantly since the previous BA was prepared. Photos of onsite conditions as of January 14, 2025 are provided at the end of this memorandum.

From analysis of the project plans, the impacts analysis presented in the 2020 BA appear to still apply. The method of cultivation will continue to be direct planting into the ground, and the water source and cultivation location are the same. No new buildings are proposed to be constructed, and no new uses including processing will be undertaken. As described below, current conditions on the project property have not changed significantly.

Based on the site visit was performed on December 14, 2025, the current conditions on the project parcel have also not changed substantially since the 2020 BA was prepared. As part of the site visit, the entirety of the cultivation site was walked and all plants and animals and natural communities including potentially sensitive habitats documented. Plant species observed onsite are predominantly non-native grasses and forbs and no sensitive plant species were observed onsite, although the timing of the site visit was not during the flowering time of most plant species. The entirety of the leased portion of the property is previously used for agricultural purposes including hay production and grazing, and the ground is

covered approximately 90% by ruderal weeds including grasses. No pathways for erosion or sediment transport offsite into the Laguna de Santa Rosa exist.

Based on this analysis, the conclusions of the 2020 BA related to the impacts of the proposed project is still applicable. No significant changes in site conditions have occurred since the BA was prepared, and there are no changes to the use plan that would affect environmental impacts at the site.

Please contact us anytime at the number or email address below if you have any questions about this memorandum or other studies we've completed for this or other projects.

Sincerely,



Christopher T. DiVittorio, PhD
President, PRC
(510) 881-3039
chris@pinecrestenvironmental.org



Pinecrest Research Corporation
www.pinecrestenvironmental.org

Proposed Cultivation Area

SOURCES: PRC Inc.

APN 063-150-010
2409 Meier Road, Sebastopol, CA 95472



Pinecrest Research Corporation
www.pinecrestenvironmental.org

South Fenceline

SOURCES: PRC Inc.

APN 063-150-010
2409 Meier Road, Sebastopol, CA 95472



Pinecrest Research Corporation
www.pinecrestenvironmental.org

West Fenceline

SOURCES: PRC Inc.

APN 063-150-010
2409 Meier Road, Sebastopol, CA 95472



Pinecrest Research Corporation
www.pinecrestenvironmental.org

Riparian Corridor

SOURCES: PRC Inc.

APN 063-150-010
2409 Meier Road, Sebastopol, CA 95472



Pinecrest Research Corporation
www.pinecrestenvironmental.org

Laguna de Santa Rosa

SOURCES: PRC Inc.

APN 063-150-010
2409 Meier Road, Sebastopol, CA 95472

BIOLOGICAL ASSESSMENT

2409 MEIER ROAD [APN 063-150-010]
SONOMA COUNTY, CALIFORNIA

SUBMITTED TO:

New Family Farms
2409 Meier Road
Sebastopol, CA 95472

PREPARED BY:

Pinecrest Environmental Consulting
5627 Telegraph Avenue #420
Oakland, California 94609

PROJECT № SON013

Pinecrest Environmental Consulting

NOVEMBER 29, 2020

TABLE OF CONTENTS

1.0 INTRODUCTION 3

1.1 PURPOSE 3

1.2 LOCATION 3

1.2.1 Site Overview 3

1.2.2 Landforms & Water Features 3

1.2.3 Existing Structures 4

1.2.4 Federal Critical Habitat 4

1.2.5 Special-Status Species Occurrences 4

1.3 METHODS 7

1.3.1 Records Search & Literature Review 7

1.3.2 Field Surveys 7

2.0 RESULTS 8

2.1 REGIONAL ECOLOGICAL COMMUNITIES 8

2.2 NATURAL COMMUNITIES WITHIN THE STUDY AREA 8

2.2.1 Annual Grassland 8

2.2.2 Riparian Corridor 9

2.3 WILDLIFE 9

2.4 WETLANDS & WATERCOURSES 9

2.5 SOILS 10

3.0 SUMMARY & CONCLUSIONS 11

4.0 REGULATORY FRAMEWORK 12

4.1 FEDERAL ENDANGERED SPECIES ACT 12

4.2 CALIFORNIA ENDANGERED SPECIES ACT 12

4.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT 12

4.4 CLEAN WATER ACT 13

4.5 CALIFORNIA WATER QUALITY REGULATORY PROGRAMS 13

5.0 REFERENCES 14

FIGURE 1: REGIONAL LOCATION 15
FIGURE 2: 40 FOOT CONTOURS 16
FIGURE 3: WATERCOURSES & POTENTIAL WETLANDS 17
FIGURE 4: PHOTOGRAPH OF RESIDENCE 18
FIGURE 5: PHOTOGRPAH OF CULTIVATION AREA 19
FIGURE 6: PHOTOGRAPH OF CULTIVATION AREA 20
FIGURE 7: PHOTOGRAPH OF CULTIVATION AREA 21
FIGURE 8: PHOTOGRAPH OF BARN 22
FIGURE 9: PHOTOGRAPH OF LAGUNA DE SANTA ROSA 23
FIGURE 10: PHOTOGRAPH OF BERM 24
FIGURE 11: PHOTOGRAPH OF NORTHWEST FENCELINE 25

APPENDIX A: SPECIAL-STATUS SPECIES CONSIDERED 26
APPENDIX B: SPECIES ENCOUNTERED 45
APPENDIX C: CNDDB OCCURRENCES MAP 47
APPENDIX D: MAP OF FEDERAL CRITICAL HABITAT 48
APPENDIX E: REGIONAL NSO OCCURRENCES 49
APPENDIX F: CANNABIS CULTIVATION BEST MANAGEMENT PRACTICES 50
F.1 CANNABIS CULTIVATION 50
F.2 EROSION & SEDIMENT CONTROL 52
F.3 WATER USE & POLLUTION 54
F.4 ROAD MAINTENANCE & GENERAL CONSTRUCTION 56
F.5 SWALE & VEGETATION MANAGEMENT 57
F.6 IRRIGATION & CULTIVATION MANAGEMENT 59
APPENDIX G: STREAM CLASSIFICATION CRITERIA 62
APPENDIX H: SONOMA COUNTY SPECIAL HABITAT TYPES 63

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this reconnaissance-level Biological Assessment (BA) is to evaluate the existence of special-status species (SSS) and/or habitats, as well as assess the potential for SSS listed in Appendix A to occur on or near the site of commercial cultivation activities, pursuant to applicable regulations from County of Sonoma and the State of California. This BA also analyzes the potential for jurisdictional wetlands and other waters of the U.S. to exist onsite, and classifies landforms that may potentially convey sediment to waters of the U.S. including dry creeks, washes, swales, gullys, and other erosional features. Also included is a set of Best Management Practices (BMPs) that are adapted from a variety of sources including State Water Resources Control Board *Cannabis* General Order No. WQ 2019-0001-DWQ and other state and local ordinances.

1.2 LOCATION

1.2.1 Site Overview

The project site is located at 2409 Meier Road in unincorporated Sonoma County, approximately 5 miles south of the City of Santa Rosa (Figure 1). The project area comprises approximately 13 acres of flat pastureland that contains several ranch buildings, a residence, and a concrete pad that is the proposed cultivation area. The parcel is designated Assessor's Parcel Number (APN) 063-150-010, is deeded 13.27 acres, is zoned DA40, and is located in Groundwater Availability Zone 1. The parcel is under the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB) and the Bay-Delta Region (Region 3) of the California Department of Fish & Wildlife (CDFW). There is County-designated Valley Oak Habitat, Biotic Habitat, and Riparian Corridor on the parcel (Appendix H).

1.2.2 Landforms & Topography

The topography of the site is flat with a maximum elevation of 78 feet in the southeast corner of the property, and a minimum elevation of 72 feet above sea level in the northwest corner of the parcel where the Laguna de Santa Rosa exits the property (Figure 2). The parcel is located in Section 7, Township 6 N, Range 8 West, on the USGS Sebastopol 7.5 minute quadrangle. The approximate latitude and longitude of the parcel is 38.3799 (W), -122.7888 (N). The topography of the parcel is flat with a slope of 0-2% as measured by Suunto handheld clinometer.

1.2.3 Existing Structures

The majority of the property is active grazing land and has been grazed and disked annually for most of the past 60 years by both aerial photograph. The remainder is either fenced paddock, storage barns or reserved for residential uses (Figure 3). Existing structures are limited to buildings used to support ranch operations including barns (Figure 8), a residence (Figure 4), and numerous other sheds and fenced livestock areas (Figure 5) that is the proposed cultivation location. The parcel is accessed via graded driveway that branches to the east off of Gravenstein Highway (Figure 1).

1.2.4 Federal Critical Habitat

Federal Critical Habitat (FCH) is designated by the U.S. Fish & Wildlife Service (USFWS) and provides special protections for habitats considered important for long-term population persistence of endangered or threatened species. There is no FCH onsite for any animal or plant species (Appendix E). The nearest Federal Critical Habitat is located 0.3 miles east of the parcel for California tiger salamander (*Ambystoma californiense*; CTS). The next nearest Federal Critical Habitat is located 8.7 miles northeast of the parcel for California red-legged frog (*Rana draytonii*; CRLF). There is no other Federal Critical Habitat within 10 miles of the project parcel.

1.2.5 Special-Status Species Occurrences

Special-status species (SSS) are those species that receive special protections under either local, State, or Federal law and include both State and Federally Endangered and Threatened species of animals and plants, as well as candidate listing species and other species or populations of special concern for which additional information is required. The California Natural Diversity Database (CNDDB) provides information on most known SSS occurrences in the State of California. A description of the habitat requirements and likelihood of occurrence of potential SSS on the project parcel based the CNDDB database, published scientific literature, and the expertise of PEC staff, is provided in Appendix A, with a description of the nearest locality of all SSS known from within a 5 mile radius around the project parcel. Additionally, map-based representation of all of the SSS within an approximately 5 mile radius around the project site is provided in Appendices C & D.

1.2.5.1 SSS Animals

There are a total of 14 special-status animal species within 5 miles of the project parcel (Appendices A & C). There are no known special-status animal species known from the project parcel (Appendix C). The nearest known occurrence of special-status animal species is Blennosperma vernal pool andrenid bee (*Andrena blennospermatis*) located approximately 0.4 miles northeast of the project parcel near Colgan Creek Flood Control Channel. The next nearest known occurrence of special-status plant/animal species is an indistinct locality of California red-legged frog (*Rana draytonii*; CRLF) observed somewhere in the USGS Valley Ford 7.5 minute quad (Appendix C), that comes as close as 0.4 miles south of the project parcel. The nearest known occurrence of special-status animal species is California tiger salamander (*Ambystoma californiense*; CTS) located approximately 0.5 miles northeast of the project parcel near Todd Rd. The nearest known occurrence of special-status

animal species is Tricolored blackbird (*Agelaius tricolor*) located approximately 1.5 miles northwest of the project parcel near Laguna de Santa Rosa. The nearest known occurrence of special-status animal species is American badger (*Taxidea taxus*) located approximately 1.6 miles northeast of the project parcel near Ludwig Ave.

The nearest known occurrence of special-status animal species is California freshwater shrimp (*Syncaris pacifica*) located approximately 1.9 miles southwest of the project parcel in Blucher Creek. The nearest known occurrence of special-status animal species is Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) located approximately 2.1 miles southeast of the project parcel near Laguna de Santa Rosa. The nearest known occurrence of special-status animal species is Western pond turtle (*Emys marmorata*) located approximately 2.6 miles northwest of the project parcel near Laguna Youth Park. The nearest known occurrence of special-status animal species is California linderiella (*Linderiella occidentalis*) located approximately 2.7 miles northeast of the project parcel near Cook Park. The nearest known occurrence of special-status animal species is Western bumblebee (*Bombus occidentalis*) located approximately 3.1 miles east of the project parcel near Foxtail Golf Club. The nearest known occurrence of special-status animal species is White-tailed kite (*Elanus leucurus*) located approximately 4.2 miles northeast of the project parcel near Colgan Creek Flood Control Channel. The nearest known occurrence of special-status animal species is Cooper's hawk (*Accipiter cooperii*) located approximately 4.4 miles northeast of the project parcel near Cook Park. The nearest known occurrence of special-status animal species is North American porcupine (*Erethizon dorsatum*) located approximately 4.5 miles southwest of the project parcel near English Hill. The nearest known occurrence of special-status animal species is Obscure bumblebee (*Bombus caliginosus*) located approximately 4.8 miles northeast of the project parcel near Santa Rosa Creek. There are no other known occurrences of special-status animal species within 5 miles of the project parcel.

1.2.5.2 SSS Plants

There are a total of 26 special-status plant species within 5 miles of the project parcel (Appendices A & C). There is one special-status plant species whose CNDDB polygon overlaps with project parcel, Sebastopol meadowfoam (*Limnanthes vinculans*). The centroid of this polygon is located offsite, 0.1 miles east of the parcel near Laguna de Santa Rosa. The next nearest occurrence of special-status plant species is Pitkin Marsh lily (*Lilium pardalinum* ssp. *pitkinense*) located somewhere in the USGS Two Rock 7.5-minute quad, that overlaps with the project parcel. The next nearest known occurrence of special-status plant species is Marsh microseris (*Microseris paludosa*) located approximately 0.5 miles east of the project parcel along Todd Rd. The next nearest known occurrences of special-status plant species are Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*) and Saline clover (*Trifolium hydrophilum*) located approximately 0.5 miles northeast of the project parcel near Laguna de Santa Rosa.

The next nearest known occurrences of special-status plant species are Burke's goldfields (*Lasthenia burkei*) and Sonoma sunshine (*Blennosperma bakeri*) located approximately 0.6 miles northeast of the project parcel near Laguna de Santa Rosa. The next nearest known occurrences of special-status plant species are California beaked-rush (*Rhynchospora californica*) and Cunningham Marsh cinquefoil (*Potentilla uliginosa*) located approximately 1.0 miles southwest of the project parcel near Blucher Creek. The next nearest known occurrence of special-status plant species is Fragrant fritillary (*Fritillaria liliacea*) located approximately 1.1 miles south of the project parcel near Blucher Creek.

The next nearest known occurrence of special-status plant species is Sonoma Alopecurus (*Alopecurus aequalis* var. *sonomensis*) located approximately 1.1 miles southeast of the project parcel along Llano Rd. The next nearest known occurrence of special-status plant species is Dwarf downingia (*Downingia pusilla*) located approximately 1.3 miles northeast of the project parcel near Laguna de Santa Rosa. The next nearest known occurrences of special-status plant species are Baker's goldfields (*Lasthenia californica* ssp. *bakeri*), Oval-leaved viburnum (*Viburnum ellipticum*), and Sonoma spineflower (*Chorizanthe valida*) located approximately 1.6 miles northwest of the project parcel near Laguna de Santa Rosa.

The next nearest known occurrence of special-status plant species is Thin-lobed horkelia (*Horkelia tenuiloba*) located approximately 1.7 miles northwest of the project parcel near Laguna de Santa Rosa. The next nearest known occurrence of special-status plant species is Legenere (*Legenere limosa*) located approximately 1.9 miles northeast of the project parcel near Ludwig Ave. The next nearest known occurrence of special-status plant species is Two fork clover (*Trifolium amoenum*) located approximately 1.9 miles north of the project parcel near Ludwig Ave. The next nearest known occurrence of special-status plant species is Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*) located approximately 2.1 miles southwest of the project parcel near Blucher Creek. The next nearest known occurrence of special-status plant species is Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*) located approximately 2.5 miles northwest of the project parcel along Laguna de Santa Rosa. The next nearest known occurrence of special-status plant species is Vine Hill ceanothus (*Ceanothus foliosus* var. *vineatus*) located approximately 3.4 miles northwest of the project parcel near Ragle Ranch Park. The next nearest known occurrences of special-status plant species are Brownish beaked-rush (*Rhynchospora capitellata*) and Swamp harebell (*Campanula californica*) located approximately 4.3 miles northwest of the project parcel near Atascadero Creek. The next nearest known occurrence of special-status plant species is Round-headed beaked-rush (*Rhynchospora globularis*) located approximately 4.3 miles northwest of the project parcel near Gravenstein Hwy N. The next nearest known occurrence of special-status plant species is Golden larkspur (*Delphinium luteum*) located approximately 4.5 miles northwest of the project parcel near Atascadero Creek. The next nearest known occurrence of special-status plant species is Santa Cruz clover (*Trifolium buckwestiorum*) located approximately 4.8 miles northeast of the project parcel near Santa Rosa Creek. There are no other known occurrences of special-status plant species within 5 miles of the project parcel.

1.3 METHODS

1.3.1 Records Search & Literature Review

Based on a review of the literature and all relevant databases, we compiled a list of special-status plant and animal species that are known to occur within 5 miles of the project site, or that occupy habitats that are known to be present on or near the project site (Appendix A). Sources of information referenced include the California Natural Diversity Database (CNDDB 2020), U.S. Fish and Wildlife Service Environmental Conservation Online System (USFWS 2020), the California Native Plants Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020), and the knowledge of PEC staff familiar with the species and habitats of Sonoma County. Additional information on sensitive habitats including wetlands was obtained from the USFWS National Wetlands Inventory (NWI 2020), and County of Sonoma Geographic Information System Portal. Plant species included here are State or Federally Endangered or Threatened, and/or considered Rare by CDFW, and/or are recognized as special-status species by the CNPS or CDFW. Animal species included here are designated as State or Federally Endangered or Threatened, and/or California Species of Special Concern, and/or Fully Protected species by the CDFW. In addition, nests of most native bird species, regardless of their regulatory status, are protected from take or harassment under the Migratory Bird Treaty Act (MBTA) and California Fish and Wildlife Code.

1.3.2 Field Surveys

A wildlife and botanical survey was conducted at the site on October 13, 2020. The weather was clear and warm for this time of year, with temperature of 85 degF, relative humidity of 40% and wind speed of 2-4 mph, as measured by Kestrel 3000 handheld weather station. Approximately 0.5" of rain fell the preceding month (NWS 2020), and vegetation was starting to green up and some annual species had germinated. Most flowering stalks from prior year were still visible. Due to the temperature and seasonal conditions, animal activity was moderate at the time of the survey. Starting with the portion of the property nearest to the proposed cultivation area, the entire project site was surveyed on foot by PEC Senior Biologist Dr. Christopher T. DiVittorio, recording the location and identity of all plant and animal species encountered. Plant voucher specimens were taken of any species that were not identifiable in the field, and that were not likely to be special-status. The vast majority of species were identifiable at the time of the survey, although some had to be identified based on vegetative parts. Photographs and voucher specimens were taken of any plants that were identified solely based on vegetative characters. The field survey was conducted by dividing the outdoor portions of the parcel into zones and cataloging all of the species found in each zone. Each zone was surveyed by walking in parallel lines until the whole zone was covered. Notes were also taken in each zone documenting the general site characteristics and current land uses, as well as any surface erosional features that may require remediation. Botanical specimens were taken back to the laboratory for identification if identification was not possible in the field. If species were not flowering at the time of the survey and morphological characteristics indicated that the species may be special-status, notes were made for a follow-up visit. Birds and nests were identified by call and with binoculars. Vocalizations, scat, tracks, feathers, burrows, nests, and molts were used for identification of animals present onsite. Any onsite aquatic habitats were observed for a minimum of ten minutes without movement in order to observe animals that may hide when approached.

2.0 RESULTS

2.1 REGIONAL ECOLOGICAL COMMUNITIES

Using field surveys, a review of published literature, and the knowledge of PEC staff, all of the natural communities present on and around the project site were assessed. Regionally, the dominant vegetation type is grazed annual grassland, with vernal pools to the west and north, and upland CA-101 corridor to the east (Figure 3).

2.2 NATURAL COMMUNITIES WITHIN THE STUDY AREA

The parcels consist entirely of upland grazed annual grassland (Figure 3). Although there are vernal pools in the vicinity, the soils onsite are well-drained and do not exhibit the topography or vegetation characteristic of vernal pools, likely due to the history of grazing and cultivation for hay that has occurred in these parcels for the last 100 years (Figure 3). The specific community descriptions below are organized based on the zones that were surveyed, and the floristic results presented in Appendix B. We use as guidance the *Manual of California Vegetation* (Sawyer et al. 2009) for community classification. Overall, the Study Area consists of approximately 80% annual grassland, 15 riparian corridor, and 5% developed space (Figure 3).

2.2.1 Annual Grassland

Approximately half of the parcel is covered by grazed annual grassland. Species encountered in this area included dogstail grass (*Cynosurus echinatus*), slender oats (*Avena barbata*), soft chess (*Bromus hordeaceous*), Italian ryegrass (*Festuca perennis*), rattlesnake grass (*Briza maxima*), meadow barley (*Hordeum murinum*), velvet grass (*Holcus lanatus*), medusahead (*Elymus caput-medusae*), Italian rye (*Festuca perennis*), Harding grass (*Phalaris aquatica*), gumweed madia (*Madia gracilis*), bristly ox-tongue (*Helminthotheca echioides*), yellow star thistle (*Centaurea solstitialis*), Italian thistle (*Circium pycnocephalus*), bull thistle (*Cirsium vulgare*), spiny sowthistle (*Sonchus asper*), spiny cocklebur (*Xanthium spinosum*), common geranium (*Geranium molle*), field bindweed (*Convolvulus arvensis*), broad leaf filaree (*Erodium botrys*), crane's bill geranium (*Geranium molle*), purple navarretia (*Navarretia pubescens*), birds foot trefoil (*Acmispon americanus*), variable-leaved pepperweed (*Lepidium heterophyllum*), field mustard (*Brassica rapa*), cultivated radish (*Raphanus sativus*), rose clover (*Trifolium hirtum*), hedge parsley (*Torilis nodosa*), spring vetch (*Vicia sativa*), common madia (*Madia gracilis*), and smooth cat's ear (*Hypochaeris glabra*). Woody and horticultural species observed on the edges of the property and around developed areas include coyote brush (*Baccharis pilularis*), *Eucalyptus* spp., and Monterey pine (*Pinus radiata*).

There are also some isolated Valley oak (*Quercus lobata*) individuals to 20" diameter that are shown in Figure 3 along the western fenceline. Due to the location of the parcel in County-designated Valley Oak Habitat (Appendix H), valley oak trees shown in Figure 3 should not be removed.

2.2.2 Riparian Corridor

Fremont cottonwood (*Populus fremontii*), Oregon ash (*Fraxinus latifolia*), Arroyo willow (*Salix lasiolepis*), California rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), sheep sorrel (*Rumex acetocella*), hyssop loosestrife (*Lythrum hyssopifolia*), nit grass (*Gastridium phleoides*), pennyroyal (*Mentha pulegium*), common cattail (*Typha latifolia*), pennyroyal (*Mentha pulegium*), creek clematis (*Clematis ligusticifolia*), bog rush (*Juncus patens*), corn spurry (*Spergula arvensis*), Harding grass (*Phalaris aquatica*), Fuller's teasel (*Dipsacus fullonum*), common cowparsnip (*Heracleum maximum*), curly dock (*Rumex crispus*), common plantain (*Plantago major*), grapevine (*Vitis vinifera*), foxglove (*Digitalis purpurea*), brass buttons (*Cotula coronopifolia*), Western morning glory (*Calystegia occidentalis*), and Queen Anne's lace (*Daucus carota*).

2.3 WILDLIFE

Wildlife activity was moderate due to the time of year and the weather. Nonetheless, numerous wildlife species were observed both directly and indirectly. Bird species observed onsite include crow (*Corvus brachyrhynchos*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), Western scrub jay (*Aphelocoma californica*), Brewer's blackbird (*Euphagus cyanocephalus*), and red-tailed hawk (*Buteo jamaicensis*). Other animals observed directly and indirectly include Western grey squirrel (*Sciurus griseus*), excavation mounds of pocket gopher (*Thomomys bottae*), runways of California vole (*Microtus californicus*), scat of black-tailed jackrabbit (*Lepus californicus*), and unidentified bumble bee (*Bombus* spp.).

2.4 WETLANDS & WATERCOURSES

Jurisdictional watercourses onsite were classified according to the three-tier method used by the California Department of Forestry & Fire Protection (CALFIRE 2017) and included as a reference in Appendix E. There is one jurisdictional watercourse onsite, a Class I arm of the Laguna de Santa Rosa (Figure 3) that flows northwest along the northern property line (Figure 9). There are no other jurisdictional watercourses onsite.

Potential wetlands onsite were assessed based on the likelihood to satisfy the three-tier wetland delineation criteria used by the Army Corps of Engineers *Wetland Delineation Manual* (ACOE 1987). Based on these criteria, there are no locations onsite that appear to qualify as jurisdictional wetlands. There is no evidence of wetland vegetation or ponding adjacent to the pond on the parcel to the west (e.g. Figure 6 & 7). There is a barely perceptible swale that runs northeast to southwest across the field, however this does not contain hydrophytic vegetation or hydric soil indicators,

although a protocol-level wetland delineation was not performed. There is a large berm on the northeast side of the field (Figure 10) that would block any overflow from the Laguna de Santa Rosa during normal flow stages.

2.5 SOILS

The parent materials on the project parcel are typical of southwestern Sonoma County, with easily erodible sediments of the Franciscan Formation dissected by highly seasonal rivers (USGS 1968). Nearly the entirety of the project parcel is mapped as Wright loam, shallow, wet, 0% to 2% slopes, (#WoA). This soil type also has lesser proportions of Yolo (5%), Huichica (5%), and Clear Lake (3%) soil types, and is designated "not prime farmland." The far southwest corner of the project parcel is mapped as Wright loam, wet, 0% to 2% slopes, (#WhA). This soil type also has lesser proportions of Unnamed (5%), Huichica (3%), and Yolo (3%) soil types, and is designated "farmland of statewide importance." Parent materials of all of the above soil types are alluvium. There are no serpentine or other ultramafic rock types onsite and no serpentine-derived soils. There are no alkalai or hardpan vernal pool soil types onsite.

3.0 SUMMARY & CONCLUSIONS

No special-status plant species were observed during the surveys performed at the site in October 2020. There are known occurrences of Sebastopol meadowfoam (*Limnanthes vinculans*) from the parcel adjacent to this property to the northwest, however this area has a seasonal pool that ends at the parcel line and there is no suitable habitat on the east side of the parcel line. Additionally, several studies performed by PEC on the adjacent parcel including site visits with CDFW staff at several times in the spring of 2019 did not yield any positive occurrences of Sebastopol meadowfoam. The occurrence on the adjacent parcel was thus determined to be nonexistent or dormant. There are no vernal pools on the project parcel and no areas that indicate that water ponds during the winter. The gentle swale does not have any hydrophytic vegetation and no soil indicators were found indicating hydric soil conditions. The property has been disked and grazed as an active ranch for the past 60 years and thus does not exhibit the mound and depression topography required for vernal pools to form and, hence, for Sebastopol meadowfoam or any of the other vernal pool endemic species listed in Appendix A to exist onsite. We did not observed any seedlings (non-flowering individuals) of Sebastopol meadowfoam despite being familiar with the juvenile stages of these plants, and despite some rains occurring in the month prior. There are, however, individuals of Valley oak (*Quercus lobata*) as indicated in Figure 3 that should not be removed since they are inside Valley Oak Habitat (Appendix H) and thus protected by County ordinance.

No special-status animal species were observed during the surveys performed at the site in October 2020 and no impacts are predicted to any of the species in Appendix A due to small scale outdoor cultivation on the proposed parcel. Despite the presence of breeding populations of California tiger salamander (*Ambystoma californiense*; CTS) adjacent to the parcel to the north/east of Laguna de Santa Rosa in the vernal pool mitigation banks, there are no suitable breeding habitats on the project parcel and no known occurrences on the south/west side of the Laguna de Santa Rosa, in part due to the 60 years of active disking and grazing, and the resulting lack of any topographic features that would cause ponding. Despite the presence of some upland habitat that may be used by CTS for estivation, no impacts are predicted to CTS since the cultivation area is proposed to be located on previously disked and currently grazed grassland, and there is other higher value habitat in Laguna de Santa Rosa corridor animals would likely utilize first. Native species should be used at all times for revegetation and restoration use in order to promote habitat for CTS and other wildlife species.

4.0 REGULATORY FRAMEWORK

4.1 FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally-listed threatened and endangered species under the federal Endangered Species Act (FESA). The USFWS also maintains a list of 'proposed' species and candidate species that are not legally protected under the FESA, but are often included in their review of a project as they may become listed in the near future. The FESA protects listed animal species from harm or "take" which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that results in death or injury to a listed species. An activity can be defined as a "take" even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under FESA if they occur on federal lands. Pursuant to the requirements of the FESA, a federal agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed threatened or endangered species (plants and animals) may be present in the project area and determine whether the proposed project may affect such species. Any activities that could result in the take of a federally-listed species will require formal consultation with the USFWS.

4.2 CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) protects any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with the CESA, the California Department of Fish and Wildlife (CDFW) has jurisdiction over state-listed species (California Fish and Wildlife Code 2070). Take of state-listed species requires a permit from CDFW, which is granted only under strictly limited circumstances. Additionally, the CDFW maintains lists of "species of special concern" that are defined as animal species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats. Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed or proposed endangered or threatened species may be present in the project area and determine whether the proposed project may result in a significant impact on such species.

4.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Wildlife Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts, if it finds that the species meets the criteria of a threatened or endangered species.

4.4 CLEAN WATER ACT

Under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may also be subject to Corps jurisdiction. In general, a Corps permit must be obtained before placing fill in wetlands or other waters of the U.S. The type of permit depends on the acreage involved and the purpose of the proposed fill. Minor amounts of fill are sometimes covered by Nationwide Permits, which were established to streamline the permit process for projects with "minimal" impacts on wetlands or other waters of the U.S. An Individual Permit is required for projects that result in more than a minimal impact on jurisdictional areas. The Individual Permit process requires evidence that fill of jurisdictional areas has been minimized to the extent "practicable" and provides an opportunity for public review of the project.

4.5 CALIFORNIA WATER QUALITY REGULATORY PROGRAMS

Pursuant to Section 401 of the federal Clean Water Act and the state's Porter-Cologne Act, projects that are regulated by the Corps must obtain water quality certification from the Regional Water Quality Control Board (RWQCB). This certification ensures that the project will uphold state water quality standards. The RWQCB sometimes asserts jurisdiction over wetlands that the Corps does not (e.g. certain isolated wetlands) and may impose mitigation requirements even if the Corps does not. The CDFW also exerts jurisdiction over the bed and banks of watercourses and water bodies according to provisions of Section 1601 to 1603 of the Fish and Wildlife Code. The Fish and Wildlife Code requires a Stream Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or water body.

5.0 REFERENCES

Baldwin, B.G., et al. 2012. *The Jepson Manual: Vascular Plants of California.* University of California Press, Berkeley, CA.

Cafferata, P. *et al*. 2017. *Designing Watercourse Crossings for Passage of 100-Year Flood Flows, Wood, and Sediment*. California Natural Resources Agency, Sacramento, CA.

California Department of Fish & Wildlife (CDFW). 2019. *California Natural Diversity Database*. CDFW Wildlife and Habitat Data Analysis Branch, Sacramento, CA. https://www.wildlife.ca.gov/data.

California Department of Forestry & Fire Protection (CALFIRE). 2017. *California Forest Practice Rules*. California Natural Resources Agency, Sacramento, CA.

California Native Plant Society (CNPS). 2018. *Inventory of Rare and Endangered Plants*. CNPS, Sacramento, CA.

Central Valley Regional Water Quality Control Board (CVRWQCB). 2015. *Waste Discharge Requirements General Order for Discharges of Waste Associated with Medicinal Cannabis Cultivation Activities*. Order No. R5-2015-0113.

County of Sonoma Assessor. 2019. *Geographical Information Systems (GIS) Databases*. County of Sonoma, Santa Rosa, CA.

Natural Resources Conservation Service (NRCS). 2019. *SoilWeb*. University of California, Agricultural and Natural Resources, Davis, CA. http://casoilresource.lawr.ucdavis.edu/gmap//.

North Coast Regional Water Quality Control Board (NCRWQCB). 2015. *Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects*. Order No. R1-2015-0023.

Sawyer, J.O., T. Keeler-Wolf, J. Evens. 2009. *Manual of California Vegetation*. California Native Plant Society Press, Sacramento, CA.

State Water Resources Control Board (SWRCB). 2017. *Cannabis Cultivation General Order WQ 2017-0023-DWQ.* SWRCB, Sacramento, CA.

U.S. Department of Agriculture (USDA). 1968. *Soil Survey of Sonoma County, California.* Soil Conservation Service, Washington D.C.

U.S. Army Corps of Engineers (ACOE). 1987. *Wetlands Delineation Manual.* Watershed Research Program Technical Report Y-87-1, Washington, D.C.

U.S. Fish and Wildlife Service (USFWS). 2019. *Environmental Conservation Online System*. USFWS, Washington, DC. https://ecos.fws.gov/ecp/.

U.S. Fish and Wildlife Service (USFWS). 2019. *National Wetlands Inventory*. USFWS, Washington, DC. https://www.fws.gov/wetlands/.

U.S. National Weather Service (NWS). 2019. *National Climatic Data Center.* USNWS, Washington, DC. https://w2.weather.gov/climate/

Weaver, W.E. *et al.* 2015. *Culvert Sizing Procedures for the 100-Year Peak Flow.* Mendocino County Resource Conservation District, Ukiah, CA.

FIGURE 1: REGIONAL LOCATION

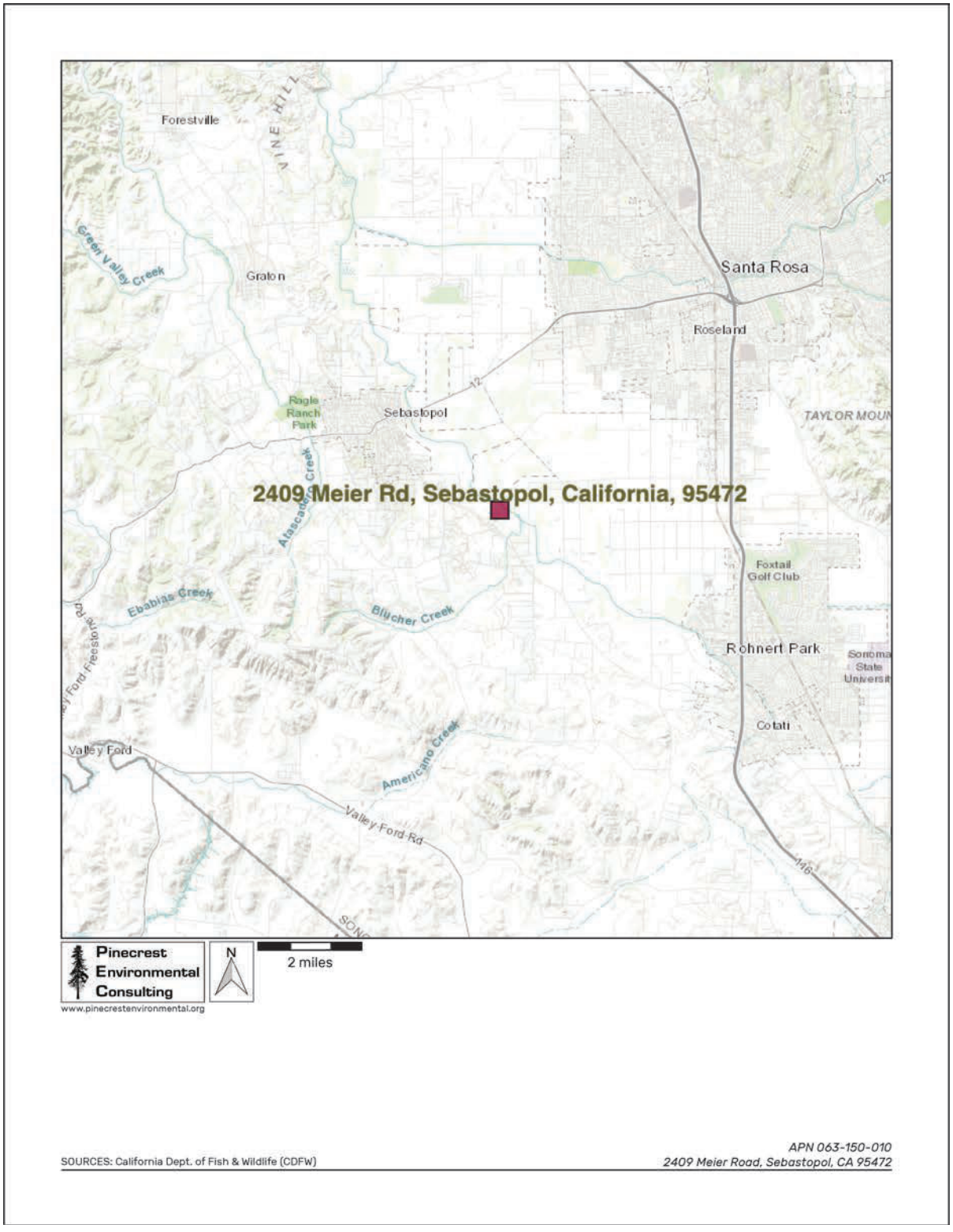


FIGURE 2: 40 FOOT CONTOURS

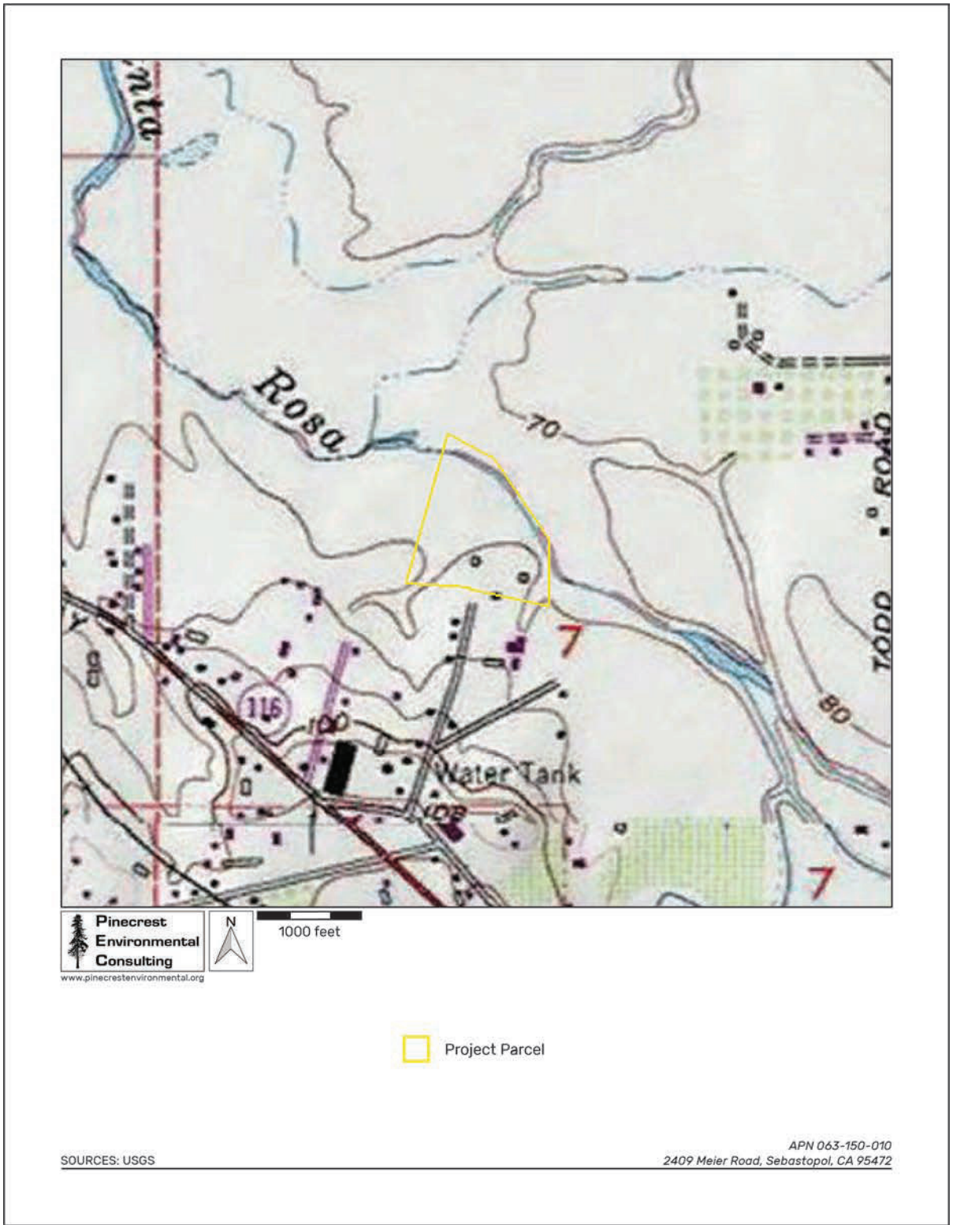


FIGURE 3: WATERCOURSES & POTENTIAL WETLANDS



FIGURE 4: PHOTOGRAPH OF RESIDENCE



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | 105 Morris St. Suite 164
Oakland, CA 94609 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 5: PHOTOGRPAH OF CULTIVATION AREA



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | Oakland, CA 94609
105 Morris St. Suite 164 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 6: PHOTOGRAPH OF CULTIVATION AREA



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | Oakland, CA 94609
105 Morris St. Suite 164 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 7: PHOTOGRAPH OF CULTIVATION AREA



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | 105 Morris St. Suite 184
Oakland, CA 94609 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 8: PHOTOGRAPH OF BARN



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | Oakland, CA 94609
105 Morris St. Suite 164 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 9: PHOTOGRAPH OF LAGUNA DE SANTA ROSA



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
3627 Telegraph Ave. Ste. 420 | Oakland, CA 94609
105 Morris St. Suite 184 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 10: PHOTOGRAPH OF BERM



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | Oakland, CA 94609
105 Morris St. Suite 164 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

FIGURE 11: PHOTOGRAPH OF NORTHWEST FENCELINE



Pinecrest Environmental Consulting

(510) 881-3039 info@pinecrestenvironmental.org
5627 Telegraph Ave. Ste. 420 | Oakland, CA 94609
105 Morris St. Suite 164 | Sebastopol, CA 95472

SOURCES: PEC Inc.

APN 063-150-010
2409 Meier Road Sebastopol Ca 95472

APPENDIX A: SPECIAL-STATUS SPECIES CONSIDERED

The following is a list of special-status plant and animal species generated based on knowledge of the species and habitats of Sonoma County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDB). CNDDB occurrences within 5 miles of the project site are shown in bold.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
Alkali milk-vetch (*Astragalus tener* var. *tener*)	—/—/1B.2	Valley grasslands, alkali sinks	None: No suitable alkali habitat exists onsite.
Anthony peak lupine (*Lupinus antoninus*)	—/—/1B.2	Mixed evergreen forest	None: No suitable forest habitat exists onsite.
Baker's goldfields (*Lasthenia californica* ssp. *bakeri*)	**—/—/1B.2**	**Coastal grasslands**	**Medium: Some grassland habitat exists. Nearest known occurrence is 1.6 miles NW of the parcel near Laguna de Santa Rosa.**
Baker's larkspur (*Delphinium bakeri*)	FE/SE/1B.1	Coastal scrub	None: No coastal scrub habitat exists onsite.
Baker's manzanita (*Arctostaphylos bakeri* ssp. *bakeri*)	—/—/1B.1	Serpentine chaparral, mixed evergreen forest	None: No serpentine habitat exists onsite.
Baker's meadowfoam (*Limnanthes bakeri*)	—/ST/1B.1	Vernal pools, freshwater wetland	Very Low: No suitable wetland habitat exists in the project area.
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	**—/—/1B.1**	**Vernal pools, riparian woodland**	**Low: No vernal pool habitat exists in the project area. Nearest known occurrence is 0.5 miles NE of the parcel near Laguna de Santa Rosa.**
Beaked tracyina (*Tracyina rostrata*)	—/—/1B.2	Valley grassland, foothill woodland	Very Low: Some grassland habitat exists onsite.
Bent flowered fiddleneck (*Amsinckia lunaris*)	—/—/1B.2	Valley grassland, foothill woodland	Low: Some grassland habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Big scale balsamroot (*Balsamorhiza macrolepis*)	—/—/1B.2	Valley grassland	Low: Some grassland habitat exists onsite.
Blasdale's bent grass (*Agrostis blasdalei*)	—/—/1B.2	Coastal prairie	Low: Some grassland habitat exists onsite.
Blue coast gilia (*Gilia capitata* ssp. *chamissonis*)	—/—/1B.1	Coastal sand dunes	None: No sand dune habitat exists onsite.
Bluff wallflower (*Erysimum concinnum*)	—/—/1B.2	Coastal scrub	None: No suitable coastal scrub habitat exists onsite.
Bogg's Lake hedge-hyssop (*Gratiola heterosepala*)	—/—/1B.2	Freshwater marsh, riparian	Very Low: No suitable wetland habitat exists near the project area.
Bolander's horkelia (*Horkelia bolanderi*)	—/—/1B.2	Yellow pine forest, grassland	Low: Some grassland habitat exists onsite.
Brandegee's eriastrum (*Eriastrum brandegeeae*)	—/—/1B.1	Chaparral	None: No suitable chaparral habitat exists onsite.
Bristly sedge (*Carex comosa*)	—/—/2B.1	Freshwater marsh, riparian	Very Low: No suitable wetland habitat exists near the project area.
Brownish beaked-rush (*Rhynchospora capitellata*)	**—/—/2B.2**	**Freshwater marsh, riparian**	**Very Low: No suitable wetland habitat exists near the project area. Nearest known occurrence is 4.3 miles NW of the parcel near Atascadero Creek.**
Burke's goldfields (*Lasthenia burkei*)	**FE/SE/1B.1**	**Vernal pools**	**Low: No vernal pool habitat exists near the project area. Nearest known occurrence is 0.6 miles NE of the parcel near Laguna de Santa Rosa.**
California alkali grass (*Puccinellia simplex*)	—/—/1B.2	Grassland, riparian	None: No alkali wetland habitat exists onsite.
California beaked-rush (*Rhynchospora californica*)	**—/—/1B.1**	**Freshwater wetlands**	**Low: No suitable wetland habitat exists near the project area. Nearest known occurrence is 1.0 miles SW of the parcel near Blucher Creek.**
California satintail (*Imperata brevifolia*)	—/—/2B.1	Chaparral, coastal scrub	None: No suitable chaparral habitat exists onsite.
California sedge (*Carex californica*)	—/—/2B.3	Wetlands	Very Low: No suitable wetland habitat exists near the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Calistoga ceanothus (*Ceanothus divergens*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Calistoga popcornflower (*Plagiobothrys strictus*)	FE/ST/1B.1	Wetland, riparian	None: No suitable wetland habitat exists near the project area.
Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)	—/—/1B.1	Valley grassland	Very Low: Some grassland habitat exists onsite.
Clara Hunt's milk vetch (*Astragalus claranus*)	—/—/1B.1	Chaparral, grassland	None: No suitable chaparral habitat exists onsite.
Coast lily (*Lilium maritimum*)	—/—/1B.1	Coastal prairie	Low: Some grassland habitat exists onsite.
Coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite, although species prefers the coast.
Cobb Mountain lupine (*Lupinus sericatus*)	—/—/1B.2	Chaparral, pine forest	None: No suitable chaparral habitat exists onsite.
Colusa layia (*Layia septentrionalis*)	—/—/1B.2	Chaparral, valley grassland	Low: Some grassland habitat exists onsite; no chaparral habitat onsite.
Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)	**—/—/1B.2**	**Grassland, coastal scrub**	**Medium: Some grassland habitat exists onsite. Nearest known occurrence is 2.1 miles SW of the parcel near Blucher Creek.**
Contra Costa goldfields (*Lasthenia conjugens*)	FE/—/1B.1	Vernal pool	Very Low: No vernal pool habitat exists near the project area.
Cunningham marsh cinquefoil (*Potentilla uliginosa*)	**—/—/1A**	**Freshwater marsh**	**Low: No suitable wetland habitat exists near the project area. Nearest known occurrence is 1.0 miles SW of the parcel near Blucher Creek.**
Deceiving sedge (*Carex saliniformis*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Deep scarred cryptantha (*Cryptantha excavata*)	—/—/1B.2	Foothill woodland	Very Low: Some grassland habitat exists onsite.
Dimorphic snapdragon (*Antirrhinum subcordatum*)	—/—/4.3	Serpentine, chaparral	Very Low: No serpentine habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Dwarf downingia (*Downingia pusilla*)	**—/—/2B.2**	**Vernal pool, freshwater wetland**	**Very Low: No vernal pool habitat exists near the project area. Nearest known occurrence is 1.3 miles NE of the parcel near Laguna de Santa Rosa.**
Dwarf soaproot (*Chlorogalum pomeridianum* var. *minus*)	—/—/1B.2	Serpentine chaparral	None: No serpentine chaparral habitat exists onsite.
Eel-grass pondweed (*Potamogeton zosteriformis*)	—/—/2B.2	Freshwater wetland, aquatic	None: No suitable wetlands exist near the project area.
Fragrant fritillary (*Fritillaria liliacea*)	**—/—/1B.2**	**Freshwater wetland, coastal prairie**	**Very Low: No suitable wetlands exist near the project area. Nearest known occurrence is 1.1 miles S of the parcel near Blucher Creek.**
Few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*)	FE/SE/1B.1	Chaparral	Very Low: No suitable chaparral habitat exists onsite.
Franciscan onion (*Allium peninsulare* var. *franciscanum*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Geysers panicum (*Panicum acuminatum* var. *thermale*)	—/—/1B.2	Chaparral, wetlands	None: No suitable chaparral habitat exists onsite.
Glandular western flax (*Hesperolinon adenophyllum*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Golden larkspur (*Delphinium luteum*)	**FE/SR/1B.1**	**Chaparral, coastal prairie**	**Very Low: Some grassland habitat exists onsite. Nearest known occurrence is 4.5 miles NW of the parcel near Atascadero Creek.**
Grassleaf water plantain (*Alisma gramineum*)	—/—/2B.2	Wetland, riparian	Low: No suitable wetland habitat exists near the project area.
Greene's narrow-leaved daisy (*Erigeron greenei*)	—/—/1B.2	Serpentine grassland	None: No serpentine habitat exists onsite.
Hall's harmonia (*Harmonia hallii*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Hoffman's bristly jewelflower (*Streptanthus glandulosus* spp. *hoffmanii*)	—/—/1B.3	Chaparral, foothill woodland	None: No suitable chaparral habitat exists onsite.
Holly-leaved ceanothus (*Ceanothus purpureus*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*)	—/—/1B.2	Foothill woodland	Very Low: Some woodland habitat exists onsite, but not near the project area.
Humboldt County milk vetch (*Astragalus agnicidus*)	—/—/1B.1	Mixed evergreen forest	None: No suitable forest habitat exists onsite.
Jepson's coyote thistle (*Eryngium jepsonii*)	—/—/4.2	Wetlands and vernal pools	Low: No vernal pool habitat exists near the project area.
Jepson's leptosiphon (*Leptosiphon jepsonii*)	—/—/1B.2	Chaparral, serpentine grassland	None: No suitable chaparral or serpentine habitat exists onsite.
Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*)	—/—/1B.2	Chaparral, serpentine grassland	None: No suitable chaparral or serpentine habitat exists onsite.
Kenwood marsh checkerbloom (*Sidalcea oregana* ssp. *valida*)	FE/SE/1B.1	Freshwater wetlands	None: No suitable wetland habitat exists near the project area.
Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*)	—/—/1B.3	Chaparral, foothill woodland	Very Low: No suitable chaparral habitat exists onsite.
Lake County stonecrop (*Sedella leiocarpa*)	FE/SE/1B.1	Valley grassland freshwater wetlands	None: No suitable wetland habitat exists near the project area.
Legenere (*Legenere limosa*)	**—/—/1B.1**	**Freshwater wetland, valley grassland**	**Low: No suitable wetland habitat exists in the project area. Nearest known occurrence is 1.9 miles NE of the parcel near Ludwig Ave.**
Loch Lomond button-celery (*Eryngium constancei*)	FE/SE/1B.1	Freshwater wetland	None: No suitable wetland habitat exists in the project area.
Long-styled sand-spurrey (*Spergularia macrotheca* var. *longistyla*)	—/—/1B.2	Wetland, riparian	None: No suitable wetland habitat exists in the project area.
Many-flowered navarretia (*Navarretia leucocephala* spp. *plieantha*)	FE/SE/1B.2	Vernal pools	None: No vernal pool habitat exists in the project area.
Maple leaved checkerbloom (*Sidalcea malachroides*)	—/—/4.2	Coastal prairie, coniferous forest	Very Low: Some grassland habitat exists onsite.
Marin knotweed (*Polygonum marinense*)	—/—/3.1	Coastal salt marsh	None: No coastal salt marsh habitat exists onsite.
Marsh checkerbloom (*Sidalcea oregana* ssp. *hydrophila*)	—/—/1B.2	Freshwater wetland, riparian	Low: No suitable riparian habitat exists near the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Marsh microseris (*Microseris paludosa*)	**—/—/1B.2**	**Northern coastal scrub**	**Very Low: No marsh habitat exists onsite. Nearest known occurrence is 0.5 miles E of the parcel along Todd Rd.**
Marsh pea (*Lathyrus palustris*)	—/—/2B.1	Coastal prairie	None: No coastal prairie habitat exists onsite.
Milo Baker's lupine (*Lupinus milo-bakeri*)	—/—/1B.1	Foothill woodland, valley grassland	None: No serpentine habitat exists onsite.
Morrison's jewelflower (*Streptanthus morrisonii* ssp. *morrisonii*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Mt. St. Helena morning-glory (*Calystegia collina* ssp. *oxyphylla*)	—/—/4.2	Serpentine chaparral	None: No serpentine habitat exists onsite.
Napa blue grass (*Poa napensis*)	FE/SE/1B.1	Chaparral	Very Low: Some suitable woodland habitat exists onsite.
Napa checkerbloom (*Sidalcea hickmanii* ssp. *napensis*)	—/—/1B.1	Chaparral	Very Low: Some suitable woodland habitat exists onsite.
Napa false indigo (*Amorpha californica* var. *napensis*)	—/—/1B.2	Forest, woodland	Very Low: Some suitable woodland habitat exists onsite.
Narrow-anthered brodiaea (*Brodiaea leptandra*)	—/—/1B.2	Foothill woodland, grassland	Low: Some grassland habitat exists onsite.
North Coast semaphore grass (*Pleuropogon hooverianus*)	—/—/1B.1	Freshwater wetland, vernal pools	Low: No suitable wetland or vernal pool habitat exists in the project area.
Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)	—/—/2B.2	Freshwater wetlands	Low: No wetland or pond habitat exists in the project area.
Oval-leaved viburnum (*Viburnum ellipticum*)	**—/—/2B.3**	**Forest, Chaparral**	**Very Low: Some forest habitat exists, but not near the project area. Nearest known occurrence is 1.6 miles NW of the parcel near Laguna de Santa Rosa.**
Pacific gilia (*Gilia capitata* ssp. *pacifica*)	—/—/1B.2	Coastal prairie	Low: No coastal prairie habitat exists onsite.
Pacific Grove clover (*Trifolium polyodon*)	—/SR/1B.1	Grassland, wetland	None: No suitable wetland habitat exists near the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Pappose tarplant (*Centromadia parryi* ssp. *parryi*)	—/—/1B.2	Grassland, wetland	None: No suitable wetland habitat exists near the project area.
Pennell's bird's beak (*Cordylanthus tenuis* ssp. *capillaris*)	FE/SR/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Perennial goldfields (*Lasthenia californica* ssp. *macrantha*)	—/—/1B.2	Northern coastal scrub	Very Low: Some grassland habitat exists onsite.
Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*)	**—/—/1B.2**	**Parasitic plant; grassland, chaparral**	**Very Low: Typical host plants not known from the property. Nearest known occurrence is 2.5 miles NW of the parcel along Laguna de Santa Rosa.**
Petaluma popcornflower (*Plagiobothrys mollis* var. *vestitus*)	—/—/1A	Coastal salt marsh	None: No coastal salt marsh habitat exists onsite.
Pink sand verbena (*Abronia umbellata* var. *breviflora*)	—/—/1B.1	Coastal sand dunes	None: No coastal sand dune habitat exists onsite.
Pitkin Marsh lily (*Lilium pardalinum* ssp. *pitkinense*)	**FE/SE/1B.1**	**Freshwater wetlands**	**Very Low: No suitable wetland habitat exists near the project area. Nearest occurrence is an indistinct locality somewhere in the USGS Two Rock 7.5-minute quad that includes the project parcel.**
Pitkin Marsh paintbrush (*Castilleja uliginosa*)	FE/SE/1A	Freshwater wetlands	None: No suitable wetland habitat exists near the project area.
Point Reyes checkerbloom (*Sidalcea calycosa* ssp. *rhizomata*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habiat exists onsite.
Point Reyes salty bird's beak (*Chloropyron maritimum* ssp. *palustre*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habitat exists onsite.
Purple-stemmed checkerbloom (*Sidalcea malviflora* spp. *purpurea*)	—/—/1B.2	Wetlands	None: No suitable wetland habitat exists near the project area.
Pygmy cypress (*Hesperocyparis pygmaea*)	—/—/1B.2	Closed-cone pine forest	Very Low: No suitable forest habitat exists near the project area.
Raiche's manzanita (*Arctostaphylos stanfordiana* ssp. *raichei*)	—/—/1B.1	Chaparral	None: No suitable chaparral habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Raiche's red ribbons (*Clarkia concinna* spp. *raichei*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists onsite.
Rincon Ridge ceanothus (*Ceanothus confusus*)	—/—/1B.1	Chaparral	None: No suitable chaparral habitat exists onsite.
Rincon Ridge manzanita (*Arctostaphylos stanfordiana* ssp. *decumbens*)	—/—/1B.1	Chaparral	None: No suitable chaparral habitat exists onsite.
Rose leptosiphon (*Leptosiphon rosaceus*)	—/—/1B.1	Coastal scrub	None: No suitable coastal scrub habitat exists onsite.
Round-headed beaked-rush (*Rhynchospora globularis*)	**—/—/2B.1**	**Freshwater wetlands, riparian**	**Very Low: No suitable wetland habitat exists near the project area. Nearest known occurrence is 4.3 miles NW of the parcel near Gravenstein Hwy N.**
Round-leaved filaree (*California macrophylla*)	—/—/1B.2	Foothill grassland	Low: Some grassland habitat exists onsite.
Saline clover (*Trifolium hydrophilum*)	**—/—/1B.2**	**Wetland, riparian**	**Low: No suitable wetland habitat exists near the project area. Nearest known occurrence is 0.5 miles NE of the parcel near Laguna de Santa Rosa.**
San Joaquin spearscale (*Extriplex joaquinana*)	—/—/1B.2	Shadscale scrub, valley grassland	None: No alkali scrub habitat exists onsite.
Santa Cruz clover (*Trifolium buckwestiorum*)	**—/—/1B.1**	**Coastal prairie**	**Very Low: Some grassland habitat onsite but species prefers the coast. Nearest known occurrence is 4.8 miles NE of the parcel near Santa Rosa Creek.**
Santa Cruz microseris (*Stebbinsoseris decipiens*)	—/—/1B.2	Chaparral	None: No coastal scrub habitat exists onsite.
Santa Rosa horkelia (*Horkelia tenuiloba*)	—/—/1B.2	Freshwater wetland, vernal pools	None: No suitable chaparral habitat exists onsite.
Sebastopol meadowfoam (*Limnanthes vinculans*)	**FE/SE/1B.1**	**Freshwater wetland, vernal pools**	**Medium: No vernal pool habitat exists onsite. Nearest occurrence is a historical record from adjacent parcel to the west.**
Serpentine cryptantha (*Cryptantha dissita*)	—/—/1B.2	Serpentine chaparral	None: No serpentine habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Serpentine daisy (*Erigeron serpentinus*)	—/—/1B.3	Chaparral	None: No suitable chaparral habitat exists onsite.
Short-leaved evax (*Hesperevax sparsiflora var. brevifolia*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Slender Orcutt grass (*Orcuttia tenuis*)	—/—/1B.1	Grassland, freshwater wetlands	None: No suitable grassland habitat exists onsite.
Small-flowered calycadenia (*Calycadenia micrantha*)	—/—/1B.2	Foothill grassland	Low: Some suitable grassland habitat onsite.
Small groundcone (*Kopsiopsis hookeri*)	—/—/2B.3	Redwood forest	None: No redwood forest habitat exists onsite.
Soft salty bird's beak (*Chloropyron molle* ssp. *molle*)	FE/ST/1B.2	Coastal salt marsh	None: No salt marsh habitat exists onsite.
Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*)	**FE/—/1B.1**	**Freshwater wetland, vernal pools**	**Low: No wetland or vernal pool habitat exists near the project area. Nearest known occurrence is 1.1 miles SE of the parcel along Llano Rd.**
Sonoma beardtongue (*Penstemon newberryi* var. *sonomensis*)	—/—/1B.3	Chaparral	Very Low: Some grassland habitat exists onsite.
Sonoma ceanothus (*Ceanothus sonomensis*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Sonoma spineflower (*Chorizanthe valida*)	**FE/SE/1B.1**	**Coastal prairie**	**Low: Some grassland habitat exists onsite. Nearest known occurrence is 1.6 miles NW of the parcel near Laguna de Santa Rosa.**
Sonoma sunshine (*Blennosperma bakeri*)	**FE/SE/1B.1**	**Valley grassland, freshwater wetland**	**Very Low: Some grassland habitat exists onsite, although species prefers wetlands. Nearest known occurrence is 0.6 miles NE of the parcel near Laguna de Santa Rosa.**
Supple daisy (*Erigeron supplex*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Swamp harebell (*Campanula californica*)	**—/—/1B.2**	**Coastal prairie, freshwater wetlands**	**Very Low: No wetlands exist near the project area. Nearest known occurrence is 4.3 miles NW of the parcel near Atascadero Creek.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
The Cedars fairy lantern (*Calochortus raichei*)	—/—/1B.2	Hardpan chaparral	None: No suitable chaparral habitat exists onsite.
The Cedars manzanita (*Arctostaphylos bakeri* ssp. *sublaevis*)	—/—/1B.2	Hardpan chaparral	None: No suitable chaparral habitat exists onsite.
Thin-lobed horkelia (*Horkelia tenuiloba*)	**—/—/1B.2**	**Chaparral**	**None: No suitable chaparral habitat exists onsite. Nearest known occurrence is 1.7 miles NW of the parcel near Laguna de Santa Rosa.**
Thurber's reed grass (*Calamagrostis crassiglumis*)	—/—/2B.1	Coastal scrub, freshwater wetland	None: No suitable wetland habitat exists near the project area.
Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Two-carpellate Western flax (*Hesperolinon bicarpellatum*)	—/—/1B.2	Chaparral	None: No suitable chaparral habitat exists onsite.
Two-fork clover (*Trifolium amoenum*)	**FE/—/1B.1**	**Grassland, wetland**	**Low: Some grassland habitat exists onsite. Nearest known occurrence is 1.9 miles N of the parcel near Ludwig Ave.**
Vine Hill ceanothus (*Ceanothus foliosus* var. *vineatus*)	**—/—/1B.1**	**Chaparral**	**Very Low: No suitable chaparral habitat exists onsite. Nearest known occurrence is 3.4 miles NW of the parcel near Ragle Ranch Park.**
Vine Hill clarkia (*Clarkia imbricata*)	FE/SE/1B.1	Chaparral, grassland	None: No suitable chaparral habitat exists onsite.
Vine Hill manzanita (*Arctostaphylos densiflora*)	—/SE/1B.1	Chaparral	None: No suitable chaparral habitat exists onsite.
Watershield (*Brasenia schreberi*)	—/—/2B.3	Pond, wetland	None: No pond habitat exists in the project area.
Western leatherwood (*Dirca occidentalis*)	—/—/1B.2	Foothill woodland, chaparral	Very Low: Some woodland habitat exists but not near the project area.
White beaked-rush (*Rhynchospora alba*)	—/—/2B.2	Wetlands, riparian	None: No suitable wetland habitat exists onsite.
White flowered rein orchid (*Piperia candida*)	—/—/1B.2	Yellow pine forest	None: No suitable forest habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Wolly-headed gilia (*Gilia capitata* ssp. *tomentosa*)	—/—/1B.1	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Wolly meadowfoam (*Limnanthes floccosa* ssp. *floccosa*)	—/—/4.2	Vernal pools	None: No vernal pool habitat exists onsite.
Wolly spineflower (*Chorizanthe cuspidata* var. *villosa*)	—/—/1B.2	Coastal dunes	None: No coastal dune habitat exists onsite.
MOSSES, LICHENS & LIVERWORTS			
Angel's hair lichen (*Ramalina thrausta*)	—/—/2B.1	Old growth conifer and hardwood forests	None: No old growth conifer forest habitat exists onsite.
Coastal triquetrella (*Triquetrella californica*)	—/—/1B.2	Forest, woodland	None: No suitable forest habitat exists onsite.
Methuselah's beard lichen (*Dolichousnea longissima*)	—/—/4.2	Old growth conifer and hardwood forests	None: No old growth conifer forest exists onsite.
Slender silver moss (*Anomobryum julaceum*)	—/—/4.2	Rocky substrates in forests	None: No suitable rock habitat exists onsite.
Torren's grimmia (*Grimmia torenii*)	—/—/1B.3	Forest, woodland	Very Low: No suitable woodland habitat exists near the project area.
FISH			
Chinook Salmon Coastal California DPS (*Oncorhynchus kisutch*)	FT/SE/—	Freshwater streams, open ocean and estuaries	None: No suitable streams exist near the project area.
Coho Salmon Central California Coast ESU (*Oncorhynchus kisutch*)	FE/SE/—	Freshwater streams, open ocean and estuaries	None: No suitable streams exist near the project area.
Gualala roach (*Lavinia symmetricus parvipinnis*)	—/SSC/—	Freshwater streams	None: No suitable streams exist near the project area.
Longfin smelt (*Spirinchus thaleichthys*)	FT/ST/—	Estuaries and coastal lakes	None: No suitable estuary habitat exists near the project area.
Navarro roach (*Lavinia symmetricus navarroensis*)	—/SSC/—	Freshwater streams	None: No suitable streams exist near the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Russian River tule perch (*Hysterocarpus traski pomo*)	—/SSC/—	Low gradient rivers	None: No suitable habitat exists near the project area.
Sacramento perch (*Archoplites interruptus*)	—/SSC/—	Low gradient sloughs and lakes	None: No suitable habitat exists near the project area.
Sacramento splittail (*Pogonichthys macrolepidotus*)	—/SSC/—	Low gradient freshwater streams	None: No suitable streams exist near the project area.
Steelhead Central California Coast DPS (*Oncorhynchus mykiss irideus*)	FT/—/—	Freshwater streams, open ocean and estuaries	None: No suitable streams exist near the project area.
Tidewater goby (*Eucyclogobius newberryi*)	FE/SSC/—	Brackish coastal lagoons and streams	None: No brackish coastal lagoons exist onsite.
AMPHIBIANS & REPTILES			
California giant salamander (*Dicamptodon ensatus*)	—/SSC/—	Wetlands and riparian areas	Low: No suitable wetland habitat exists near the project area.
California red-legged frog (*Rana draytonii*)	**FT/SSC/—**	**Vernal pools, seasonal pools, stock ponds, and associated grasslands**	**Low: No suitable breeding habitat exists near the project area. Some suitable estivation habitat. Nearest known occurrence is 0.4 miles S of the parcel somewhere in the USGS Valley Ford 7.5 minute quad.**
California tiger salamander (*Ambystoma californiense*)	**FE/ST/—**	**Ponds, streams, drainages, and associated uplands**	**Low: No suitable breeding habitat exists near the project area. Some suitable estivation habitat. Nearest known occurrence is 0.5 miles NE of the parcel near Todd Rd.**
Foothill yellow-legged frog (*Rana boylii*)	—/ST/—	Wetlands, riparian, streams and ponds	None: No suitable breeding or estivation habitat exists onsite.
Red bellied newt (*Taricha rivularis*)	—/SSC/—	Woodland streams, riparian corridors	None: No suitable habitat exists onsite.
Western pond turtle (*Emys marmorata*)	**—/SSC/—**	**Slow-moving creeks, streams, ponds, rivers, ditches**	**Low: No suitable pond habitat exists near the project area. Nearest known occurrence is 2.6 miles NW of the parcel near Laguna Youth Park.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
INVERTEBRATES			
Barr's amphipod (*Stygobromus cherylae*)	—/SSC/—	Subterranean aquatic habitats	None: No suitable aquatic habitat onsite.
Behren's silverspot butterfly (*Speyeria zerene behrensii*)	FE/SSC/—	Coastal prairie	None: Requires blue violet to reproduce; none onsite.
Blennosperma vernal pool andrenid bee (*Andrena blennospermatis*)	**—/SSC/—**	**Upland areas near vernal pools**	**Low: No vernal pool habitat exists near the project area. Nearest known occurrence is 0.4 miles NE of the parcel near Colgan Creek Flood Control Channel.**
California brackishwater snail (*Tryonia imitator*)	—/SSC/—	Brackish wetlands	None: No wetland habitat exists near the project area.
California floater (*Anodonta californiensis*)	—/SSC/—	Freshwater ponds, streams	None: No suitable stream habitat exists near the project area.
California freshwater shrimp (*Syncaris pacifica*)	**FE/SE/—**	**Freshwater ponds, streams**	**None: No suitable stream habitat exists near the project area. Nearest known occurrence is 1.9 miles SW of the parcel in Blucher Creek.**
California linderiella (*Linderiella occidentalis*)	**—/SSC/—**	**Vernal pools**	**None: No suitable vernal pool habitat exists near the project area. Nearest known occurrence is 2.7 miles NE of the parcel near Cook Park.**
Crotch bumble bee (*Bombus crotchii*)	—/SSC/—	Grassland and chaparral	Very Low: Some grassland habitat exists onsite, although species is not known from the coast.
Leech's skyline diving beetle (*Hydroporus leechi*)	—/SSC/—	Freshwater ponds	None: No suitable pond habitat exists onsite.
Myrtle silverspot butterfly (*Speyeria zerene myrtleae*)	FE/SSC/—	Coastal prairie, chaparral with *Viola* plants	None: Requires western dog violet for reproduction; none observed onsite.
Monarch butterfly California overwintering Population #1 (*Danaus plexippus*)	—/SSC/—	Large trees required for roosting	Medium: Some suitable trees for roosting onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Obscure bumble bee (*Bombus caliginosus*)	**—/SSC/—**	**Grassland, foothill woodland, chaparral**	**Medium: Some grassland habitat exists onsite. Nearest known occurrence is 4.8 miles NE of the parcel near Santa Rosa Creek.**
Opler's longhorn moth (*Adela oplerella*)	—/SSC/—	Usually associated with *Platystemon* (creamcups)	Very Low: No suitable host plants observed onsite.
Oregon floater (*Anodonta oregonensis*)	—/SSC/—	High order freshwater streams	None: No suitable stream habitat exists onsite.
Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*)	—/SSC/—	Freshwater ponds	None: No suitable pond habitat exists onsite.
Sonoma arctic skipper (*Carterocephalus palaemon magnus*)	—/SSC/—	Grasslands with suitable host plants	Very Low: Some suitable grassland habitat onsite.
Sonoma zerene fritillary (*Speyeria zerene sonomensis*)	—/SSC/—	Grasslands and meadows with *Viola* plants	None: Requires *Viola* for reproduction; none observed onsite.
Tomales isopod (*Caecidotea tomalensis*)	—/SSC/—	Ponds and streams	None: No pond or stream habitat exists onsite.
Western bumblebee (*Bombus occidentalis*)	**—/SSC/—**	**Grassland**	**Medium: Some grassland habitat exists onsite. Nearest known occurrence is 3.1 miles E of the parcel near Foxtail Golf Club.**
BIRDS			
American perigrine falcon (*Falco peregrinus anatum*)	—/SSC/—	Forages in open grasslands, nests in trees	Low: Some marginal nesting and foraging habitat exists.
Bald eagle (*Haliaeetus leucocephalus*)	—/SSC/—	Nests in forests, forages over lakes and streams.	None: No suitable nesting or foraging habitat exists onsite.
Bank swallow (*Riparia riparia*)	FE/SE/—	Typically found near lakes and streams	None: No suitable stream habitat exists near the project area.
Black swift (*Cypseloides niger*)	—/SSC/—	Cliff faces near water	None: No suitable stream habitat exists near the project area.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Burrowing owl (*Athene cunicularia*)	—/SSC/—	Grasslands with ground squirrel burrows	None: No suitable grassland habitat with ground squirrel burrows exists onsite.
California black rail (*Laterallus jamaicensis coturniculus*)	FE/SE/—	Coastal salt marshes and mudflats	None: No suitable salt marsh habitat exists onsite.
California horned lark (*Eremophila alpestris actia*)	—/SSC/—	Herbaceous vegetation, chaparral	Low: Some suitable habitat exists onsite.
Cooper's hawk (*Accipiter cooperii*)	**—/WL/—**	**Forages over open grassland**	**Low: Some suitable foraging habitat exists onsite. No suitable nesting habitat onsite. Nearest known occurrence is 4.4 miles NE of the parcel near Cook Park.**
Ferruginous hawk (*Buteo regalis*)	—/SSC/—	Forages over open grassland, nests in old-growth trees	Low: Little suitable foraging habitat exists onsite. Some suitable nesting habitat onsite.
Golden eagle (*Aquila chrysaetos*)	—/SSC/—	Forages over open grassland, nests in old-growth trees	Very Low: Little suitable foraging habitat exists onsite. Some marginal nesting habitat.
Grasshopper sparrow (*Ammodramus savannarum*)	—/SSC/—	Forages over open grassland	Low: Some suitable foraging habitat exists onsite.
Great blue heron (*Ardea herodias*)	—/SSC/—	Nests in trees, forages in wetlands and grasslands	Very Low: Some suitable foraging habitat exists onsite.
Great egret (*Ardea alba*)	FE/SE/—	Nests in trees, forages in wetlands and grasslands	Very Low: Some suitable habitat exists near the project area for foraging. No suitable nesting habitat onsite.
Marbled murrelet (*Brachyramphus marmoratus*)	FT/SE/—	Old growth forest	None: No suitable old growth forest habitat exists.
Northern goshawk (*Accipiter gentilis*)	—/SSC/—	Old growth forest	None: No suitable forest habitat exists onsite. Species prefers high elevations.
Northern spotted owl (*Strix occidentalis*)	FT/ST/—	Nests primarily in old growth forest	None: No suitable forest habitat exists onsite. Species prefers high elevation coniferous forests.
Osprey (*Pandion haliaetus*)	—/WL/—	Areas with fish	Low: Some marginal nesting habitat exists onsite. No suitable foraging habitat onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Prairie falcon (*Falco mexicanus*)	—/SSC/—	Forages over grasslands	Low: Some marginally suitable nesting and foraging habitat exists onsite.
Purple martin (*Progne subis*)	FE/SE/—	Insectivorous, nests in cavities	Low: No suitable nesting habitat exists onsite. Some suitable foraging habitat exists.
Ridgway's rail (*Rallus obsoletus obsoletus*)	FE/SE/—	Mudflats and tidal sloughs	None: No suitable tidal habitat exists onsite.
Salt marsh common yellowthroat (*Geothlypis trichas sinuosa*)	—/SSC/—	Forages in grasslands and nests in dense freshwater marshes	Very Low: No suitable nesting or foraging habitat exists.
San Pablo song sparrow (*Melospiza melodia samuelis*)	—/SSC/—	Marsh and grassland	Very Low: No suitable habitat exists onsite.
Sharp-shinned hawk (*Accipiter striatus*)	—/SSC/—	Forest and woodland	Very Low: Some marginal nesting and foraging habitat exists onsite.
Swainson's hawk (*Buteo swainsoni*)	—/SSC/—	Forages in open grasslands, nests in trees	Very Low: Some marginal nesting and foraging habitat exists onsite.
Tricolored blackbird (*Agelaius tricolor*)	**—/SSC/—**	**Forages in grasslands and nests in dense freshwater marshes**	**Low: Some suitable nesting and foraging habitat exists onsite. Nearest known occurrence is 1.5 miles NW of the parcel near Laguna de Santa Rosa.**
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	**—/SE/—**	**Woodland, riparian**	**Low: Some suitable nesting habitat exists. Some suitable foraging habitat exists. Nearest known occurrence is 2.1 miles SE of the parcel near Laguna de Santa Rosa.**
White-tailed kite (*Elanus leucurus*)	**—/CFP/—**	**Prefers to nest in marshes adjacent to deciduous forests**	**Low: Some suitable nesting or foraging habitat exists onsite. Nearest known occurrence is 4.2 miles NE of the parcel near Colgan Creek Flood Control Channel.**
Yellow breasted chat (*Icteria virens*)	—/SSC/—	Dense shrubby growth, farmland	Very Low: Some marginal nesting and foraging habiat onsite.
Yellow rail (*Coturnicops noveboracensis*)	—/SSC/—	Breeds in marshes, forages in wet meadows	None: No suitable marsh habiat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Yellow warbler (*Coturnicops noveboracensis*)	—/SSC/—	Riparian, shrubland, farmland	Low: Some suitable scrub habitat onsite.
MAMMALS			
American badger (*Taxidea taxus*)	**—/SSC/—**	**Open grassland habitats with plenty of prey**	**Low: Some suitable habitat exists onsite near Laguna de Santa Rosa. Nearest known occurrence is 1.6 miles NE of the parcel near Ludwig Ave.**
Big free-tailed bat (*Nyctinomops macrotis*)	—/SSC/—	Forages over open areas, roots in trees or caves	None: Some suitable foraging habitat. No suitable roosts.
Fisher (*Pekania pennanti*)	—/SSC/—	Forages and breeds primarily in forests	None: No suitable forest habitat exists onsite.
Fringed myotis (*Myotis thysanodes*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Very Low: Some suitable foraging habitat. No suitable roosts in the project area.
Hoary bat (*Lasiurus cinereus*)	—/SSC/—	Forages over open areas, roots in trees or caves at high altitude	Very Low: Foraging limited to high altitudes. No suitable roosts in the project area.
Long-eared myotis (*Myotis evotis*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Very Low: Some suitable foraging habitat. No suitable roosts in the project area.
Long-legged myotis (*Myotis volans*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	None: Some foraging habitat. No suitable roosts.
North American porcupine (*Erethizon dorsatum*)	**—/SSC/—**	**Require rocky areas or trees for dens, abundant open space for foraging**	**Medium: Some suitable foraging habitat, no suitable den habitat. Nearest known occurrence is 4.5 miles SW of the parcel near English Hill.**
Pallid bat (*Antrozous pallidus*)	—/SSC/—	Common in open dry habitats with rocky areas for roosting	Low: Some foraging habitat exists. Some suitable roosts in the project area. Nearest occurrence is near Forestville.
Salt marsh harvest mouse (*Reithrodontomys raviventris*)	FE/SE/—	Salt marshes	None: No suitable salt marsh habitat exists onsite. Nearest occurrence is south of Petaluma.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Silver haired bat (*Lasionycteris noctivagans*)	—/SSC/—	Nocturnal, migratory, solitary, roosts in tree cavities	Low: Some suitable trees exist for roosting. Some foraging habitat exists.
Sonoma tree vole (*Arborimus pomo*)	—/SSC/—	Old growth Douglas fir canopies	Very Low: No suitable Douglas fir forest habitat exists onsite.
Townsend's big-eared bat (*Corynorhinus townsendii*)	—/SSC/—	Hibernate in mines or caves, roost in man made structures and caves	Low: Few man-made structures exist suitable for roosting. Some habitat for foraging.
Western red bat (*Lasiurus blossevillii*)	—/SSC/—	Forages over open areas, roots in trees or caves	Low: Some marginal roosting and foraging habitat onsite.
Yuma myotis (*Myotis yumanensis*)	—/SSC/—	Forages over open areas, roots in trees or caves	Very Low: No suitable nesting habitat exists, some suitable foraging habitat exists.
HABITATS			
Coastal & Valley Freshwater Marsh (CVFM)	—	—	None: No marsh habitat exists onsite.
Coastal Brackish Marsh (CVFM)	—	—	None: No brackish marshes exist onsite.
Northern Coastal Salt Marsh (NCSM)	—	—	None: No salt marsh habitat exists onsite.
Northern Hardpan Vernal Pool (NHVP)	—	—	None: No hardpan vernal pool habitat exists onsite.
Northern Vernal Pool (NVP)	—	—	None: No vernal pool habitat exists onsite.
Sycamore Alluvial Woodland (SAW)	—	—	None: No woodland habitat exists onsite.
Valley Needlegrass Grassland (VNG)	—	—	Low: Some grassland habitat exists onsite.
Valley Oak Woodland (VOW)	—	—	None: No valley oaks exist onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Valley Sink Scrub (VSS)	—	—	None: No sink habitat exists onsite.

[1] Status:

Federal
FE = Federally Endangered Species
FT = Federally Threatened Species

State
SE = State Endangered Species
ST = State Threatened Species
SR = State Rare (applies to plants only)
SSC = California Species of Special Concern
CFP = California Fully Protected Species

CNPS (applies to plants only)
List 1B = plants considered rare, threatened, or endangered in California and elsewhere
List 2B = plants rare, threatened or endangered in California, but more common elsewhere
List 4 = plants of limited distribution

[2] USFWS

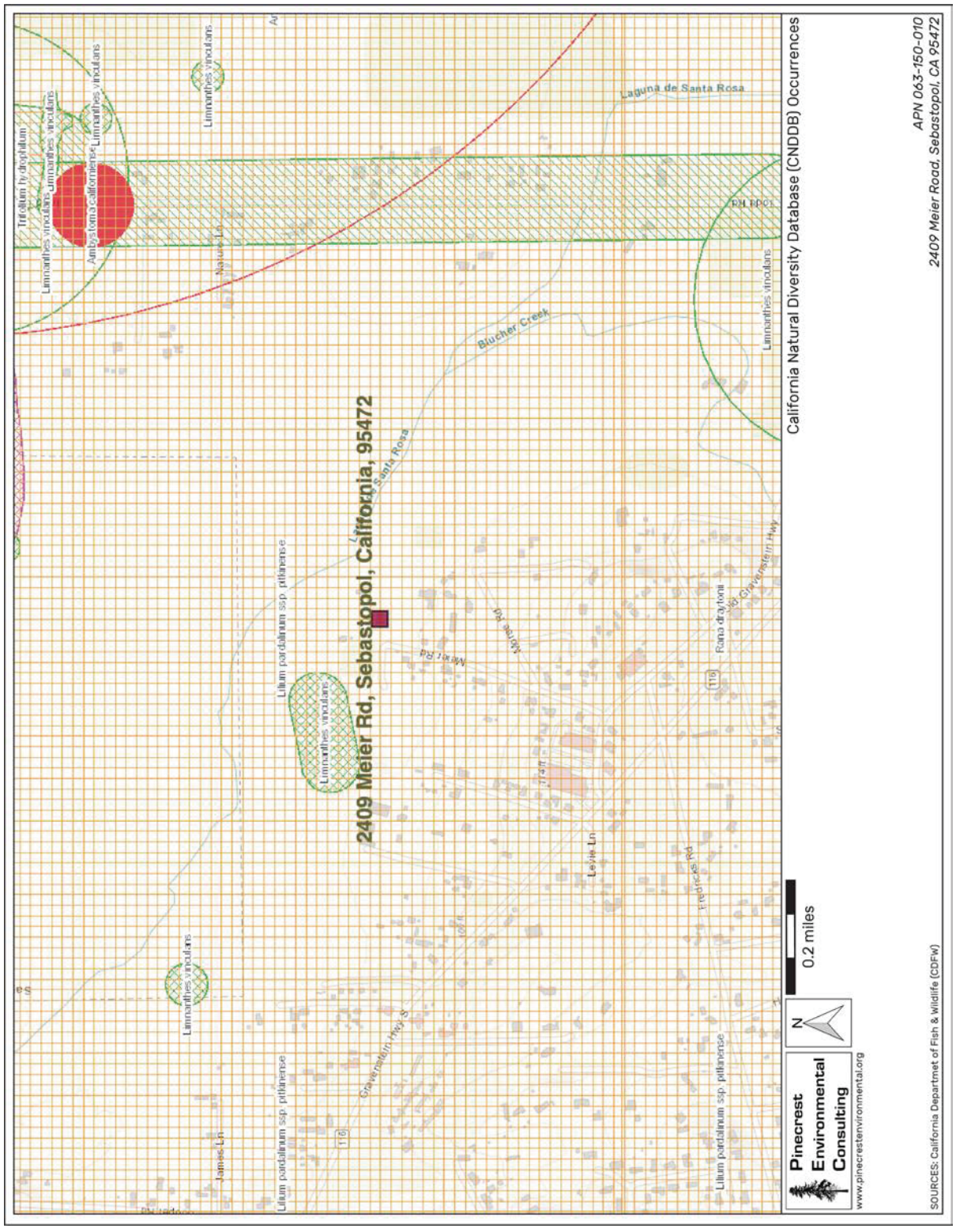
APPENDIX B: SPECIES ENCOUNTERED

PLANTS
Acmispon americanus
Avena barbata
Baccharis pilularis
Brassica rapa
Briza maxima
Bromus hordeaceous
Calystegia occidentalis
Centaurea solstitialis
Circium pycnocephalus
Cirsium vulgare
Clematis ligusticifolia
Convolvulus arvensis
Cotula coronopifolia
Cynosurus echinatus
Daucus carota
Digitalis purpurea
Dipsacus fullonum
Elymus caput-medusae
Erodium botrys
Eucalyptus spp.
Festuca perennis
Fraxinus latifolia
Gastridium phleoides
Geranium molle
Helminthotheca echioides
Heracleum maximum
Holcus lanatus
Hordeum murinum
Hypochaeris glabra
Juncus patens
Lepidium heterophyllum
Lythrum hyssopifolia
Madia gracilis
Madia gracilis
Mentha pulegium
Navarretia pubescens
Phalaris aquatica
Pinus radiata
Plantago major

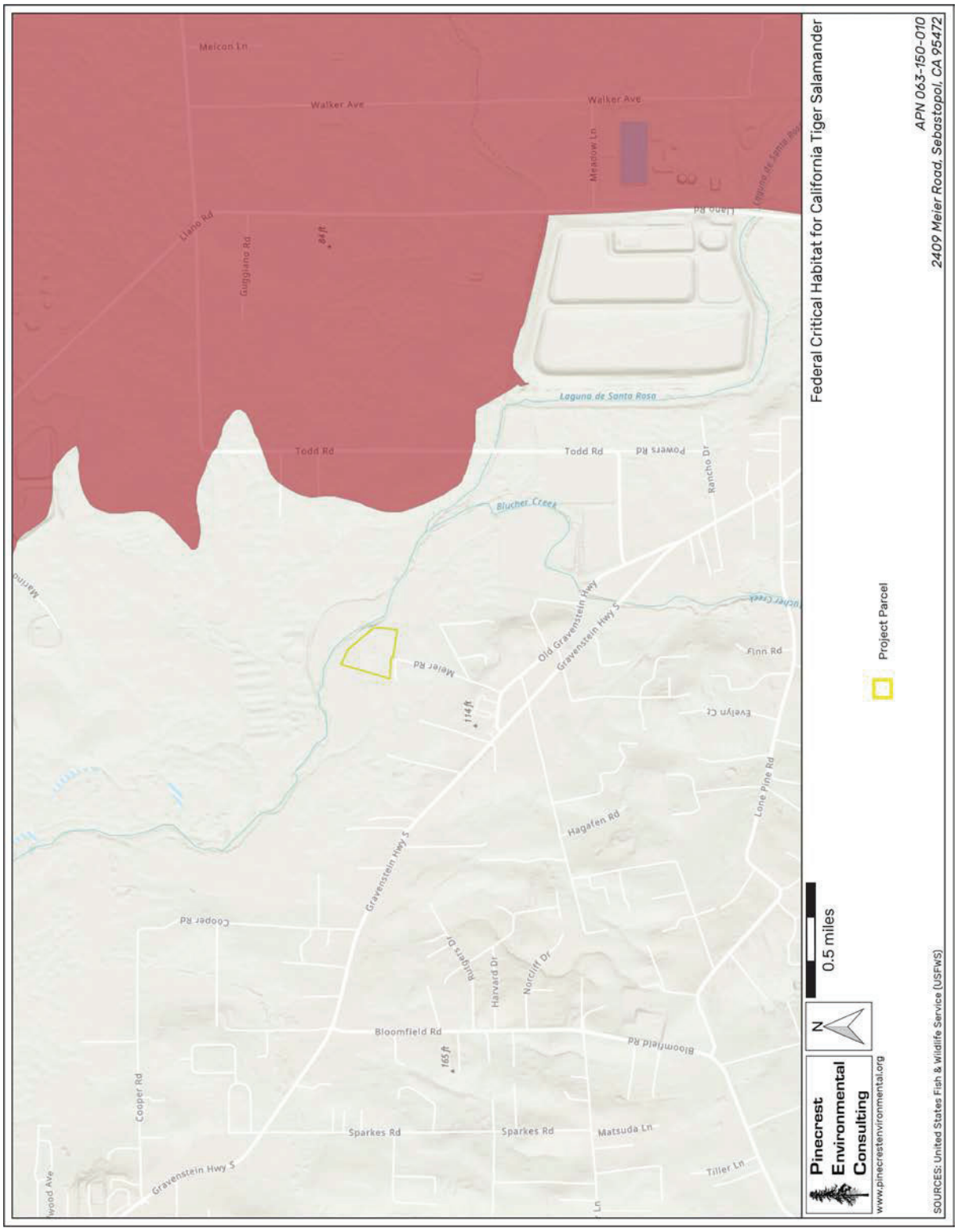
Populus fremontii
Quercus lobata
Raphanus sativus
Rosa californica
Rubus armeniacus
Rumex acetocella
Rumex crispus
Salix lasiolepis
Sonchus asper
Spergula arvensis
Torilis nodosa
Trifolium hirtum
Typha latifolia
Vicia sativa
Vitis vinifera
Xanthium spinosum

ANIMALS
Aphelocoma californica
Bombus spp.
Buteo jamaicensis
Cathartes aura
Corvus brachyrhynchos
Euphagus cyanocephalus
Lepus californicus
Microtus californicus
Sciurus griseus
Thomomys bottae
Zenaida macroura

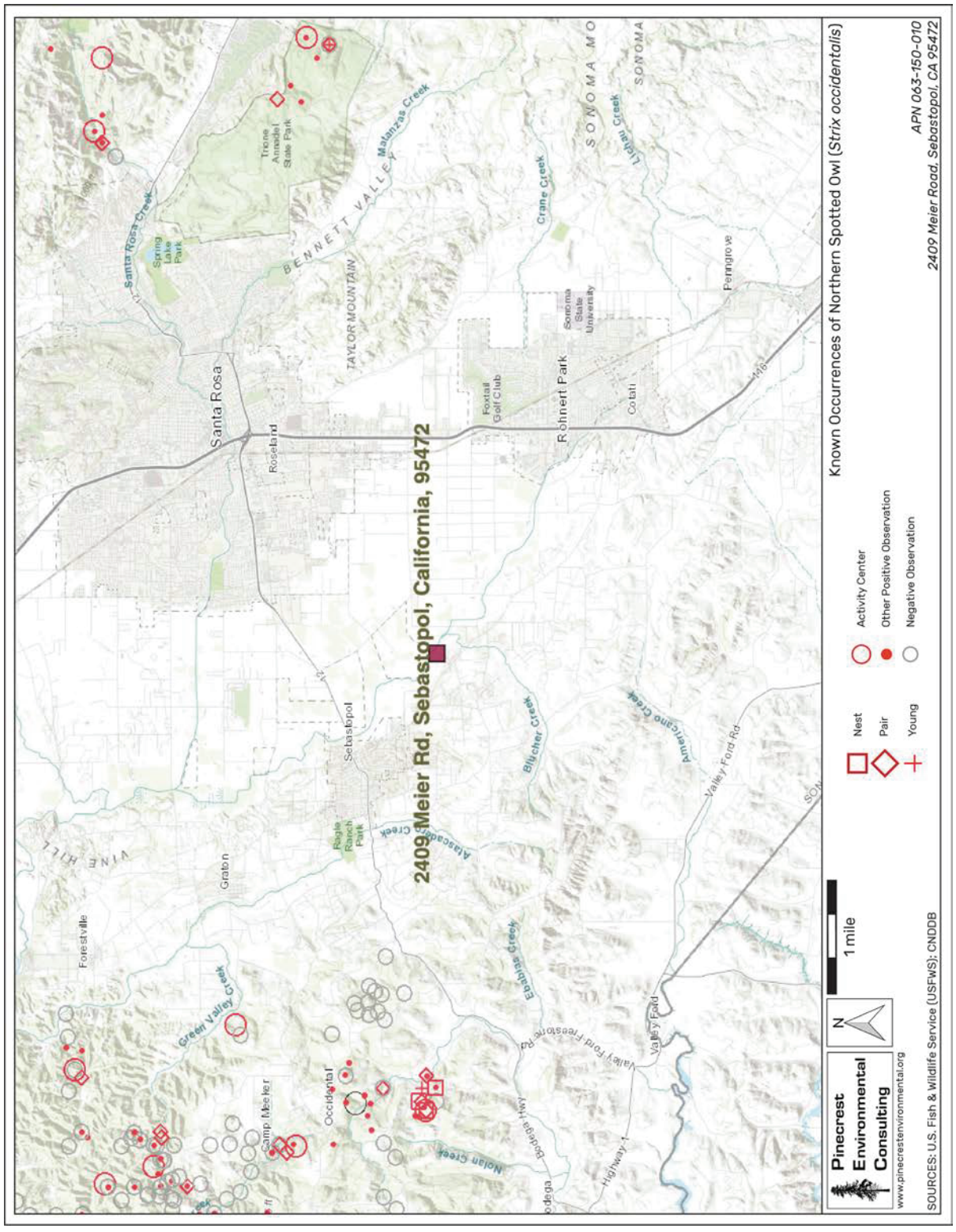
APPENDIX C: CNDDB OCCURRENCES MAP



APPENDIX D: MAP OF FEDERAL CRITICAL HABITAT



APPENDIX E: REGIONAL NSO OCCURRENCES



APPENDIX F: CANNABIS CULTIVATION BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are designed to prevent, minimize, and control the discharge of waste and pollutants associated with site operations and maintenance for the aforementioned project. Many of these BMPs are considered enforceable conditions under North Coast Regional Water Quality Board Order No. R1-2015-0023 and applicable State Water Resources Control Board *Cannabis* General Order No. WQ 2019-0001-DWQ.

F.1 CANNABIS CULTIVATION

- Pesticide and fertilizer storage facilities shall be located outside of the Riparian Corridor setbacks for structures.
- Pesticide and fertilizer storage facilities shall not be located within 100 feet of a wellhead, or within 50 feet of identified wetlands.
- Pesticide and fertilizer storage facilities shall be adequate to protect pesticide and fertilizer containers from the weather.
- Store all bags and boxes of pesticides and fertilizers off the ground on pallets or shelves.
- If the structure does not have an impermeable floor, store all liquid pesticides and fertilizers on shelves capable of containing spills or provide appropriate secondary containment.
- Routinely check for leaks and spills.
- Have spill cleanup kit onsite to be able to respond to any leaks or spills.
- Inspect planting stock for pests and diseases prior to planting. Avoid planting stock with pests and disease and notify the supplier of the planting stock of the infestation.
- Comply with all pesticide laws and regulations as enforced by the California Department of Pesticide Regulation and Sonoma County Agricultural Commissioner.
- For pesticides with the signal word CAUTION that have listed food uses, comply with all pesticide label directions as they pertain to personal protective equipment, application method, and rate, environmental hazards, longest reentry intervals and greenhouse and indoor use directions.
- For all other pesticides, use must comply with all label requirements including site and crop restrictions.
- Prior to the use of any registered pesticide on cannabis, Operator Identification Number should be obtained from the County Agricultural Commissioner if required.
- Submit monthly pesticide use reports to the County Agricultural Commissioner if required.

- Prior to applying fertilizers, evaluate irrigation water, soils, growth media, and plant tissue to optimize plant growth and avoid over fertilization.
- Apply fertilizers at label rates and no higher.
- Do not apply fertilizers in a way that will result in runoff that may contaminate ground or surface water or escape via airborne drift or fugitive dust.
- Observe riparian corridor setbacks for agricultural cultivation as applicable. These shall be maintained as "no touch" areas. The removal of vegetation is prohibited within these setback areas.
- No equipment, vehicles, or other materials shall be stored in the riparian setback areas.
- Composting areas shall not be located in the riparian setback areas.
- Irrigation must be conducted in a manner that does not result in runoff from the cultivated area.
- Any water tanks or storage facilities must obtain all necessary permits from the Sonoma County Permit and Resource Management Department (PRMD).
- The use of membrane based water bladders is prohibited.
- If using an irrigation system, inspect for and repair leaks prior to planting each year and continuously during the season.
- Irrigation systems shall be equipped with a backflow prevention devices and shutoff valves.
- 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.
- Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter.
- Avoid soil disturbance between November 1 and April 15 and during times of active precipitation.
- All exposed and disturbed soil must be covered with a minimum of 2 inches of mulch, such as straw, bark, wood chips, etc., by November 15. Alternatively, establish a thick cover crop over disturbed areas composed of native species.

- Erosion control materials shall be available on site at all times in the form of straw or appropriate mulch adequate to cover area of disturbed soil.
- In the event of a forecast storm event likely to produce runoff, apply mulch to disturbed areas prior to rain event.
- Any grading or drainage conducted as part of site preparation shall have the appropriate permits from the Sonoma County PRMD.

F.2 EROSION & SEDIMENT CONTROL

- Erosion control and sediment detention devices and materials shall be incorporated into the cleanup/restoration work design and installed prior to the end of project work and before the beginning of the rainy season or any predicted rain events.
- Any continuing, approved project work conducted after October 15 shall have erosion control measures completed and up-to-date.
- All erosion control measures shall be inspected daily during severe rain events.
- Erosion control materials shall be, at minimum, stored on-site at all times during approved project work between May 1 and October 15.
- Approved project work within the 5-year flood plain shall not begin until all temporary erosion controls (straw bales or silt fences that are effectively keyed-in) are installed downslope of cleanup/restoration activities.
- Native species appropriate to the local habitat shall be used for all revegetation purposes. Non-invasive, non-persistent grass species (e.g., barley grass) may be used for their temporary erosion control benefits to stabilize disturbed slopes and prevent exposure of disturbed soils to rainfall.
- Upon work completion, all exposed soil present in and around the cleanup/restoration sites shall be stabilized within 7 days.
- The disturbed area will be minimized at all times to only that which is essential for the completion of the project.
- Provide temporary cover over disturbed areas that are not currently being worked on.
- Heavy equipment shall not be used in flowing water.
- Use of heavy equipment shall be avoided or minimized in a channel bottom with rocky or cobbled substrate.
- Heavy equipment shall not introduce chemicals or foreign sediment to the channel (e.g., remove mud from tracks or cover channel work area with plastic sheeting prior to heavy equipment entry).
- When heavy equipment is used, any woody debris and stream bank or streambed vegetation disturbed shall be replaced to a pre-project density with native species appropriate to the site.
- When possible, existing ingress or egress points shall be used or work shall be performed remotely from the top of the creek banks.

- Divert runoff away from unprotected slopes or loose soils using a combination of mats, geotextiles, silt fencing, wattling, check dams, sediment basins, vegetated buffers, or rock armor.
- Deploy appropriate erosion control measures such as silt fencing or straw wattles around all temporary exposed piles or soil or surface disturbances.
- All temporary exposed piles or soil or surface disturbances shall have tarping and sand bags or other stabilization materials deployed in order to prevent discharge of sediments in the event of a rain or wind event.
- Geotechnical fabric shall be deployed on all exposed dirt surfaces with a slope of greater than 15% and staked in place during ground disturbing activities, and silt fencing deployed on slopes of greater than 15% where appropriate.
- Sand bags, straw bales, or other devices shall be placed at appropriate locations near and alongside the roadsides and swales in anticipation of large storm events.
- Bioswales and cultivation areas including parking areas shall be maintained free of trash including empty soil and pesticide or fertilizer containers.
- Locations of sediment sources shall be identified during rain events and mitigated where appropriate.
- Protect ditch inlets and outlets from erosion using rock armor.
- Silt fencing shall be installed downstream of rock piles, stockpiles, and temporary soils storage areas.
- Desilting or retention basins shall be installed if the capacity of the natural percolation exceeds the inputs during routine storm events.
- Sediment traps shall be used on all exposed driveway surfaces where natural vegetation is not able to be established.
- Exposed unvegetated surfaces will be graveled where appropriate.
- Rock placed for slope protection shall be the minimum necessary to avoid erosion, and shall be part of a design that provides for native plant revegetation and minimizes bank armoring.
- Soil exposed as a result of project work, soil above rock riprap, and interstitial spaces between rocks shall be revegetated with native vegetation by live planting, seed casting, or hydroseeding prior to the rainy season of the year work is completed.
- Avoidance of earthwork on steep slopes and minimization of cut/fill volumes, combined with proper compaction, shall occur to ensure the area is resilient to issues associated with seismic events and mass wasting. If cracks are observed, or new construction is anticipated, consultation with a qualified professional is recommended.
- Culvert fill slopes shall be constructed at a 2:1 slope or shall be armored with rock.
- If it is necessary to conduct work in or near a live stream, the work space shall be isolated to avoid project activities in flowing water.
- Any spoils associated with site maintenance shall be placed in a stable location where it cannot enter a watercourse.

- Sidecasting shall be minimized and shall be avoided on unstable areas or where it has the potential to enter a watercourse.
- Entrance to the project site shall be maintained in a condition that will prevent tracking or flowing of sediment into the public right-of-way.
- All sediment spilled, dropped, washed, or tracked onto the public right-of-ways shall be removed immediately.
- When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-ways.
- When wheel washing is required, it shall be done in an area stabilized with crushed stone that drains into a sediment trap fitted with appropriate erosion control measures.
- To control surface water runoff in and around cultivation areas use fiber rolls or wattling and stake appropriately and perpendicular to the flow path.
- Cover crops should be utilized on all exposed slopes that are not able to be protected by other means.
- Cover crops should be native species as described in the associated biological resources report.
- Rip compacted soils prior to placing spoils to prevent the potential for ponding under the spoils that could result in spoil site failure and subsequent sedimentation.
- Compact and contour stored spoils to mimic the natural slope contours and drainage patterns to reduce the potential for fill saturation and failure.
- Ensure that spoil materials are free of woody debris, and not placed on top of brush, logs or trees.
- Inspect all roads and culverts regularly for blockages.

F.3 WATER USE & POLLUTION

- Ensure that all appropriate water rights permits are filed with the State Water Resources Control Board.
- Notify the California Department of Fish and Wildlife by submitting a Lake and Streambed Alteration (LSA) notification package if the proposed activities involve substantial diversion from or alteration of the bed or bank of a stream or other waterbody.
- Ensure that all water storage features are permitted from the Department of Water Rights if necessary.
- All refueling and pesticide and chemical storage and transfer shall occur greater than 100 feet away from any swales, creeks, or natural areas.
- All refueling and pesticide and chemical storage and transfer shall occur on top of an impermeable metal or other fabric mat that is no less than 2 inches high on all sides and capable of completely containing any spillage.

- Concrete truck and other vehicles shall not be washed out in natural areas or directly onto soil and shall be washed out into a metal or other impermeable basin and disposed of properly such that no water is discharged to the soil.
- All waste shall be kept in plastic drums with tight fitting lids so that water is not able to make contact with the contents and potentially leach to the environment.
- All pesticide sprays shall occur on windless nights for outdoor facilities.
- Chemical or fertilizer wastes shall never be disposed of into swales or creeks and shall be contained inside closed-roof facilities and designated with appropriate labeling until it is possible to dispose of properly.
- Septic leach fields and graywater mulch fields shall be maintained free of large vegetation and not used for aboveground storage that may impact their proper functioning.
- Chemical contamination (fuel, grease, oil, hydraulic fluid, solvents, etc.) of water and soils is prohibited during routine equipment operation and maintenance.
- The use or storage of petroleum-powered equipment shall be accomplished in a manner that prevents the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).
- Schedule excavation and grading activities for dry weather periods.
- Designate a contained area for equipment storage, short-term maintenance, and refueling. Ensure it is located at least 50 feet from waterbodies.
- Inspect vehicles for leaks and repair immediately.
- Clean up leaks, drips and other spills immediately to avoid soil or groundwater contamination.
- Conduct major vehicle maintenance and washing offsite.
- Ensure that all spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries are collected, stored, and recycled as hazardous waste offsite.
- Ensure that all construction debris is taken to appropriate landfills and all sediment disposed of in upland areas or offsite, beyond the 100-year floodplain.
- Use dry cleanup methods (e.g., absorbent materials, cat litter, and/or rags) whenever possible. If necessary for dust control, use only a minimal amount of water.
- Sweep up spilled dry materials immediately.
- Separate organic material (e.g., roots, stumps) from the dirt fill and store separately. Place this material in long-term, upland storage sites, as it cannot be used for fill.
- Spoils shall not be placed or stored in locations where soils are wet or unstable, or where slope stability could be adversely affected.
- Do not locate spoil piles in or immediately adjacent to wetlands and watercourses.
- Store spoil piles in a manner (e.g. cover pile with plastic tarps and surround base of pile with straw wattle) or location that would not result in any runoff from the spoil pile ending up in wetlands and watercourses.

- Keep temporary disposal sites out of wetlands, adjacent riparian corridors, and ordinary high water areas as well as high risk zones, such as 100-year floodplain and unstable slopes.
- Conduct operations on a size and scale that considers available water sources and other water use and users in the planning watershed.
- Implement water conservation measures such as rainwater catchment systems, drip irrigation, mulching, or irrigation water recycling where possible.
- Hauled water utilized for irrigation shall be documented via receipt or similar, and show the date, name, and license plate of the water hauler, and the quantity of water purchased.
- If using a water storage tank, do not locate the tank in a flood plain or next to equipment that generates heat. Locate the tank so it is easy to install, access, and maintain.
- Vertical tanks should be installed according to manufacturer's specifications and placed on firm, compacted soil that is free of rocks/sharp objects and capable of bearing the weight of the tank and its maximum contents.
- Install float valves on tanks to prevent them from overflowing.
- Place proper lining or sealing in ponds to prevent water loss.

F.4 ROAD MAINTENANCE & GENERAL CONSTRUCTION

- Always limit work to the appropriate work date windows considering wet weather, migratory bird and other biological and environmental constrains that may be placed on the project.
- Proper design and location of roads and other features is critical to ensuring that a road or other feature be adequately drained and is best accomplished through consultation with a qualified professional.
- Placement of temporary access roads, staging areas, and other facilities shall avoid or minimize disturbance to habitat.
- If inspection identifies surface rills or ruts, then surfacing and drainage likely needs maintenance. Consultation should be made with a licensed professional to design appropriate erosion control strategies.
- Design of roads should allow for sheet flow of water and use water bars and rolling dips to break up slope length.
- Vehicle speed shall be kept to a maximum of 10 mph while onsite to minimize dust generation.
- All unvegetated and unpaved roadways and vehicle turnarounds shall be graveled to a depth of not less than 1" in order to prevent dust and sediment entrainment.
- Applicant will use geotechnical fabric or similar materials on exposed slopes, and distribute weed-free straw mulch wherever possible on exposed surfaces on the perimeter of all graded roads and graveled areas.

- Roads and the berms alongside all roads shall be maintained free of headcuts, gullies, stutter bumps, and other erosion features capable of discharging sediment to adjacent grassland areas.
- Roads will be graveled with clean rock whenever required to prevent dust and sediment erosion during the wet season.
- Whenever possible, road maintenance activities shall be performed from May 1 to October 15.
- Work performed outside of this window should take extra precautions for winter weather erosion control prevention beyond that which is described in this Plan.
- A 48 hour advance forecast for rain shall trigger a temporary cessation of work, and all soils piles will need to be covered and secured with sandbags or other materials.
- Placement of temporary access roads, staging areas, and other facilities shall avoid or minimize disturbance to habitat.
- Whenever feasible, finished grades shall not exceed 1.5:1 side slopes. In circumstances where final grades cannot achieve 1.5:1 slope, additional erosion control or stabilization methods shall be applied as appropriate for the project location.
- Spoils and excavated material not used during project activities shall be removed and placed outside of 100-year floodplains.
- Upon completion of grading, slope protection of all disturbed sites shall be provided prior to the rainy season through a combination of permanent vegetative treatment, mulching, geotextiles, and/or rock, or equivalent.
- Position vehicles and other apparatus so as to not block emergency vehicle access.
- After construction is complete, all storm drain systems and culverts shall be inspected and cleared of accumulated sediment and debris.
- Sediment barriers including wattles and silt fencing should be checked for sediment accumulation following each significant rainfall and sediment removed or the feature replaced as needed.
- Road drainage shall be discharged to a stable location away from a watercourse.
- Use sediment control devices, such as check dams, sand/gravel bag barriers, and other acceptable techniques, when it is neither practical nor environmentally sound to disperse ditch water immediately before the ditch reaches a stream.
- Within areas with potential to discharge to a watercourse (i.e. within riparian areas of at least 200 feet of a stream) road surface drainage shall be filtered through vegetation, slash, or other appropriate material or settled into a depression with an outlet with adequate drainage.

F.5 SWALE & VEGETATION MANAGEMENT

- The work area shall be restored to pre-project work condition or better.

- Any stream bank area left barren of vegetation as a result of cleanup/restoration activities shall be stabilized by seeding, replanting, or other means with native trees, shrubs, and/or grasses appropriate to the site prior to the rainy season in the year work was conducted.
- Ensure that vegetated swales are properly formed, allow moderate velocity water passage without causing sediment entrainment, and are otherwise functioning properly.
- Create and expand vegetated bioswales where necessary, should additional construction or road maintenance be required, in order to maintain flow without scour.
- All bioswales and other drainage features requiring revegetation will be seeded with native vegetation and lawns and hedgerows maintained in good health and watered in dry years.
- Vegetation including grasses shall be mowed as necessary to create fire breaks and to prevent the accumulation of fuels that would be able to sustain a ground fire.
- All vegetation shall be surveyed on foot once a year by staff and new outbreaks of any invasive weeds identified by the California Invasive Plant Council as noxious or invasive to be removed by the owner or qualified landscaping professionals.
- Channels and swales that show evidence of overland flow and scour (e.g. bare of vegetation) shall be seeded with native grasses such as *Stipa pulchra*, *Hordeum brachyantherum*, *Elymus glaucus*, and *Bromus carinatus*, and kept vegetated at all times.
- If shrubs and non-woody riparian vegetation are disturbed, they shall be replaced with similar native species appropriate to the site.
- Disturbance to native shrubs, woody perennials or tree removal on the streambank or in the stream channel shall be avoided or minimized.
- If riparian trees over six inches dbh (diameter at breast height) are to be removed, they shall be replaced by native species appropriate to the site at a 3:1 ratio.
- Where physical constraints in the project area prevent replanting at a 3:1 ratio and canopy cover is sufficient for habitat needs, replanting may occur at a lesser replacement ratio.
- Vegetation planting for slope protection purposes shall be timed to require as little irrigation as possible for ensuring establishment by the commencement of the rainy season.
- The spread or introduction of exotic plant species shall be avoided to the maximum extent possible by avoiding areas with established native vegetation during cleanup/restoration activities, restoring disturbed areas with appropriate native species, and post-project monitoring and control of exotic species.
- Removal of invasive exotic species after construction activities is strongly recommended. Mechanical removal (hand tools, weed whacking, hand pulling) of exotics shall be done in preparation for establishment of native plantings.
- Where permanent soil stabilization is required a locally-appropriate mix of native grass species shall be used such as a mix containing *Nassella pulchra*, *Hordeum brachyantherum*, *Elymus glaucus*, and *Bromus carinatus* or as described in the site's Biological Resources Assessment.
- Entire cultivation site shall be seeded and maintained as a permanent non-tilled cover crop during non-usage times. Straw mulch shall be used where native seeding is not practicable.

- Use mulches (e.g. wood chips or bark) in cultivation areas that do not have ground cover to prevent erosion and minimize evaporative loss.
- Mulch shall be applied at a rate of 4000 lbs / acre and seeding shall be applied to achieve 70% cover in the first year or approximately 200 lbs / acre.
- Annual inspections for the purpose of assessing the survival and growth of revegetated areas and the presence of exposed soil shall be conducted for three years following project work.
- Dischargers and/or their consultant(s) or third party representative(s) shall note the presence of native/non-native vegetation and extent of exposed soil, and take photographs during each inspection.
- Dischargers and/or their consultant(s) or third party representative(s) shall provide the location of each work site, pre- and post-project work photos, diagram of all areas revegetated and the planting methods and plants used, and an assessment of the success of the revegetation program in the annual monitoring report as required under relevant state and local water board regulations.

F.6 IRRIGATION & CULTIVATION MANAGEMENT

- Cultivation-related waste shall be stored in a place where it will not enter a stream.
- Soil bags and other garbage shall be collected, contained, and disposed of at an appropriate facility, including for recycling where available.
- Pots shall be collected and stored where they will not enter a waterway or create a nuisance.
- Plant waste and other compostable materials be stored (or composted, as applicable) at locations where they will not enter or be blown into surface waters, and in a manner that ensures that residues and pollutants within those materials do not migrate or leach into surface water or groundwaters.
- Imported soil for cultivation purposes shall be minimized. In the event that containers (e.g. grow bags or grow pots) are used for cultivation, reuse of soil shall be maximized to the extent feasible.
- Spent growth medium (i.e. soil and other organic medium) shall be handled to minimize discharge of soil and residual nutrients and chemicals to watercourses. Proper handling of spent soil could include incorporating into garden beds, spreading on a stable surface and revegetation, storage in watertight dumpsters, covering with tarps or plastic sheeting prior to proper disposal.
- Trash containers of sufficient size and number shall be provided and properly serviced to contain the solid waste generated by the project.
- Provide roofs, awnings, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.
- Use lined bins or dumpsters to reduce leaking of liquid waste. Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on.

- Make sure trash container areas are screened or walled to prevent off-site transport of trash. Consider using refuse containers that are bear-proof and/or secure from wildlife.
- Refuse shall be removed from the site on a frequency that does not result in nuisance conditions, transported in a manner that they remain contained during transport, and the contents shall be disposed of properly at a proper disposal facility.
- Ensure that human waste disposal systems do not pose a threat to surface or ground water quality or create a nuisance. Onsite treatment systems should follow applicable County ordinances for human waste disposal requirements, consistent with the applicable tier under the State Water Resources Control Board Onsite Waste Treatment System Policy.
- Install buffer strips, bioswales, or vegetation downslope of cultivation areas to filter runoff of chemicals from irrigation.
- Irrigate at rates to avoid or minimize runoff.
- Regularly inspect and repair leaks in mains and laterals, in irrigation connections, or at the ends of drip tape and feeder lines.
- Design irrigation system to include redundancy (i.e., safety valves) in the event that leaks occur, so that waste of water is prevented and minimized.
- Recapture and reuse irrigation runoff (tailwater) where possible, through passive (gravity-fed) or active (pumped) means.
- Construct retention basins for tailwater infiltration; percolation medium may be used to reduce pollutant concentration in infiltrated water. Constructed treatment wetlands may also be effective at reducing nutrient loads in water.
- Ensure that drainage and/or infiltration areas are located away from unstable or potentially unstable features.
- Regularly replace worn, outdated or inefficient irrigation system components and equipment.
- Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter.
- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Evaluate irrigation water, soils, growth media, and plant tissue to optimize plant growth and avoid over-fertilization.
- All chemicals shall be stored in a manner, method, and location that ensures that there is no threat of discharge to waters of the State.
- Products shall be labeled properly and applied according to the label.
- Use integrated pest management strategies that apply pesticides only to the area of need, only when there is an economic benefit to the grower, and at times when runoff losses are least likely.
- Periodically calibrate pesticide application equipment.
- Use anti-backflow devices on water supply hoses, and other mixing/loading practices designed to reduce the risk of runoff and spills.

- Petroleum products shall be stored with a secondary containment system such as a pan or a tub
- Throughout the rainy season, any temporary containment facility shall have a permanent cover and side-wind protection, or be covered during non-working days and prior to and during rain events.
- Materials shall be stored in their original containers and the original product labels shall be maintained in place in a legible condition. Damaged or otherwise illegible labels shall be replaced immediately.
- Bagged and boxed materials shall be stored on pallets and shall not be allowed to accumulate on the ground. To provide protection from wind and rain throughout the rainy season, bagged and boxed materials shall be covered during non-working days and prior to rain events.
- Have proper chemical and fertilizer storage instructions posted at all times in an open and conspicuous location.
- Prepare and keep a spill prevention and cleanup plan onsite when dealing with any hazardous materials.
- Keep ample supply of appropriate spill clean-up material near storage areas.
- Plant cover crops to boost soil fertility, improve soil texture, and protect from storm caused sediment runoff.

APPENDIX G: STREAM CLASSIFICATION CRITERIA

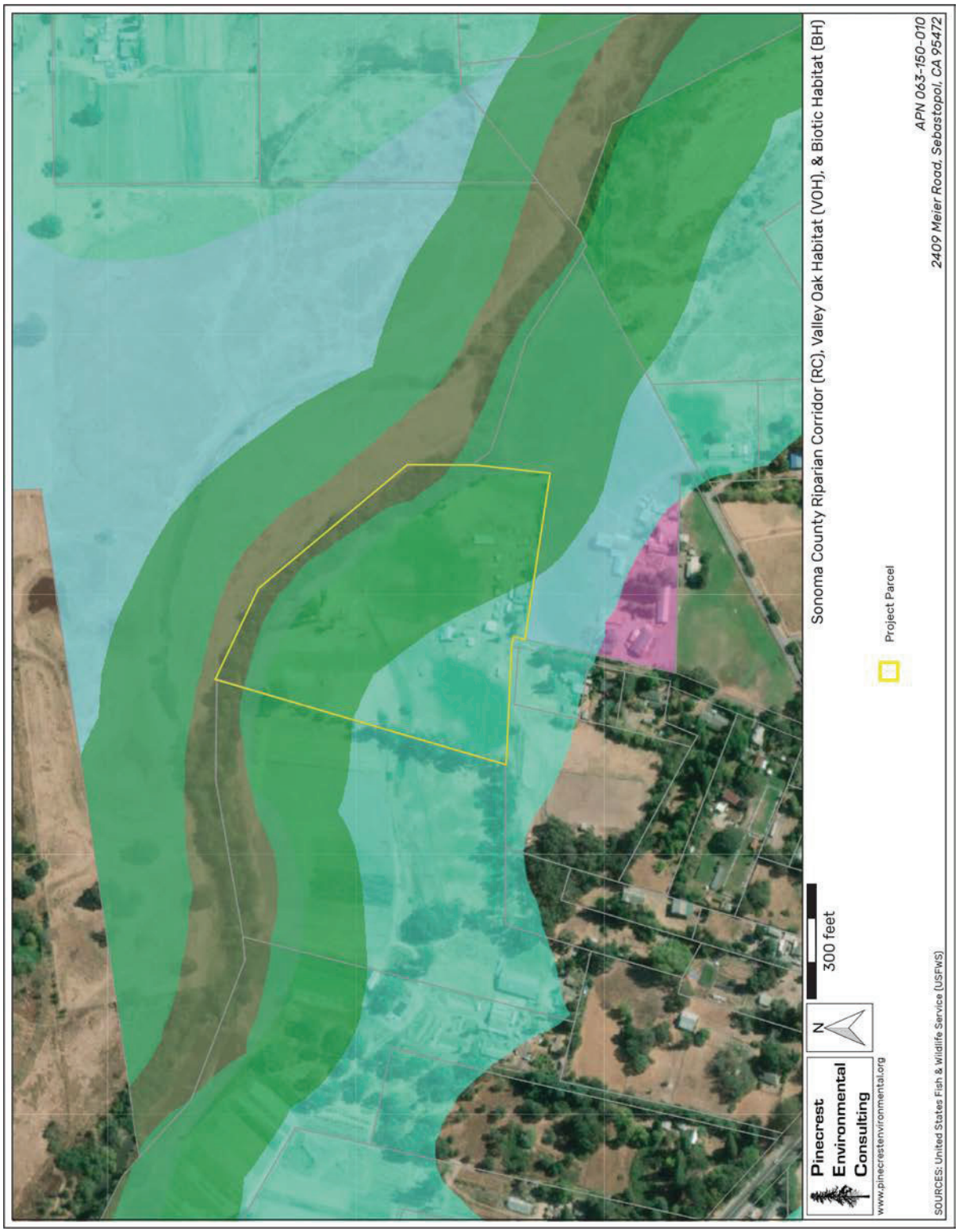
The following stream classification criteria were copied form the California Department of Forestry & Fire Protection *Forest Practice Rules* (CALFIRE 2017) and is widely used by many state and local agencies. Most state and local jurisdictions require setbacks of 50, 100, and 150 feet from Class III, II, and I streams, respectively (as shown in Figure 3) although greater setbacks may be required in some jurisdictions.

Watercourse – a natural or artificial channel through which water flows.

- Perennial watercourse (Class I*):
  1. In the absence of diversions, water is flowing for more than nine months during a typical year,
  2. Fish always or seasonally present onsite or includes habitat to sustain fish migration and spawning, and/or
  3. Spring: an area where there is concentrated discharge of ground water that flows at the ground surface. A spring may flow any part of the year. For the purpose of this Policy, a spring does not have a defined bed and banks.
- Intermittent watercourse (Class II*):
  1. In the absence of diversions, water is flowing for three to nine months during a typical year,
  2. Provides aquatic habitat for non-fish aquatic species,
  3. Fish always or seasonally present within 1,000 feet downstream, and/or
  4. Water is flowing less than three months during a typical year and the stream supports riparian vegetation.
- Ephemeral watercourse (Class III*): In the absence of diversion, water is flowing less than three months during a typical year and the stream does not support riparian vegetation or aquatic life. Ephemeral watercourses typically have water flowing for a short duration after precipitation events or snowmelt and show evidence of being capable of sediment transport.
- Other watercourses (Class IV*): Class IV watercourses do not support native aquatic species and are man-made, provide established domestic, agricultural, hydroelectric supply, or other beneficial use.

*Except where more restrictive, stream class designations are equivalent to the Forest Practice Rules Water Course and Lake Protection Zone definitions (California Code of Regulations, title 14, Chapter 4. Forest Practice Rules, Subchapters 4, 5, and 6 Forest District Rules, Article 6 Water Course and Lake Protection).

APPENDIX H: SONOMA COUNTY SPECIAL HABITAT TYPES



BIOTIC ASSESSMENT

2515 GRAVENSTEIN HIGHWAY SOUTH [APN 063-150-024]
SONOMA COUNTY, CALIFORNIA

Submitted to:

Patchwork Farms
P.O. Box 1083
Sebastopol, California 95473

Prepared by:

Pinecrest Environmental Consulting
6425 Telegraph Avenue #8
Oakland, California 94609
(510) 881-3039

Project No. NFF001

Pinecrest Environmental Consulting

January 12, 2018 (revised July 25 & December 4, 2018)

TABLE OF CONTENTS

1.0 INTRODUCTION 3

1.1 PURPOSE 3

1.2 LOCATION 3

1.2.1 Site Overview 3

1.2.2 Landforms & Water Features 4

1.2.3 Existing Structures 4

1.2.4 Regional Land Uses 4

1.3 METHODS 4

1.3.1 Records Search & Literature Review 4

1.3.2 Field Surveys 5

2.0 RESULTS 6

2.1 NATURAL COMMUNITIES IN THE EVALUATION AREA 6

2.2 NATURAL COMMUNITIES WITHIN THE PROJECT SITE 6

2.2.1 Agricultural Fields 6

2.2.2 Pasture & Developed Areas 7

2.3 WILDLIFE 7

2.4 WETLANDS & STREAMS 8

3.0 SUMMARY & CONCLUSIONS 9

4.0 REGULATORY FRAMEWORK 10

4.1 FEDERAL ENDANGERED SPECIES ACT 10

4.2 CALIFORNIA ENDANGERED SPECIES ACT 10

4.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT 10

4.4 CLEAN WATER ACT 11

4.5 CALIFORNIA WATER QUALITY REGULATORY PROGRAMS 11

5.0 REFERENCES 12

FIGURE 1: REGIONAL TOPOGRAPHY 13
FIGURE 2: EXISTING STRUCTURES 14
FIGURE 3: BUFFERS & SETBACKS 15
FIGURE 4: REGIONAL PLANT COMMUNITIES 16
FIGURE 5: ONSITE PLANT COMMUNITIES 17
FIGURE 6: PHOTOGRAPH OF IRRIGATED PASTURE 18
FIGURE 7: PHOTOGRAPH OF RIPARIAN CORRIDOR AND FIELD 19
FIGURE 8: PHOTOGRAPH OF AGRICULTURAL FIELD 20
FIGURE 9: PHOTOGRAPH OF POTENTIAL WETLAND 21
FIGURE 10: PHOTOGRAPH OF DEVELOPED AREAS 22

APPENDIX A: SPECIAL-STATUS SPECIES CONSIDERED 23

APPENDIX B: SPECIES ENCOUNTERED 38

APPENDIX C: CNDDB OCCURRENCES 41

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this Biotic Assessment is to evaluate the existence of special-status species and/or habitats, as well as assess the potential for special-status species listed in Appendix A to occur on or near the site of proposed *Cannabis* cultivation activities, pursuant to Sonoma County Ordinance No. 6189, Section 26-88-254(f)(8). This Biotic Assessment also analyzes the potential for jurisdictional wetlands and other waters of the U.S. to exist onsite, as well as landforms potentially subject to California Department of Fish and Wildlife (CDFW) jurisdiction, including dry creeks, washes, swales, gullys, and other erosional features.

1.2 LOCATION

1.2.1 Site Overview

The project site is located at 2515 Gravenstein Highway in unincorporated Sonoma County, 2.3 miles southeast of Sebastopol, 5.9 miles southwest of the City of Santa Rosa, and 14.3 miles east of Bodega Bay and the Pacific Ocean (Figure 1). The project is located on Assessor's Parcel Number 063-150-024, is 16.4 acres, is zoned Diverse Agriculture (DA), is located in Groundwater Availability Zone 1, is not subject to a Williamson Act contract, and is under the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB).

There is one County-designated Riparian Corridor (RC) that runs along the northern parcel boundary associated with the Laguna de Santa Rosa (Figure 3). All possible cultivation areas are within County-designated Valley Oak Habitat (VOH). Approximately 1.2 acres of County-designated Biotic Habitat (BH) are located onsite, associated with the Laguna de Santa Rosa (Figure 3). There is no State or Federally designated Critical Habitat for any species onsite. The nearest Critical Habitat is associated with California Tiger Salamander (CTS) approximately 0.5 miles to the east.

There is one occurrence in the California Natural Diversity Database of Sebastopol meadowfoam (*Limnanthes vinculans*) near the western parcel boundary that was registered on April 28, 2009 in the vicinity of the seasonally wet secondary channel to the Laguna de Santa Rosa that runs east-west through the center of the property (Figure 5 and Appendix C). No seedlings or flowers of Baker's meadowfoam were observed at the time of the survey, as elaborated further in Sections 2 & 3, below, although this does not preclude existence of Baker's meadowfoam onsite. The nearest occurrences of special status animals are CTS (*Ambystoma californiense*) located 0.55 miles offsite to the northeast, and another occurrence of CTS located 1.18 miles southeast of the project site (Appendix C).

A survey of aerial maps and property databases also revealed that the proposed site is more than 300 feet from all occupied residences on adjacent parcels, and is also more than 1000 feet away from sensitive uses including schools and substance abuse treatment centers (Figure 1).

1.2.2 Landforms & Water Features

Hydrologically, the parcel sits in the middle of the Llano de Santa Rosa (Santa Rosa Plain), that is drained to the north by the Laguna de Santa Rosa (Figure 2). There are no active channels onsite and most of the rainwater that falls either infiltrates into the shallow water table or collects in abandoned river channel that exists in the middle of the site (Figure 3 & 5). Runoff and subsurface flow from the project site move north and west from the project site eventually ending up in the Laguna de Santa Rosa. The Laguna de Santa Rosa then flows north through pastureland, vineyards, and rural residential developments for another 10 miles before the confluence with Mark West Creek, which flows west for another 3.6 miles before the confluence with the Russian River south of Mirabel Park. The Russian River then flows west for another 25 miles through steeply incised, densely forested canyons before the confluence with the Pacific Ocean at Jenner.

1.2.3 Existing Structures

Existing structures are restricted to the southern half of the parcel and consist of an occupied residence, an agricultural barn, and several outbuildings (Figure 10). The parcel is accessed via graded gravel driveway that branches off of Gravenstein Highway and extends approximately 1000 feet north before branching off again to the southeast, and continuing for another 300 feet before entering the project parcel. The northern half of the parcel is accessed by several dirt tracks that extend north from the barn area and also from the adjacent parcel. The southeast portion of the parcel is a fence and irrigated pasture with several goats (Figure 6).

1.2.4 Regional Land Uses

Land uses in the immediate vicinity of the project parcel are predominantly rural residences, orchards, vineyards, and dairies. Farther to the east the habitat becomes increasingly developed until reaching CA-101. To the west the habitat continues to be predominantly dairy grazing land until reaching the town of Sebastopol. To the south is predominantly rural residences and to the north is predominantly undeveloped pastureland.

1.3 METHODS

1.3.1 Records Search & Literature Review

Based on a review of the literature and all relevant databases, we compiled a list of special-status plant and animal species that are known to occur within 5 miles of the project site, or that occupy habitats that are known to be present on or near the project site (Appendix A). Sources of information referenced include the California Natural Diversity Database (CNDDB 2017), U.S. Fish and Wildlife Service Environmental Conservation Online System (USFWS 2017), the California Native Plants Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2017), and the knowledge of PEC staff familiar with the species and habitats of Sonoma County.

Additional information on sensitive habitats including wetlands was obtained from the USFWS National Wetlands Inventory (NWI 2017), the Sonoma County Vegetation Mapping and Lidar Program (SCWA 2017), and the County of Sonoma Permit and Resource Management Geographical Information Systems (GIS) databases (PRMD 2017).

Plant species included here are State or Federally Endangered or Threatened, and/or considered Rare by CDFW, and/or are recognized as special-status species by the CNPS or CDFW. Animal species included here are designated as State or Federally Endangered or Threatened, and/or California Species of Special Concern, and/or Fully Protected species by the CDFW. In addition, nests of most native bird species, regardless of their regulatory status, are protected from take or harassment under the Migratory Bird Treaty Act (MBTA) and California Fish and Wildlife Code.

1.3.2 Field Surveys

A wildlife and botanical survey was conducted at the site on December 7, 2017. The temperature was normal for this time of year, approximately 60 degF in the morning, increasing to 70 degF in the afternoon. The weather was sunny with a slight breeze and no clouds. Beginning with the southern, most easily accessible portion of the property, the entire project site was surveyed on foot by Dr. Christopher T. DiVittorio, recording the location and identity of all plant and animal species encountered. Plant voucher specimens were taken of any species that were not identifiable in the field, and that were not likely to be special-status.

The vast majority of species were identifiable at the time of the survey, although some had to be identified based on vegetative parts. Photographs were taken of any plants that were identified solely based on vegetative characters, although most species onsite were able to be identified with little difficulty. The field survey was conducted by dividing the outdoor portions of the parcel into zones and cataloging all of the species found in each zone. Each zone was surveyed by walking in parallel lines until the whole zone was covered. Notes are also taken in each zone documenting the general site characteristics and current land uses. Notes were also taken regarding any surface erosional features that may require remediation.

Botanical specimens were taken back to the laboratory for identification if identification was not possible in the field. If species were not flowering at the time of the survey, and morphological characteristics indicated that the species may be special-status, notes were made for a follow-up visit. Birds and nests were identified by call and with binoculars. Vocalizations, scat, tracks, feathers, burrows, nests, and molts were used for identification of animals present onsite. Any onsite aquatic habitats were observed for a minimum of ten minutes without movement in order to observe animals that may hide when approached.

2.0 RESULTS

2.1 NATURAL COMMUNITIES IN THE EVALUATION AREA

Using field surveys, knowledge of PEC staff, and a search of the Sonoma County Vegetation Map (SCWA 2017) within five miles of the project area ("Biological Resources Evaluation Area"), all of the natural communities present around the project site were assessed. Regionally, the dominant vegetation type is rural residences and irrigated and nonirrigated pasture, with some patches of vernal pools and vineyards (Figure 4). The onsite communities consist of rural residential development, nonirrigated agricultural fields, irrigated pasture, and portions of riparian and wetland habitat (Figure 5).

2.2 NATURAL COMMUNITIES WITHIN THE PROJECT SITE

The community descriptions below are organized based on the zones that were surveyed, and the floristic results presented in Appendix B. Overall, the parcel consists of open agricultural fields in the northern half, and pasture and developed areas in the southern half. There is a seasonal wetland in the center of the parcel formed by the abandoned channel of the Llano de Santa Rosa. On the western margin of this seasonal wetland is a CNDDB occurrence of Sebastopol meadowfoam (*Limnanthes vinculans*) from 2009 that coincides with the abandoned streamchannel (Appendix C). Sebastopol meadowfoam was not observed at the time of the survey, although this does not preclude its existence onsite since this survey was not timed to coincide with the flowering time of the species. Sebastopol meadowfoam may furthermore may have existed as seedlings or in the seed bank that were not detectable at the time of the survey in early December despite the adequate rainfall in the preceding two months to fill the seasonal wetland at the bottom of the abandoned streamchannel. Further discussion of avoidance of this feature is described in Section 3.0, below).

2.2.1 Agricultural Fields

The vast majority of the northern portion of the property south of the riparian buffer and north of the irrigated pastures is comprised of organically farmed agricultural fields (Figure 8). This zone is the location that the client has communicated is most likely to be used for cultivation purposes in the future. The plants in and around this area are typical of highly disturbed ruderal grasslands and included slender oats (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceous*), cultivated radish (*Raphanus sativus*), black mustard (*Brassica nigra*), lamb's quarters (*Chenopodium album*), turkey mullein (*Croton setiger*), velvet grass (*Holcus lanatus*), silver hairgrass (*Aira caryophyllea*), crane's bill geranium (*Geranium molle*), English plantain (*Plantago lanceolata*), bristly ox-tongue (*Helminthotheca echioides*), hairy vetch (*Vicia hirsuta*), smooth cat's ear (*Hypochaeris glabra*), white clover (*Trifolium repens*), common mallow (*Malva neglecta*), chickweed (*Stellaria media*), curly dock (*Rumex crispus*), Italian thistle (*Carduus pycnocephalus*), reed canarygrass (*Phalaris arundinaceae*), Italian rye (*Festuca perennis*), foxglove (*Digitalis purpurea*),

and common groundsel (*Senecio vulgaris*). On the north edge of the field associated with the riparian corridor (Figure 6) are several Valley Oaks (*Quercus lobata*) to 18", Pacific willow (*Salix lasiandra*), Oregon ash (*Fraxinus latifolia*), Fuller's teasel (*Dipsacus fullonum*), and many of the herbs and grasses mentioned above.

2.2.2 Pasture & Developed Areas

Plant species occupying developed areas in the southern portion of the parcel (Figure 10) included bottlebrush (*Callistemon* spp.), domesticated iris (*Iris* spp.), Eucalyptus (*Eucalyptus* spp.), Valley Oak (*Quercus lobata*) to 24", strawberry (*Fragaria ananassa*), white stemmed filaree (*Erodium moschatum*), narrow-leaved miner's lettuce (*Claytonia parvifolia*), milk thistle (*Silybum marianum*), crabgrass (*Digitaria sanguinalis*), agave (*Agave* spp.), apple (*Malus pumila*), domesticated rose (*Rosa* spp.), coast redwood (*Sequoiah sempervirens*), bull thistle (*Cirsium vulgare*), rosemary (*Rosmarinus officinalis*), American carrot (*Daucus pusillus*), chicory (*Cichorium intybus*), and spiny cockleburr (*Xanthium spinosum*).

Between the pasture and agricultural field is a seasonal wetland (Figure 9) that follows an abandoned stream channel, that is shown on County maps as wetland (Figure 5) and that has topography and vegetation consistent with a wetland but that would need to be delineated to be sure of the boundaries. Plants in this area included giant reed (*Arundo donax*), poison hemlock (*Conium maculatum*), pennyroyal (*Mentha pulegium*), Himalayan blackberry (*Rubus armeniacus*), spiny sowthistle (*Sonchus asper*), reed fescue (*Festuca arundinaceae*), California bedstraw (*Galium californicum*), American water plantain (*Alisma triviale*), tall flatsedge (*Cyperus eragrostis*), and green algae (*Cladophora* spp.).

In the western portion of this feature there is a CNDDB occurrence of Sebastopol meadowfoam, although no seedlings were positively identified at the time of the survey in early December. It is possible however that seedlings or seeds of Sebastopol meadowfoam still exist onsite and so this wetland area should be avoided as described in Section 3.0, below.

2.3 WILDLIFE

Wildlife observed onsite included western fence lizard (*Sceloperous occidentalis*), American robin (*Turdus migratorius*), song sparrow (*Melospiza meloida*), great blue heron (*Ardea herodias*), and semipalmated plover (*Charadrius semipalmatus*). Pacific tree frog (*Pseudacris regilla*) was observed indirectly by their call. Evidence of pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*) were observed in the form of excavation mounds and runways in the grass. Scat of coyote (*Canis latrans*) and California mule deer (*Odocoileus hemonious californicus*) was also observed in the grassland portions of the parcel. Numerous domesticated animals were observed onsite including cow (*Bos taurus*), burrow (*Equus africanus*), cat (*Felis silvestris*), and dog (*Canis lupus*).

Although no individuals of California tiger salamander (CTS; *Ambystoma californiense*) were observed directly onsite, there are CNDDB occurrences of CTS within 1.5 miles of the project site. These occurrences are shown in Appendix C and all exist to the east of the project site and the Llano de Santa Rosa in the zone of Federal Critical Habitat associated with the central Santa Rosa Plain.

There are no occurrences of CTS within 2 miles to the west, north, or south of the project site (Appendix C). Based on these distribution patterns, the location of the project site outside of the core CTS habiat zone, and the presence of moderate barriers to dispersal between the project site and these occurrences, there is a low probability of occurrence of CTS on the parcel. Nonetheless, since this site is within the known dispersal distance of CTS, appropriate avoidance measures should be taken as described in Section 3.0, below.

2.4 WETLANDS & STREAMS

The riparian corridor for the Laguna de Santa Rosa overlaps somewhat with the project parcel (Figure 3), although the majority of the channel and riparian corridor is outside of the parcel. There is one potential wetland in the center of the parcel (Figure 9) in a depression formed by an abandoned stream channel (Figure 5). The depression supports hydrophytic vegetation and algae and likely fills from stormwater. A large berm between the agricultural field and the potential wetland would prevent any overland sediment transport from the field to the wetland. Likewise, a low rise and abundant understory and riparian vegetation would prevent sediment transport off the field into the Laguna de Santa Rosa as well. Other onsite ditches and drainage features are limited, and there are no overland connections with blue-line creeks.

3.0 SUMMARY & CONCLUSIONS

No State or Federal special-status plant species listed in Appendix A were found onsite despite the existence of a known occurrence of Sebastopol meadowfoam in the western portion of the central seasonal wetland (Figure 5 & Appendix C). Although no individuals were positively identified at the time of the survey, there still may be seedlings or a persistent seed bank. A large earthen berm on the north side of the potential wetland (Figure 9) should provide an adequate buffer against sediment discharge or disturbance of the seasonal wetlands. Applicant is not proposing to alter any wetlands, and applicant shall maintain required 50 foot buffers on all sides of any potential wetlands including the central abandoned channel so as to avoid direct impacts or discharge of sediments or pollutants to these potential wetlands. The central disked portion of the site is not appropriate habitat for Sebastopol meadowfoam and should be appropriate for cultivation provided all disturbance to the wetlands including discharge of sediment or dust is avoided. Any future activities onsite that seek to alter wetlands should be preceded by protocol-level surveys before any disturbance of the potential wetlands onsite due to the potential for Sebastopol meadowfoam to exist.

No State or Federal special-status animal species were found onsite and no additional impacts are anticipated from continued use of the northern field for agricultural production. Despite this, there are known occurrences of California tiger salamander (CTS) 0.55 and 1.18 miles east of the project site and thus within migration distance. Appendix C shows the known occurrences of special-status species within approximately 5 miles of the project site, and from this data it is evident that the project site sits outside of the known local distribution of CTS, with no known occurrences within migration distance to the west, north, or south. Based on the existence of this parcel outside of Critical Habitat and outside of the known distribution of CTS, we consider this project to have a very low likelihood of impacting CTS. However, due to the existence of some potential wetlands onsite and the existence of CTS within 1.5 miles, we recommend a biological monitor be present during active earthmoving operations onsite.

No impacts are predicted to any creeks capable of carrying sediment due to the lack of any overland connections with known watercourses. No new erosion is predicted as part of this project, since no major grading or drainage changes are proposed. The central wetland is protected from sediment discharge by a large earthen berm to the north, and by grasses and wetland vegetation to the south. No aspects of the project involve large amounts of earth moving or grading and thus no change to onsite drainages is expected. Onsite drainage is good and no remediation actions are recommended at this time. The only source of potential disturbance to the wetlands is if truck access is required to the northern portion of the property. In this case a wetland delineation should be performed to determine whether the existing truck access to the northern portion of the parcel has a chance to disturb any onsite wetlands.

4.0 REGULATORY FRAMEWORK

4.1 FEDERAL ENDANGERED SPECIES ACT

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over federally-listed threatened and endangered species under the federal Endangered Species Act (FESA). The USFWS also maintains a list of 'proposed' species and candidate species that are not legally protected under the FESA, but are often included in their review of a project as they may become listed in the near future. The FESA protects listed animal species from harm or "take" which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that results in death or injury to a listed species. An activity can be defined as a "take" even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Listed plant species are legally protected from take under FESA if they occur on federal lands. Pursuant to the requirements of the FESA, a federal agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed threatened or endangered species (plants and animals) may be present in the project area and determine whether the proposed project may affect such species. Any activities that could result in the take of a federally-listed species will require formal consultation with the USFWS before project activities commence.

4.2 CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) protects any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered. In accordance with the CESA, the California Department of Fish and Wildlife (CDFW) has jurisdiction over state-listed species (California Fish and Wildlife Code 2070). Take of state-listed species requires a permit from CDFW, which is granted only under strictly limited circumstances. Additionally, the CDFW maintains lists of "species of special concern" that are defined as animal species that appear to be vulnerable to extinction because of declining populations, limited ranges, and/or continuing threats. Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed or proposed endangered or threatened species may be present in the project area and determine whether the proposed project may result in a significant impact on such species.

4.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in FESA and CESA and the section of the California Fish and Wildlife Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts, if it finds that the species meets the criteria of a threatened or endangered species.

4.4 CLEAN WATER ACT

Under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and, depending on the circumstances, may also be subject to Corps jurisdiction. In general, a Corps permit must be obtained before placing fill in wetlands or other waters of the U.S. The type of permit depends on the acreage involved and the purpose of the proposed fill. Minor amounts of fill are sometimes covered by Nationwide Permits, which were established to streamline the permit process for projects with "minimal" impacts on wetlands or other waters of the U.S. An Individual Permit is required for projects that result in more than a minimal impact on jurisdictional areas. The Individual Permit process requires evidence that fill of jurisdictional areas has been minimized to the extent "practicable" and provides an opportunity for public review of the project.

4.5 CALIFORNIA WATER QUALITY REGULATORY PROGRAMS

Pursuant to Section 401 of the federal Clean Water Act and the state's Porter-Cologne Act, projects that are regulated by the Corps must obtain water quality certification from the Regional Water Quality Control Board (RWQCB). This certification ensures that the project will uphold state water quality standards. The RWQCB sometimes asserts jurisdiction over wetlands that the Corps does not (e.g. certain isolated wetlands) and may impose mitigation requirements even if the Corps does not. The CDFW also exerts jurisdiction over the bed and banks of watercourses and water bodies according to provisions of Section 1601to1603 of the Fish and Wildlife Code. The Fish and Wildlife Code requires a Stream Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or water body.

5.0 REFERENCES

Baldwin, B.G., et al. 2012. *The Jepson Manual: Vascular Plants of California.* University of California Press, Berkeley, CA.

California Department of Fish and Wildlife (CDFW). 2017. *California Natural Diversity Database*. CDFW Wildlife and Habitat Data Analysis Branch, Sacramento, CA. https://www.wildlife.ca.gov/data. Accessed on December 5, 2017.

California Native Plant Society (CNPS). 2015. *Inventory of Rare and Endangered Plants*. CNPS, Sacramento, CA. Accessed on December 5, 2017.

Sawyer, J.O., T. Keeler-Wolf, J. Evens. 2009. *Manual of California Vegetation*. California Native Plant Society Press, Sacramento, CA.

Sonoma County Permit and Resource Management Department (PRMD). 2017. *Geographical Information Systems (GIS) databases*. County of Sonoma, Santa Rosa, CA. Accessed on December 5, 2017.

Sonoma County Water Agency (SCWA). 2017. *Sonoma County Vegetation Mapping and Lidar Program.* Sonoma County Agricultural Preservation and Open Space District. http://sonomavegmap.org/. SCWA, Santa Rosa, CA. Accessed on December 5, 2017.

U.S. Fish and Wildlife Service (USFWS). 2017. *Environmental Conservation Online System*. USFWS, Washington, DC. https://ecos.fws.gov/ecp/. Accessed on December 5, 2017.

U.S. Fish and Wildlife Service (USFWS). 2017. *National Wetlands Inventory*. USFWS, Washington, DC. https://www.fws.gov/wetlands/. Accessed on December 5, 2017.

FIGURE 1: REGIONAL TOPOGRAPHY

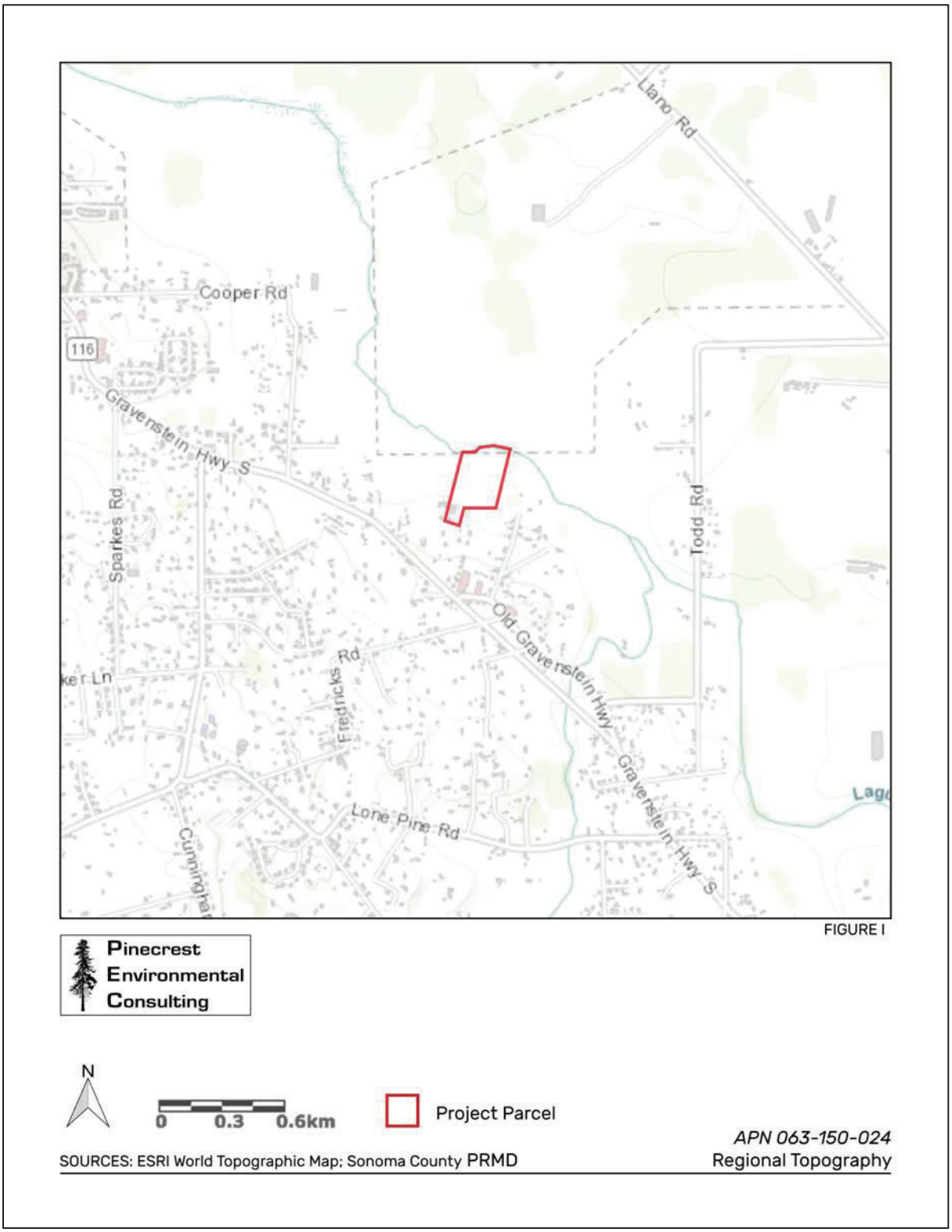


FIGURE 2: EXISTING STRUCTURES

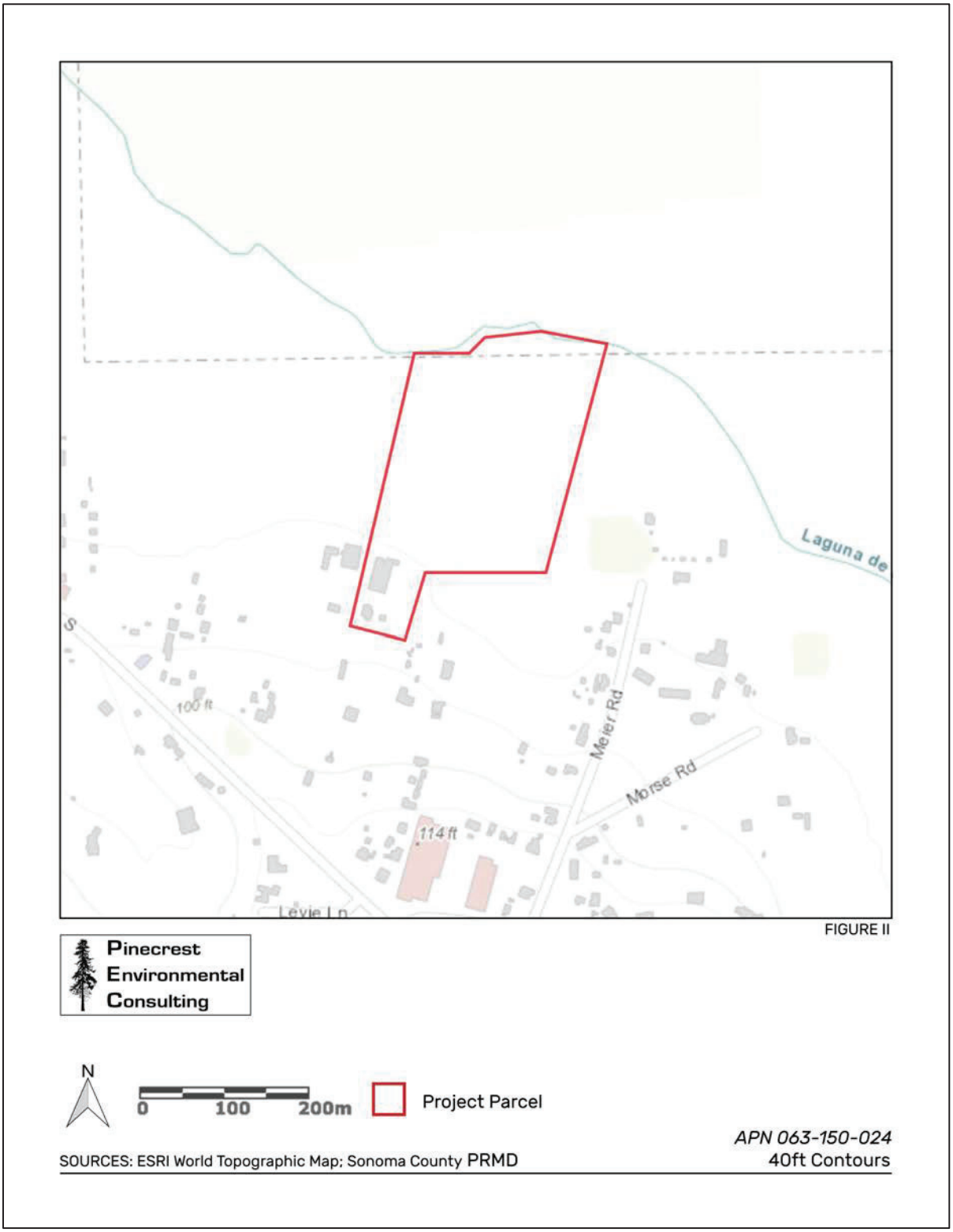


FIGURE 3: BUFFERS & SETBACKS

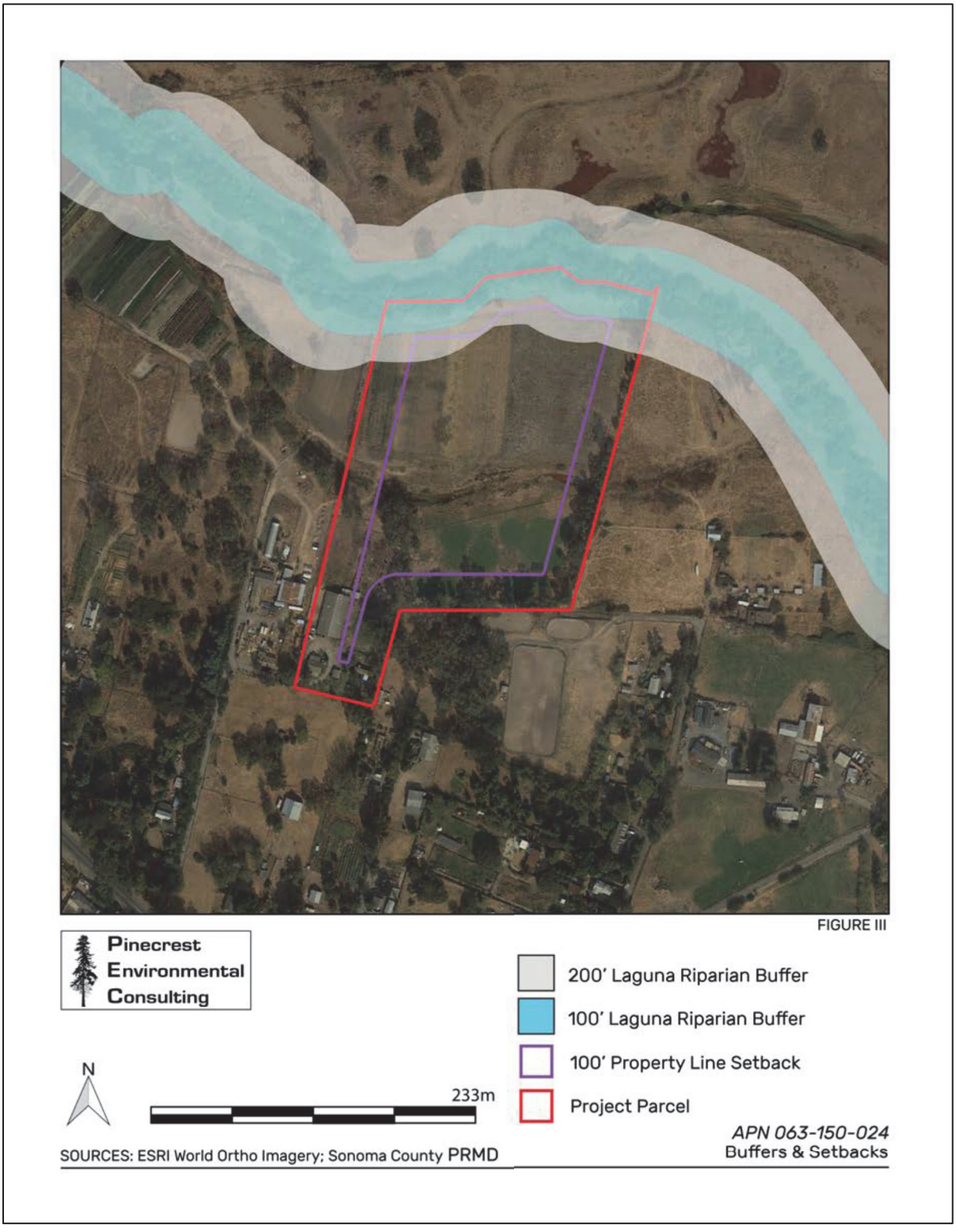


FIGURE 4: REGIONAL PLANT COMMUNITIES

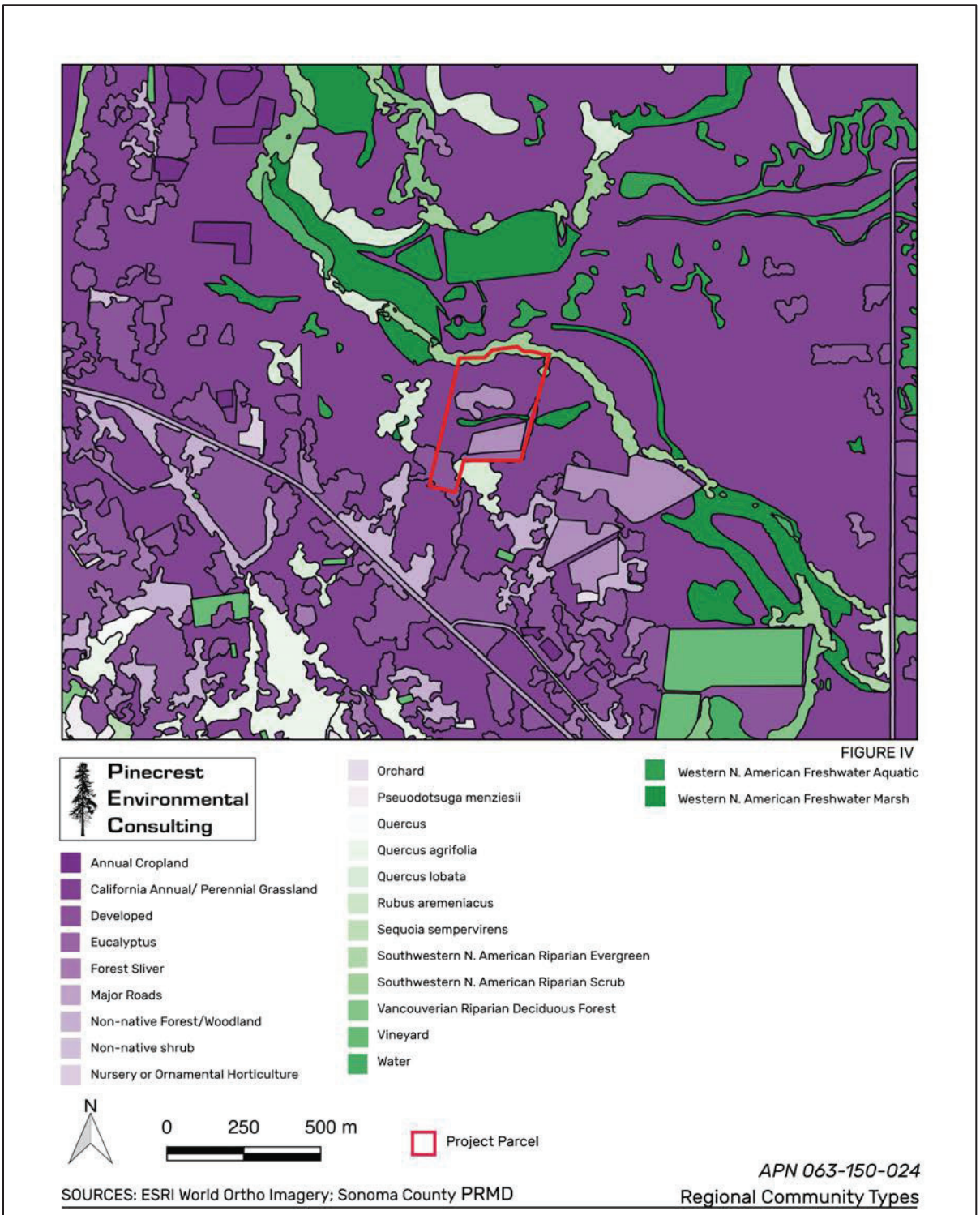


FIGURE 5: ONSITE PLANT COMMUNITIES



FIGURE 6: PHOTOGRAPH OF IRRIGATED PASTURE



FIGURE VI

Pinecrest Environmental Consulting

SOURCE: Dr. Christopher DiVittorio

APN 063-150-024
Photograph of Irrigated Pasture

FIGURE 7: PHOTOGRAPH OF RIPARIAN CORRIDOR AND FIELD



FIGURE VII

Pinecrest Environmental Consulting

SOURCE: Dr. Christopher DiVittorio

APN 063-150-024
Photograph of Riparian Corridor and Field

FIGURE 8: PHOTOGRAPH OF AGRICULTURAL FIELD



FIGURE VIII

Pinecrest Environmental Consulting

SOURCE: Dr. Christopher DiVittorio

APN 063-150-024
Photograph of Agricultural Field

FIGURE 9: PHOTOGRAPH OF POTENTIAL WETLAND



FIGURE IX

Pinecrest Environmental Consulting

SOURCE: Dr. Christopher DiVittorio

APN 063-150-024
Photograph of Potential Wetland

FIGURE 10: PHOTOGRAPH OF DEVELOPED AREAS



FIGURE X

Pinecrest Environmental Consulting

APN 063-150-024

SOURCE: Dr. Christopher DiVittorio

Photograph of Developed Areas

APPENDIX A: SPECIAL-STATUS SPECIES CONSIDERED

The following is a list of special-status plant and animal species generated based on knowledge of the species and habitats of Sonoma County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDB). CNDDB occurrences within 5 miles of the project site are shown in bold.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
Alkalai milk-vetch (*Astragalus tener* var. *tener*)	—/—/1B.2	Valley grasslands, alkali sinks	None: No suitable alkalai habitat exists onsite.
Baker's goldfields (*Lasthenia californica* ssp. *bakeri*)	**—/—/1B.2**	**Coastal grasslands**	**Low: Some grassland habitat exists, although this species prefers coastal habitats.**
Baker's larkspur (*Delphinium bakeri*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists onsite.
Baker's manzanita (*Arctostaphylos bakeri* ssp. *bakeri*)	—/—/1B.1	Serpentine chaparral, mixed evergreen forest	None: No serpentine, chaparral, or forest habitat exists onsite.
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	**—/—/1B.1**	**Vernal pools, riparian woodland**	**Low: Some potential wetland habitat exists onsite.**
Bent flowered fiddleneck (*Amsinckia lunaris*)	—/—/1B.2	Valley grassland, foothill woodland	Low: Some grassland habitat exists onsite.
Big scale balsamroot (*Balsamorhiza macrolepis*)	—/—/1B.2	Valley grassland	Low: Some grassland habitat exists onsite.
Big tarplant (*Blepharizonia plumosa*)	—/—/1B.1	Foothill woodland, chaparral	Very Low: Some grassland habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Blasdale's bent grass (*Agrostis blasdalei*)	—/—/1B.2	Coastal prairie	Low: Some grassland habitat exists onsite.
Blue coast gilia (*Gilia capitata* ssp. *chamissonis*)	—/—/1B.1	Coastal sand dunes	None: No sand dune habitat exists onsite.
Bogg's Lake hedge-hyssop (*Gratiola heterosepala*)	—/—/1B.2	Freshwater marsh, riparian	None: No wetland habitat exists onsite.
Brownish beaked-rush (*Rhynchospora capitellata*)	**—/—/2B.2**	**Freshwater marsh, riparian**	**Low: Some wetland habitat exists onsite.**
Burke's goldfields (*Lasthenia burkei*)	**FE/SE/1B.1**	**Vernal pools**	**Low: No vernal pool habitat exists onsite.**
California alkalai grass (*Puccinellia simplex*)	—/—/1B.2	Grassland, riparian	Very Low: No wetland habitat exists onsite.
California beaked-rush (*Rhynchospora californica*)	**—/—/1B.1**	**Freshwater wetlands**	**Low: Some wetland habitat exists onsite.**
Calistoga ceanothus (*Ceanothus divergens*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists onsite.
Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)	—/—/1B.1	Valley grassland	Very Low: Some grassland habitat exists onsite.
Clara Hunt's milk vetch (*Astragalus claranus*)	—/—/1B.1	Chaparral, grassland	None: No chaparral habitat exists onsite.
Coast lily (*Lilium maritimum*)	—/—/1B.1	Coastal prairie	Low: Some grassland habitat exists onsite.
Coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite, although this species prefers coastal habitats.
Cobb Mountain lupine (*Lupinus sericatus*)	—/—/1B.2	Chaparral, pine forest	None: No chaparral or pine forest habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Colusa layia (*Layia septentrionalis*)	—/—/1B.2	Chaparral, valley grassland	Low: Some grassland habitat exists onsite; no chaparral habitat onsite.
Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*)	—/—/1B.1	Valley grassland, wetlands	Low: Some grassland habitat exists onsite.
Congested hayfield tarplant (*Hemizonia congesta* ssp. *congesta*)	**—/—/1B.2**	**Grassland, coastal scrub**	**Low: Some grassland habitat exists onsite.**
Contra Costa goldfields (*Lasthenia conjugens*)	FE/—/1B.1	Vernal pool	None: No vernal pool habitat exists onsite.
Cunningham marsh cinquefoil (*Potentilla uliginosa*)	**—/—/1A**	**Freshwater marsh**	**Low: Some wetland habitat exists onsite.**
Deceiving sedge (*Carex saliniformis*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Dwarf downingia (*Downingia pusilla*)	**—/—/2B.2**	**Vernal pool, freshwater wetland**	**Low: Some wetland habitat exists onsite.**
Fragrant fritillary (*Fritillaria liliacea*)	**—/—/1B.2**	**Freshwater wetland, coastal prairie**	**Low: Some wetlands exist onsite, although this species prefers coastal habitats.**
Franciscan onion (*Allium peninsulare* var. *franciscanum*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Golden larkspur (*Delphinium luteum*)	**FE/SR/1B.1**	**Chaparral, coastal prairie**	**Very Low: Some grassland habitat exists onsite; no chaparral onsite.**
Greene's narrow-leaved daisy (*Erigeron greenei*)	—/—/1B.2	Serpentine grassland	None: No serpentine habitat exists onsite.
Holly-leaved ceanothus (*Ceanothus purpureus*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*)	—/—/1B.2	Foothill woodland	None: No woodland habitat exists onsite.
Jepson's coyote thistle (*Eryngium jepsonii*)	—/—/4.2	Wetlands and vernal pools	Low: Some wetland habitat exists onsite.
Jepson's leptosiphon (*Leptosiphon jepsonii*)	—/—/1B.2	Chaparral, serpentine grassland	None: No chaparral or serpentine habitat exists onsite.
Kenwood marsh checkerbloom (*Sidalcea oregana* ssp. *valida*)	FE/SE/1B.1	Freshwater wetlands	Very Low: Some wetland habitat exists onsite.
Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*)	—/—/1B.3	Chaparral, foothill woodland	None: No woodland or chaparral habitat exists onsite.
Legenere (*Legenere limosa*)	**—/—/1B.1**	**Freshwater wetland, valley grassland**	**Low: Some wetland habitat exists onsite.**
Livermore tarplant (*Deinandra bacigalupii*)	—/—/1B.1	Grassland	Low: Some grassland habitat exists onsite.
Loch Lomond button-celery (*Eryngium constancei*)	FE/SE/1B.1	Freshwater wetland	Very Low: Some wetland habitat exists onsite.
Many-flowered navarretia (*Navarretia leucocephala* spp. *plieantha*)	—/—/1B.2	Vernal pools	Very Low: Some wetland habitat exists onsite.
Maple leaved checkerbloom (*Sidalcea malachroides*)	—/—/4.2	Coastal prairie, coniferous forest	Very Low: Some grassland habitat exists onsite.
Marin knotweed (*Polygonum marinense*)	—/—/3.1	Coastal salt marsh	None: No coastal salt marsh habitat exists onsite.
Marsh microseris (*Microseris paludosa*)	**—/—/1B.2**	**Northern coastal scrub**	**Very Low: No scrub habitat exists onsite, and this species prefers coastal habitats.**
Marsh pea (*Lathyrus palustris*)	—/—/2B.1	Coastal prairie	Very Low: Some grassland habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Mt. St. Helena morning-glory (*Calystegia collina* ssp. *oxyphylla*)	—/—/4.2	Serpentine chaparral	None: No serpentine habitat exists onsite.
Napa checkerbloom (*Sidalcea hickmanii* ssp. *napensis*)	—/—/1B.1	Chaparral	None: No woodland habitat exists onsite.
Napa false indigo (*Amorpha californica* var. *napensis*)	—/—/1B.2	Forest, woodland	None: No woodland habitat exists onsite.
Narrow-anthered brodiaea (*Brodiaea leptandra*)	—/—/1B.2	Foothill woodland, grassland	Very Low: Some wetland habitat exists onsite.
North Coast semaphore grass (*Pleuropogon hooverianus*)	—/—/1B.1	Freshwater wetland, vernal pools	Very Low: Some wetland habitat exists onsite.
Oval-leaved viburnum (*Viburnum ellipticum*)	**—/—/2B.3**	**Chaparral**	**None: No chaparral habitat exists onsite.**
Pacific gilia (*Gilia capitata* ssp. *pacifica*)	—/—/1B.2	Coastal prairie, woodland, chaparral	Low: Few open areas exist onsite, and species prefers coastal habitats.
Pappose tarplant (*Centromadia parryi* ssp. *parryi*)	—/—/1B.2	Grassland, chaparral	None: No chaparral habitat exists onsite.
Perennial goldfields (*Lasthenia californica* ssp. *macrantha*)	—/—/1B.2	Northern coastal scrub	Very Low: Some grassland habitat exists onsite.
Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*)	**—/—/1B.2**	**Grassland, chaparral**	**Very Low: Parasitic plant, typical host plants not known from the property, no chaparral onsite.**
Petaluma popcornflower (*Plagiobothrys mollis* var. *vestitus*)	—/—/1A	Coastal salt marsh	None: No coastal salt marsh habitat exists onsite.
Pitkin Marsh lily (*Lilium pardalinum* ssp. *pitkinense*)	**FE/SE/1B.1**	**Freshwater wetlands**	**Low: Some wetland habitat exists onsite.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Pitkin Marsh paintbrush (*Castilleja uliginosa*)	FE/SE/1A	Freshwater wetlands	Very Low: Some wetland habitat exists onsite.
Point Reyes checkerbloom (*Sidalcea calycosa* ssp. *rhizomata*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habiat exists onsite.
Point Reyes salty bird's beak (*Chloropyron maritimum* ssp. *palustre*)	—/—/1B.2	Coastal salt marsh	None: No salt marsh habitat exists onsite.
Raiche's red ribbons (*Clarkia concinna* spp. *raichei*)	—/—/1B.1	Coastal scrub	None: No coastal scrub habitat exists onsite.
Rincon Ridge ceanothus (*Ceanothus confusus*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists onsite.
Rincon Ridge manzanita (*Arctostaphylos stanfordiana* ssp. *decumbens*)	—/—/1B.1	Chaparral	None: No chaparral habitat exists onsite.
Round-headed beaked-rush (*Rhynchospora globularis*)	**—/—/2B.1**	**Freshwater wetlands, riparian**	**Medium: Some wetland habitat exists onsite.**
Round-leaved filaree (*California macrophylla*)	—/—/1B.2	Foothill grassland	Medium: Some grassland habitat exists onsite.
Saline clover (*Trifolium hydrophilum*)	**—/—/1B.2**	**Wetland, riparian**	**Low: Some wetland habitat exists onsite.**
San Joaquin spearscale (*Extriplex joaquinana*)	—/—/1B.2	Shadscale scrub, valley grassland	Low: No alkalai scrub habitat exists.
Santa Cruz microseris (*Stebbinsoseris decipiens*)	—/—/1B.2	Coastal scrub	None: No coastal scrub habitat exists onsite.
Sebastopol meadowfoam (*Limnanthes vinculans*)	**FE/SE/1B.1**	**Freshwater wetland, vernal pools**	**High: Some wetland habitat exists onsite. One occurrence from 2009.**
Short-leaved evax (*Hesperevax sparsiflora var. brevifolia*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Soft salty bird's beak (*Chloropyron molle* ssp. *molle*)	FE/ST/1B.2	Coastal salt marsh	None: No salt marsh habitat exists onsite.
Sonoma alopecurus (*Alopecurus aequalis* var. *sonomensis*)	**FE/—/1B.1**	**Freshwater wetland, vernal pools**	**Low: Some wetland habitat exists onsite.**
Sonoma beardtongue (*Penstemon newberryi* var. *sonomensis*)	—/—/1B.3	Chaparral	Very Low: Some grassland habitat exists onsite.
Sonoma ceanothus (*Ceanothus sonomensis*)	—/—/1B.2	Chaparral	None: No chaparral habitat exists onsite.
Sonoma spineflower (*Chorizanthe valida*)	**—/—/1B.1**	**Coastal prairie**	**Very Low: Some cultivated grassland habitat exists onsite.**
Sonoma sunshine (*Blennosperma bakeri*)	**—/—/1B.1**	**Valley grassland, freshwater wetland**	**Very Low: Some wetland habitat exists onsite.**
Supple daisy (*Erigeron supplex*)	—/—/1B.2	Coastal prairie	Very Low: Some grassland habitat exists onsite.
Swamp harebell (*Campanula californica*)	**—/—/1B.2**	**Coastal prairie, freshwater wetlands**	**Low: Some wetlands exist on site, although this species prefers coastal habitats.**
Thin-lobed horkelia (*Horkelia tenuiloba*)	**—/—/1B.2**	**Chaparral**	**None: No chaparral habitat exists onsite.**
Thurber's reed grass (*Calamagrostis crassiglumis*)	—/—/2B.1	Coastal scrub, freshwater wetland	Very Low: Some wetland habitat exists outside of the project area, although this species prefers coastal habitats.
Two-fork clover (*Trifolium amoenum*)	—/—/1B.1	Grassland, wetland	Medium: Some grassland habitat exists onsite.
Vine Hill ceanothus (*Ceanothus foliosus* var. *vineatus*)	**—/—/1B.1**	**Chaparral**	**None: No chaparral habitat exists onsite.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Vine Hill clarkia (*Clarkia imbricata*)	FE/SE/1B.1	Chaparral, grassland	None: No chaparral habitat exists onsite.
Vine Hill manzanita (*Arctostaphylos densiflora*)	—/SE/1B.1	Chaparral	None: No chaparral habitat exists onsite.
Western leatherwood (*Dirca occidentalis*)	—/—/1B.2	Foothill woodland, chaparral	None: No chaparral or woodland habitat exists onsite.
White beaked-rush (*Rhynchospora alba*)	—/—/2B.2	Wetlands, riparian	Very Low: Some wetland habitat exists onsite.
White flowered rein orchid (*Piperia candida*)	—/—/1B.2	Yellow pine forest	None: No forest habitat exists onsite.
Wolly headed gilia (*Gilia capitata* ssp. *tomentosa*)	—/—/1B.1	Coastal prairie	Low: Some grassland habitat exists onsite.
MOSSES, LICHENS & LIVERWORTS			
Methuselah's beard lichen (*Dolichousnea longissima*)	—/—/4.2	Old growth conifer and hardwood forests	None: No old growth Douglas fir forest exists onsite.
Slender silver moss (*Anomobryum julaceum*)	—/—/4.2	Rocky substrates in forests	None: No forest habitat exists onsite.
Coastal triquetrella (*Triquetrella californica*)	—/—/1B.2	Forest, woodland	None: No forest habitat exists onsite.
FISH			
Gualala roach (*Lavinia symmetricus parvipinnis*)	—/SSC/—	Freshwater streams	None: No suitable streams exist onsite.
Navarro roach (*Lavinia symmetricus navarroensis*)	—/SSC/—	Freshwater streams	None: No suitable streams exist onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Sacramento splittail (*Pogonichthys macrolepidotus*)	—/SSC/—	Low gradient freshwater streams	None: No suitable streams exist onsite.
Steelhead Central California Coast DPS (*Oncorhynchus mykiss irideus*)	FT/—/—	Freshwater streams, open ocean and estuaries	None: No suitable streams exist onsite.
Steelhead Northern California DPS (*Oncorhynchus mykiss irideus*)	FT/—/—	Freshwater streams, open ocean and estuaries	None: No suitable streams exist onsite.
Tidewater goby (*Eucyclogobius newberryi*)	FE/SSC/—	Brackish coastal lagoons and streams	None: No brackish coastal lagoons exist onsite.
AMPHIBIANS & REPTILES			
Alameda whipsnake (*Masticophis lateralis euryxanthus*)	FT/ST/—	Grasslands	Very Low: Some suitable wetland habitat exists onsite.
California giant salamander (*Dicamptodon ensatus*)	—/SSC/—	Wetlands and riparian areas	Very Low: Some wetland habitat exists onsite.
California glossy snake (*Arizona elegans occidentalis*)	—/SSC/—	Grasslands	Low: Some habitat exists onsite.
California red-legged frog (*Rana draytonii*)	**FT/SSC/—**	**Vernal pools, seasonal pools, stock ponds, and associated grasslands**	**Low: No suitable breeding habitat exists onsite. Some suitable estivation habitat exists onsite.**
California tiger salamander (*Ambystoma californiense*)	**FT/SSC/—**	**Ponds, streams, drainages, and associated uplands**	**Low: No suitable wetland habitat exists onsite. Some suitable estivation habitat exist onsite.**
Foothill yellow-legged frog (*Rana boylii*)	—/SSC/—	Wetlands, riparian, streams and ponds	None: No suitable wetland habitat exists onsite.
Red bellied newt (*Taricha rivularis*)	—/SSC/—	Woodland streams, riparian corridors	None: No suitable stream habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Western pond turtle (*Emys marmorata*)	**—/SSC/—**	**Slow-moving creeks, streams, ponds, rivers, ditches; sandy banks and fields for nesting**	**Low: No suitable pond habitat exists onsite.**
INVERTEBRATES			
Behren's silverspot butterfly (*Speyeria zerene behrensii*)	FE/SSC/—	Coastal prairie	None: Requires blue violet to reproduce; none onsite.
California brackishwater snail (*Tryonia imitator*)	—/SSC/—	Brackish wetlands	None: No suitable wetland habitat exists onsite.
California freshwater shrimp (*Syncaris pacifica*)	**FE/SE/—**	**Freshwater ponds, streams**	**Very Low: No suitable wetland habitat exists onsite.**
California linderiella (*Linderiella occidentalis*)	**—/SSC/—**	**Vernal pools**	**Very Low: No vernal pool habitat exists onsite.**
Crotch bumble bee (*Bombus crotchii*)	—/SSC/—	Grassland and chaparral	Medium: Some grassland habitat exists onsite.
Leech's skyline diving beetle (*Hydroporus leechi*)	—/SSC/—	Freshwater ponds	None: No suitable pond habitat exists onsite.
Myrtle silverspot butterfly (*Speyeria zerene myrtleae*)	FE/SSC/—	Coastal prairie, chaparral	None: Requires western dog violet for reproduction; none onsite.
Monarch butterfly California overwintering Population #1 (*Speyeria zerene myrtleae*)	—/SSC/—	Large trees required for roosting.	None: Site is not near the coast.
Obscure bumble bee (*Bombus caliginosus*)	—/SSC/—	Grassland, foothill woodland, chaparral	Medium: Some grassland habitat exists onsite.
Opler's longhorn moth (*Adela oplerella*)	—/SSC/—	Usually associated with *Platystemon* (creamcups)	Very Low: No suitable host plants onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*)	—/SSC/—	Freshwater ponds	None: No suitable pond habitat exists onsite.
Tomales isopod (*Caecidotea tomalensis*)	—/SSC/—	Ponds and streams	None: No suitable pond or stream habitat exists onsite.
Western bumblebee (*Bombus occidentalis*)	**—/SSC/—**	**Grassland**	**Medium: Some grassland habitat exists onsite.**
Vernal pool adrenid bee (*Andrena blennospermatis*)	**—/SSC/—**	**Upland areas near vernal pools**	**None: No vernal pool habitat exists onsite.**
BIRDS			
American perigrine falcon (*Falco peregrinus anatum*)	—/SSC/—	Forages in open grasslands, nests in trees	Very Low: No suitable nesting or foraging habitat exists.
Bank swallow (*Riparia riparia*)	FE/SE/—	Migratory, typically found near lakes and streams	None: No suitable stream habitat exists onsite.
Black swift (*Cypseloides niger*)	—/SSC/—	Cliff faces near water	None: No suitable stream habitat exists onsite.
Burrowing owl (*Athene cunicularia*)	—/SSC/—	Grasslands	Very Low: Some suitable grassland habitat exists onsite.
California black rail (*Laterallus jamaicensis coturniculus*)	FE/SE/—	Coastal salt marshes and mudflats	None: No suitable salt marsh habitat exists onsite.
California horned lark (*Eremophila alpestris actia*)	—/SSC/—	Herbaceous vegetation, chaparral	None: No suitable scrub or chaparral habitat exists onsite.
Cooper's hawk (*Accipiter cooperii*)	—/WL/—	Forages over open grassland.	Low: Some suitable foraging habitat exists onsite. No suitable nesting habitat onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Ferruginous hawk (*Buteo regalis*)	—/SSC/—	Forages over open grassland. Nests in old-growth trees.	Low: Little suitable foraging habitat exists onsite. No suitable nesting habitat onsite.
Golden eagle (*Aquila chrysaetos*)	—/SSC/—	Forages over open grassland. Nests in old-growth trees.	Very Low: Little suitable foraging habitat exists onsite. No suitable nesting habitat.
Grasshopper sparrow (*Ammodramus savannarum*)	—/SSC/—	Forages over open grassland.	Low: Some suitable foraging habitat exists onsite.
Ridgway's rail (*Rallus obsoletus obsoletus*)	FE/SE/—	Mudflats and tidal sloughs	None: No suitable tidal habitat exists onsite.
Salt marsh common yellowthroat (*Geothlypis trichas sinuosa*)	—/SSC/—	Forages in grasslands and nests in dense freshwater marshes	Very Low: No suitable nesting habitat exists. Some suitable foraging habitat.
San Pablo song sparrow (*Melospiza melodia samuelis*)	—/SSC/—	Forages in grasslands and nests in dense freshwater marshes	Very Low: No suitable nesting habitat exists. Some suitable foraging habitat.
Tricolored blackbird (*Agelaius tricolor*)	**—/SSC/—**	**Forages in grasslands and nests in dense freshwater marshes**	**Low: No suitable nesting habitat exists onsite. Some suitable foraging habitat onsite.**
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	**—/SE/—**	**Woodland, riparian**	**Very Low: No suitable nesting habitat exists. Some suitable foraging habitat exists.**
White-tailed kite (*Elanus leucurus*)	**—/CFP/—**	**Prefers to nest in marshes adjacent to deciduous forests.**	**Very Low: No suitable nesting habitat exists. Some suitable foraging habitat exists.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
MAMMALS			
American badger (*Taxidea taxus*)	**—/SSC/—**	**Open grassland habitats with plenty of prey. Prefers complex topography for burrows and cover.**	**Low: Insufficient habitat complexity exists for this territorial animal.**
Big free-tailed bat (*Nyctinomops macrotis*)	—/SSC/—	Forages over open areas, roots in trees or caves	Low: Some suitable foraging habitat available.
Burrowing owl (*Athene cunicularia*)	—/SSC/—	Forages over open areas, nests in grasslands	Low: No suitable nesting habitat available.
Fringed myotis (*Myotis thysanodes*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Low: Some foraging habitat exists in the project area.
Hoary bat (*Lasiurus cinereus*)	—/SSC/—	Forages over open areas, roots in trees or caves at high altitude.	None: Foraging limited to high altitudes; no suitable roosts in the project area.
Long-legged myotis (*Myotis volans*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Very Low: Some foraging habitat exists; no suitable roosts in the project area.
North American porcupine (*Erethizon dorsatum*)	**—/SSC/—**	**Require rocky areas or trees for dens, abundant open space for foraging.**	**Very Low: Some foraging habitat exists; little suitable den habitat in the project area.**
Pallid bat (*Antrozous pallidus*)	—/SSC/—	Common in open dry habitats with rocky areas for roosting.	Very Low: Some foraging habitat exists; no suitable roosts in the project area.
Sonoma tree vole (*Arborimus pomo*)	—/SSC/—	Old growth Douglas fir canopies.	None: No forest habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Townsend's big-eared bat (*Corynorhinus townsendii*)	—/SSC/—	Hibernate in mines or caves, roost in man made structures and caves, forages at night.	Low: Few man-made structures or caves exist onsite that are suitable for roosting. Some habitat for foraging exists.
Western red bat (*Lasiurus blossevillii*)	—/SSC/—	Forages over open areas, roots in trees or caves.	Very Low: No suitable nesting habitat exists, some suitable foraging habitat exists.
Yuma myotis (*Myotis yumanensis*)	—/SSC/—	Forages over open areas, roots in trees or caves.	Very Low: No suitable nesting habitat exists, some suitable foraging habitat exists.
HABITATS			
Coastal & Valley Freshwater Marsh (CVFM)	—	—	**Medium: Some wetland habitat exists onsite.**
Coastal Brackish Marsh (CVFM)	—	—	None: No brackish marshes exist onsite.
Northern Hardpan Vernal Pool (NHVP)	—	—	**Low: No vernal pool habitat exists onsite.**
Northern Vernal Pool (NVP)	—	—	None: No vernal pool habitat exists onsite.
Sycamore Alluvial Woodland (SAW)	—	—	None: No woodland habitat exists onsite.
Valley Needlegrass Grassland (VNG)	—	—	Low: Some grassland habitat exists onsite.

[1] Status:

Federal
FE = Federally Endangered Species
FT = Federally Threatened Species

State
SE = State Endangered Species
ST = State Threatened Species
SR = State Rare (applies to plants only)
SSC = California Species of Special Concern
CFP = California Fully Protected Species

CNPS (applies to plants only)
List 1B = plants considered rare, threatened, or endangered in California and elsewhere
List 2B = plants rare, threatened or endangered in California, but more common elsewhere
List 4 = plants of limited distribution

[2] USFWS

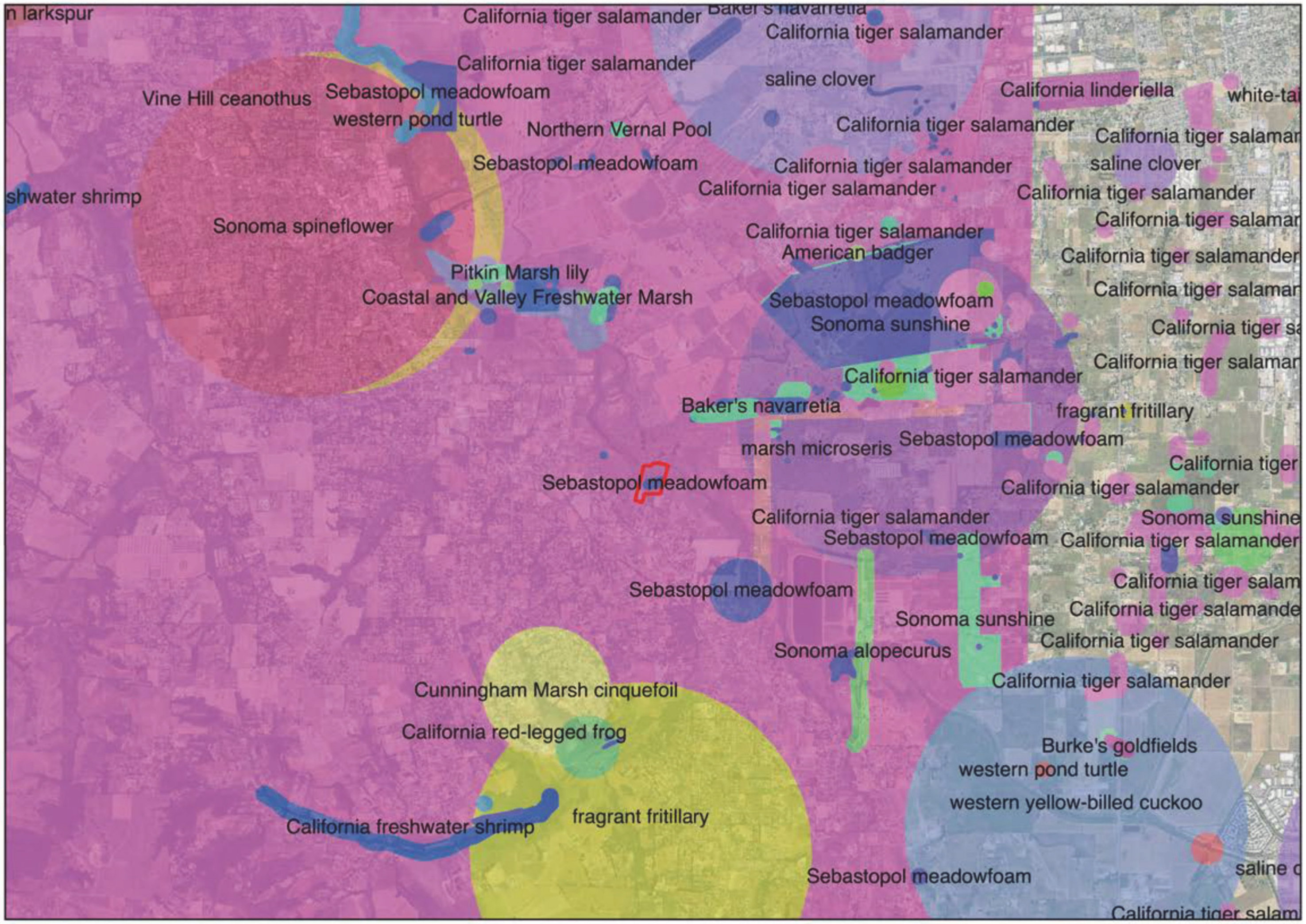
APPENDIX B: SPECIES ENCOUNTERED

Plants
Agave spp.
Aira caryophyllea
Alisma triviale
Arundo donax
Avena barbata
Brassica nigra
Bromus diandrus
Bromus hordeaceous
Callistemon spp.
Carduus pycnocephalus
Chenopodium album
Cichorium intybus
Cirsium vulgare
Cladophora spp.
Claytonia parvifolia
Conium maculatum
Croton setiger
Cyperus eragrostis
Daucus pusillus
Digitalis purpurea
Digitaria sanguinalis
Dipsacus fullonum
Erodium moschatum
Eucalyptus spp.
Festuca arundinaceae
Festuca perennis
Fragaria ananassa
Fraxinus latifolia
Galium californicum
Geranium molle

Helminthotheca echioides
Holcus lanatus
Hypochaeris glabra
Iris spp.
Malus pumila
Malva neglecta
Mentha pulegium
Phalaris arundinaceae
Plantago lanceolata
Quercus lobata
Quercus lobata
Raphanus sativus
Rosa spp.
Rosmarinus officinalis
Rubus armeniacus
Rumex crispus
Salix lasiandra
Senecio vulgaris
Sequoiah sempervirens
Silybum marianum
Sonchus asper
Stellaria media
Trifolium repens
Vicia hirsuta
Xanthium spinosum
Animals
Ardea herodias
Bos taurus
Canis latrans
Canis lupus
Charadrius semipalmatus
Equus africanus
Felis silvestris
Melospiza meloida
Microtus californicus
Odocoileus hemonious californicus

Pseudacris regilla
Sceloperous occidentalis
Thomomys bottae
Turdus migratorius

APPENDIX C: CNDDB OCCURRENCES



Appendix C

Pinecrest Environmental Consulting

N

0 1 2 km

Project Parcel ● Spotted Owl Observations

APN 063-150-024

SOURCES: ESRI World Topographic Map; Sonoma County PRMD; CNDDB

CNDDB Species

Appendix B – Cultural Resources and Tribal Cultural Resources Evaluation

PAGE LEFT INTENTIONALLY BLANK

ARCHAEOLOGICAL SURVEY REPORT

FAMILY FLORALS
2409 MEIER ROAD
SEBASTOPOL, CALIFORNIA

APN 063-150-010

Prepared for:

Adam Davidoff
Family Florals
2505 Gravenstein Highway South
Sebastopol, California, 95472

Prepared by:

Dean Martorana, M.A., RPA
Alta Archaeological Consulting
15 Third Street
Santa Rosa, CA 95401

ALTA 2020-83

Key Words: USGS 7.5' Sebastopol Quad; T6N, R19W; 3-acre survey; Negative Findings.

December 2020

TABLE OF CONTENTS

I. SUMMARY OF FINDINGS 1
II. INTRODUCTION 1
III. PROJECT DESCRIPTION AND PROJECT AREA 1
IV. REGULATORY CONTEXT 5
California Environmental Quality Act 5
V. BACKGROUND 6
Environment 6
Ethnography 6
Prehistory 7
History 7
VI. SOURCES CONSULTED 8
Records Search 8
Historic Map Review 10
Ethnographic Literature Review 11
Native American Communication 12
VII. FIELD METHODS 12
VIII. STUDY FINDINGS AND MANAGEMENT RECOMMENDATIONS 12
Study Findings 12
Management Recommendations 13
IX. REFERENCES CITED 15

LIST OF FIGURES

Figure 1. Project Vicinity 3
Figure 2. Project Location 4
Figure 3. Survey Coverage 14

LIST OF TABLES

Table 1. Summary of Previous Cultural Resources Studies within Search Radius 9
Table 2. Previously Recorded Cultural Resources in the Search Radius 10

ATTACHMENTS

Attachment A – Records Search Results
Attachment B – Native American Communication
Attachment C – Photographic Record

I. SUMMARY OF FINDINGS

This document reports the findings of the cultural resources assessment that was conducted for the proposed project area and provides the inventory methods and results as required for compliance with State of California regulations. The study consisted of a literature review to identify any previously recorded cultural resources that could be affected by the proposed project and a field survey to locate any cultural resources that may exist, but have not yet been recorded. Fieldwork was conducted on December 2, 2020 by Dean Martorana, ALTA staff archaeologist. The survey entailed a cultural resources inventory of the project area, including the surrounding area, which totaled about 3-acres. No cultural resources potentially eligible to the California Register of Historic Resources (CRHP) were identified.

The cultural resource inventory was performed based on information obtained at the Northwest Information Center of the California Historical Resources Information System, as well as on direct observation of site conditions and other information generally available as of December 2020. The conclusions and recommendations herein are based on information available at the time of the records search and field survey. Further information may be identified in the future that could substantially change the conclusions found herein.

Information obtained from these sources in this timeframe is assumed to be correct and complete. Alta Archaeological Consulting (ALTA) does not assume any liability for findings or lack of findings based upon misrepresentation of information presented to ALTA or for items that are not visible, made visible, accessible, or present at the time of the project area inventory.

The project, as presently designed, is not anticipated to have a significant impact to historical resources.

II. INTRODUCTION

A cultural resources inventory was conducted to satisfy requirements of the California Environmental Quality Act (CEQA) of 1970, and the responsibilities codified in Public Resource Code sections 5097, and it's implementing guidelines 21082 and 21083.2. An archaeological field survey was completed for the purpose of identifying cultural resources within the project area. Fieldwork was completed by ALTA on December 2, 2020. This survey was designed for the purposes of identifying cultural resources within the project area. The resulting document addresses these regulatory responsibilities under Public Resource Code sections 5097, and 21082 and 21083.2.

III. PROJECT DESCRIPTION AND PROJECT AREA

The proposed project (Project) entails the reconfiguration of an existing grazing parcel for cannabis cultivation, totaling about 2-acres, on a single 13-acre parcel (APN 063-150-010). No infrastructure is proposed, nor are raised beds necessary for the cultivation. Irrigation supply is currently installed that is adequate for this type of agriculture. All access to the parcel will be conveyed through existing roads. Several outbuildings and barns, including a small single family residence are extant on the parcel. None of these buildings or structures will be affected by the Project.

The project area is located about 3-miles east of downtown Sebastopol, California in Sonoma County, California (Figure 1). The physical address is 2409 Meier Road, Sebastopol, California. The project is located on the Sebastopol Quad; Township 6 North, Range 19 West; Unsectioned; Mount Diablo Base and Meridian (Figure 2). The project area is about 2-acres.



Figure 1. Project Vicinity

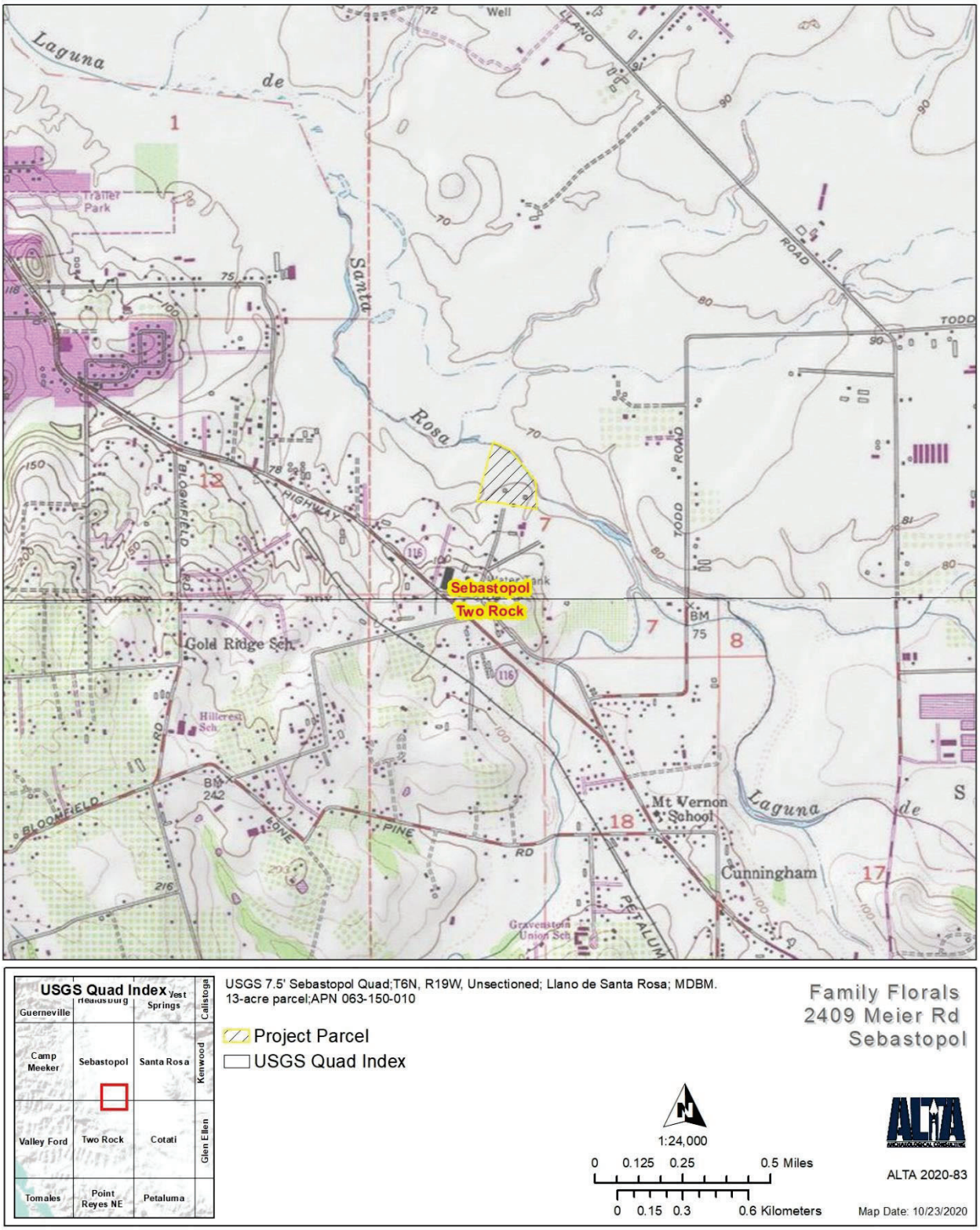


Figure 2. Project Location

IV. REGULATORY CONTEXT

This section briefly discusses the nature and extent of State regulations that apply to the Project. The proposed Project is subject to CEQA as amended; and its implementing regulations and guidelines, codified in Title 14 of the California Code of Regulations (CCR), which provide agencies guidance for compliance with environmental regulations.

California Environmental Quality Act

The CEQA applies to certain projects requiring approval by State and/or local agencies. Property owners, planners, developers, as well as State and local agencies, are responsible for complying with CEQA's requirements regarding the identification and treatment of historical resources. Applicable California regulations are found in California PRC Sections 5020 through 5029.5 and Section 21177, and in CEQA (CCR Sections 15000 through 15387). CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (PRC Section 21084.1). A substantial adverse change includes demolition, destruction, relocation, or alteration that would impair the historical significance of a resource (PRC Section 5020.1). PRC Section 21084.1 stipulates that any resource listed in, or eligible for listing in, the California Register of Historical Resource (CRHR) is presumed to be historically or culturally significant. If a resource is determined *ineligible* for listing on the CRHR, the resource is released from management responsibilities and a project can proceed without further cultural resource considerations.

Under CEQA, cultural resources that will be affected by an undertaking must be evaluated to determine their eligibility for listing in the CRHR (PRC Section 5024.1(c)). For a cultural resource to be deemed eligible for listing, it must meet at least one of the following criteria:

1. is associated with events that have made a significant contribution to the broad patterns of California History and cultural heritage; or
2. is associated with the lives of persons important to our past; or
3. embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possess high artistic value; or
4. has yielded or is likely to yield, information important to prehistory or history.

The eligibility of archaeological sites is usually evaluated under Criterion 4 –its potential to yield information important to prehistory or history. Whether or not a site is considered important is determined by the capacity of the site to address pertinent local and regional research themes. The process for considering cultural resources on CEQA projects is essentially linear, although in practice it may overlap or be compressed. Evaluating prehistoric properties involves four basic tasks: (1) development of an archaeological research design (2) field excavations, (3) laboratory analysis, and (4) report preparation and eligibility determination.

V. BACKGROUND

As the significance of cultural resources is best assessed with regard to environmental and cultural contexts, descriptions of the natural and cultural setting of the project region are presented below.

Environment

The project area is situated within the Coast Range geologic province (Jennings and Strand 1960). The North Coast Range is comprised of a geologic feature unique to California, the Franciscan Formation, which dictates the vegetative communities (Schoenherr 1992:274-276). The Franciscan Formation is comprised of serpentine, sandstone, and other sedimentary rocks. This area is characterized by a Mediterranean climate that averages about 50-60 inches of rainfall annually. The winters are cool and wet, and the summers are warm and dry.

The project is located in Sonoma County on a flat at approximately 75 feet above mean sea level. The project parcel is situated in a valley on the south side of the Laguna de Santa Rosa. Laguna de Santa Rosa is a perennial river, which runs along the northern border of the project parcel. As the largest tributary of the Russian River, the Laguna drains a 254-square-mile watershed which encompasses nearly the entire Santa Rosa Plain. Indeed, this watershed "…is a unique ecological system covering more than 30,000 acres and comprised of a mosaic of creeks, open water, perennial marshes, seasonal wetlands, riparian forests, oak woodlands and grasslands." (Laguna Foundation 2020).

The project area is in a rural residential area characterized by small farms. Native and non-native annual and perennial grasses and various forbs thrive throughout the parcel; a small grove of eucalyptus separate the two fields along the creek edge. Dense deciduous forest and blackberry thicket is located on the north side of the project parcel along the creek.

Ethnography

The Southern Pomo, who inhabited this region prior to Euro-American intrusion, were one of several groups of Pomo Indians distributed over the lands of Mendocino, Lake, and Sonoma Counties. Seven distinct and mutually unintelligible languages are recognized under the rubric of Pomo (Barrett 1908; Kroeber 1925; McLendon & Oswalt 1978). These languages are delineated by geographic divisions, which include: Northern, Central, Southern, Eastern, Southeastern, Northeastern, and Southwestern (Stewart 1943). The following ethnographic summary is not intended as a thorough description of Southern Pomo culture but instead is meant to provide a background to the present cultural resource investigation with specific references to the project area. In this section, the past tense is sometimes used when referring to native peoples because this is a historical study. This convention is not intended to suggest that Southern Pomo people only existed in the past. To the contrary, many Pomo groups have strong cultural and social identities today.

Prior to Euro-American occupation, the project area was occupied by speakers of the Southern Pomo language. Southern Pomo speakers occupied central to southern Sonoma County from the coast to the Russian River, extending just south of Gualala in the north, to Sebastopol in the south (McLendon & Oswalt 1978:278). The Southern Pomo had a narrow extension of territory in the north that allowed them access to the coast, where they went to in the summer to collect seafood. In the winter the Southern Pomo would move inland to fish in the Russian River, hunt deer and gather

acorns (McLendon & Oswalt 1978:276). The Southern Pomo population was decimated early on by missionization, especially in the southern part of Sonoma County around Santa Rosa (McLendon & Oswalt 279). The closest ethnographic village to the project area was the Southern Pomo village of *bati'klētcawī*, meaning "at elderberry house," located in the southern part of modern day Sebastopol (Barrett 1908: 213). It was a large village at one time and there were still a few Southern Pomo families living in the village area in the early 1900s (Barrett 1908:214). No ethnographically described resources are situated within the current project area.

Prehistory

Over half a century of archaeological investigations in the North Coast Ranges has revealed a record of hunter-gatherer occupation spanning 12,000 years. The cultural chronology of this area is best described as part of the overall cultural chronology for the central North Coast Ranges. A number of cultural chronologies have been developed for this region (cf. Basgall 1982; Fredrickson 1974; Fredrickson and White 1988; Hildebrandt and Hayes 1984; Jones and Hayes 1993; Layton 1990; Meighan 1955; White and King 1993; and White et al. 2002).

In his 1974 doctoral dissertation David A. Fredrickson proposed five chronological periods and related cultural patterns. The Paleo-Indian Period (10,000 to 6000 BC) is represented as a hunting adaptation characterized by large fluted projectile points. The Lower Archaic Period (6000 to 2000 BC) is distinguished by an emphasis on plant exploitation as evidenced by high frequencies of milling tools. The Middle Archaic (3000-1000 BC) is characterized by the introduction of mortar and pestle technology and the assumed exploitation of acorns. The Upper Archaic Period (1000 BC to AD 100) is represented growing social complexity marked by status differentiation, complex trade networks, and the development of "group oriented religious activities" (Fredrickson 1974: 48). The Emergent Period (AD 500 to Historic times) is marked by the use/introduction of bow and arrow technology, expansion of exchange relations, and the establishment of clearly defined territorial systems.

History

Early Exploration

The first European to set foot in present day Sonoma County was the Spanish explorer Juan Francisco de la Bodega y Cuedra in the year 1775. While Europeans had been exploring the California coast since the 16th century, they had failed to make land in Sonoma until then. The Spanish claimed the region for Spain and by the 1800s were colonizing the area. In 1823 the Mission San Francisco Solano de Sonoma was established.

Early Settlement

The first non-native peoples to explore the inland areas of Sonoma County were Russian and Aluet trappers staged from Fort Ross on the Sonoma Coast. Fort Ross was the southern-most outpost of Russian settlement in North American from 1812 to 1842 (Beck and Haase 1974). During the Mexican Period (1822-1847) large private rancho land grants were being issued to prominent Spanish families, and the land in Sonoma was being used heavily for the grazing of livestock and ranching. Between 1840 and 1845 American settlers began arriving in the County and, along with agriculture and livestock, the logging industry began to prosper (Fredrickson et. al 1979).

In 1845, the Rancho Caňada de Jonive was granted to James Black, which encompassed 10,787 acres of land west of what would later become Sebastopol (Beck & Haase 1974). The next year a

three square league section of the Rancho Llano de Santa Rosa, located in the western part of Santa Rosa valley, was granted to Joaquin Carrillo. He built a ranch house on the banks of the Laguna de Santa Rosa (Miller 1967). By 1855, H. P. Morris settled on a 120 acre claim named the settlement Pine Grove. The name was changed to Sebastopol in 1856. Three years later the Sebastopol post office was officially established (Gudde 2004).

Railroads

One of the earliest railroads in Sonoma County was the Petaluma and Haystack railroad. The railroad started construction in 1862 and was the precursor to the Sonoma and Marin Railroad built in 1876. The San Francisco and North Pacific Railroad, incorporating the Sonoma and Marin Railroad in 1877, connected Haystack Landing to a ferry connection in San Rafael (Stindt 1964:13). The railroads were built to support hauling lumber, then freight and finally as part of the burgeoning tourism industry. This continued until the great depression and the collapse of the lumber market caused many railroad closures throughout the county (Stindt 1964:53).

At the turn of the 20th century the Petaluma and Santa Rosa Electric Railroad was built, including a stop in Sebastopol along its route. The railroad incorporated the two city's electric railways in 1903 and began construction to Sebastopol in 1904. The railroad was bought by the Northwest Pacific Railroad in 1932 at which time passenger service was discontinued. The rail was shut down in 1946 (Stindt 1964:54).

Logging Industry

In Sonoma County, market logging began in 1836 when the first commercial sawmill, Rancho El Molino, was built by Captain John Cooper on the Russian River. Soon thereafter in 1842, Steven Smith's steam-powered mill was constructed in the town of Bodega. The timber boom, that was to deforested much of the Russian River valley and its surrounding slopes, did not occur until the growth of towns in the 1850s.

Logging of redwoods was the economic focus of the area for a period of about 45 years, from 1865 to the 1910s. Intensive logging combined with wild fires depleted the redwood forests resulting in a decline in the timber industry. As one of the main railroad hubs in the area, the timber shipping industry was big business for the town of Sebastopol. Following the decline of the timber industry, economic activity shifted to focus on agricultural (Stindt 1964).

Gold Ridge

After the majority of the trees in the Sebastopol area were cut down by logging activities. Farmers recognized the local sandy soil was well suited to produce apple orchards, which were soon grown in abundance. The area became known as the "Gold Ridge" due to apple orchards littering the land between Laguna de Santa Rosa and the crest of the western hills beyond Green Valley with apples (Menefee 1873). Other Signiant agricultural production in the Sebastopol area include raspberries, cherries, blueberries and fresh vegetables, which has been farmed since the early 1900s.

VI. SOURCES CONSULTED

Records Search

A records search was requested by Dean Martorana, ALTA staff archaeologist (File Number 20-0793) at the Northwest Information Center (NWIC) located on the campus of Sonoma State

University. The NWIC, an affiliate of the State of California Office of Historic Preservation is the official state repository of archaeological and historical records and reports for an 18-county area that includes Sonoma County. The records search requested was an update from a previous request conducted directly adjacent to the current project area, (File No. 17-02779), prepared in 2018 by ALTA Archaeological Consulting. This request included a review of all study reports on file within a one-quarter mile radius of the Project Area. Sources consulted include archaeological site and survey base maps, survey reports, site records, and historic General Land Office (GLO) maps. Only one additional report was unique to the current search radius, S-00442.

Included in the review were:

- *California Inventory of Historical Resources* (California Department of Parks and Recreation 1976)
- *California Historical Landmarks* for Marin County (CA-OHP 1990)
- *California Points of Historical Interest* (CA-OHP 1992)
- *Built Environment Resource Directory (BERD)* (CA-OHP January 2020), including the National Register of Historic Places, California Historical Landmarks, and California Points of Historical Interest

Review of historic registers and inventories indicate that no historical landmarks or points of interest are present in the Project Area. No National Register listed or eligible properties are located within the 0.5-mile visual area of the Project Area.

Review of archaeological and historical site and survey maps revealed that eight cultural resource studies have been previously performed that intersect with the search radius (Table 1).

Table 1. Summary of Previous Cultural Resources Studies within Search Radius

Number	Author(s)	Year	Report Title
S-000442	Thomas M. Origer and David A. Fredrickson	1977	Cultural Resource Record Review for the Proposed Santa Rosa Effluent Disposal System.
S-000477	Thomas M. Origer and David A. Fredrickson	1977	An Archaeological Survey of the Proposed Santa Rosa Wastewater Disposal System, Sonoma County, California
S-000851	John F. Hayes	1978	An Archaeological Survey of the Merrill Property, Sebastopol, Sonoma County, California, A.P. 63-17
S-000860	Robert J. Jackson	1978	An Archaeological Investigation of the Toussaint Property, 2601 Gravenstein Highway, Sebastopol, Sonoma County, California, County File Number MS-6304.
S-010554	Suzanne B. Stewart	1989	An Archaeological Study for the Todd Road Pipeline Project, near Santa Rosa, Sonoma County, California
S-012123	Leigh Jordan	1990	Archaeological Archival Study for the City of Santa Rosa Wastewater Project Alternatives: Bloomfield Reservoir Site, Laguna Wetland Restoration Study Areas, Ocean Pipeline Alignment, and the South County Alternative/Lakeville Pipeline Alignment and Reservoir Site, Sonoma County, California
S-048798	Anne Bloomfield	1989	Cultural Heritage Survey of the City of Santa Rosa, California
S-048798	Dan Peterson, Anne Bloomfield, Dennis Harris, Adrian	1990	City of Santa Rosa Cultural Heritage Survey; Historic Properties Inventory

Number	Author(s)	Year	Report Title
	Praetzellis, Jack Bookwalter, and Paula Cook		

Table 2. Previously Recorded Cultural Resources in the Search Radius

Primary	Trinomial	Type	Description
P-49-000606	CA-SON-000656	Prehistoric	Midden Site
P-49-001022	CA-SON-001094	Prehistoric	Lithic Scatter Site
P-49-002278	CA-SON-001769	Prehistoric	Lithic Scatter Site
P-49-002805		Historic	CA2290A (water tower)
P-49-003201		Historic	2555 South Gravenstein Highway

Site P-49-000606 (CA-SON-656) is a prehistoric midden site consisting of a moderately dense shell midden, mortar fragment, point fragment and a chalcedony core (Origer & Weichel 1970). The site is located approximately 800-feet west of the project area.

Site P-49-001022 (CA-SON-1094) is a prehistoric lithic scatter site consisting of a moderate scatter of obsidian flakes and some possible flaked tools (Hayes 1978). The site is located approximately 0.4 miles southeast of the project area.

Site P-49-002278 (CA-SON-1769) is a prehistoric lithic scatter site consisting of a sparse scatter of Annadel flakes (Stewart 1989). The site is located approximately 0.3 miles southeast of the project area.

Site P-49-002805 is a historic-era site consisting of a 130 foot tall water tank on steel support legs (Billat 2000). The site is located approximately 0.3 miles south of the project area.

Site P-49-003201 is a historic-era site consisting of a small wood frame 1 ½ story residence (Hope 1992). The site is located approximately 0.25 miles south of the project area.

Historic Map Review

Review of historic maps of the area was completed to better understand the timing of development within the project area and recognize historic features. The following historic maps were reviewed as part of this investigation.

General Land Office
- 1856 Plat Map Township 6 North, Range 8 West. June 19, 1856.
- 1866 Plat Map Township 6 North, Range 8 West. September 29, 1866.

Reynolds & Proctor
- 1898 Illustrated Atlas of Sonoma County, Santa Rosa, T6N R8W, Page 57.

Thos. H. Thompson & Co.
- 1877 New Historical Atlas of Sonoma County, Farm Map No. 8, page 50.

United States Geological Survey
1935 Sebastopol Topographic Map, 48,000 scale.
1942 Sebastopol Topographic Map, 62,500 scale.
1954 Sebastopol Topographic Map, 24,000 scale.
1968 Sebastopol Topographic Map, 62,500 scale
1980 Sebastopol Topographic Map, 24,000 scale.

The earliest map of the area (1856) depicts the project area as part of an 80 acre parcel (GLO 1856). By 1866 the project area has been subdivided into its current parcel size to the south of Laguna de Santa Rosa and totaling 16.33 acres (GLO 1866). The project parcel remained unowned until post 1877 (Thompson & Co. 1877). In 1898, the project parcel is part of a 131.66 acre parcel owned by S.C. and W.P. Morse (Reynolds & Proctor 1898). At this time Sebastopol and the surrounding areas had been developing rapidly, including the development of roads, residences, schools and churches (Thompson 1877; Reynolds & Proctor 1898). The project area remained undeveloped from the 1930s into the 1960s (USGS 1935, 1942, 1954, 1968). The earliest record of structures on the project parcel is in 1954 with the dwelling and barns mapped on the southeast corner of the project parcel (USGS 1980). Over the course of the mid-1900s the city of Sebastopol and surrounding area continued to develop into its current status (USGS 1980).

Ethnographic Literature Review
Available ethnographic literature was reviewed to identify cultural resources in the project vicinity. The following sources were consulted.

Barrett, Samuel A.
1908 The Ethnogeography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1):1-332. Berkeley

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology* Bulletin 78. Washington D.C.

McLendon, Sally and Robert L. Oswalt
1978 Pomo: Introduction. In *Handbook of the Indians of North America, Volume 8 California*. Smithsonian Institution, Washington.

Stewart, Omer C.
1943 Notes on Pomo Ethnogeography. *University of California Publications in American Archaeology and Ethnology* 40(2):29-62.

Tiley, Shelly and Shannon Tushingham
2011 *Native American Ethnogeography, Traditional Resources, and Contemporary Communities and Concerns: Cultural Resource Inventory of Caltrans District I, Rural Conventional Highways: Del Norte, Humboldt, Mendocino, and Lake Counties. Volume I: Report and Appendices A-E.* Report on file at the Northwest Information Center, California Historical Resources Information System, S-38865.

The Southern Pomo held the territories surrounding Sebastopol (Barrett 1908, McLendon & Oswalt 1978:278). There are eight villages located within five miles of the project area, all located along

the Laguna de Santa Rosa. The closest ethnographically known village was *bati'klētcawī*, meaning "at elderberry house," located in the southern part of modern day Sebastopol (Barrett 1908:213). The village is located approximately one and a half miles northwest of the project area. There are no ethnographically described villages located within one-half mile of the project area in any of the above reference sources.

Native American Communication

Assembly Bill 52, which went into effect in July 2015, is an amendment to CEQA Section 5097.94 of the Public Resources Code. AB52 established a proactive consultation process with all California Native American tribes identified by the Native American Heritage Commission (NAHC) with cultural ties to an area. This process is implemented on projects that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration. Under AB52, the Lead Agency is required to consult with tribes at tribal request. The bill further created a new class of resources under CEQA known as Tribal Cultural Resources (TCRs).

ALTA archaeologist Dean Martorana contacted the NAHC to request a review of the Sacred Lands file for information on Native American cultural resources in the study area and to request a list of Native American contacts in this area. The NAHC responded on November 18, 2020 indicating that the sacred lands database review was negative for any known sacred lands. The NAHC provided a list of local Native American contacts who may have additional information regarding important cultural resources to the local Native American community. On December 2, 2020 letters were sent (either via email or physical mail) to each contact provided. No response has been received to date. As planning proceeds, any additional communication or consultation with the Native American community, as needed, will be conducted by Sonoma County or the relevant lead agency.

VII. FIELD METHODS

On December 2, 2020, Dean Martorana, staff archaeologist with Alta Archaeological Consulting, conducted a field survey of the entire Project Area, and about 100-feet of area surrounding the proposed cultivation area (Figure 3). Project design, project maps and aerial imagery were used to correctly identify the project area. Ground surface visibility was excellent throughout due to extensive tilling and vegetation clearing on the parcel; as a result, at least the top 3-feet of ground surface was exposed for survey. The area of proposed cultivation was previously used for sheep grazing. Three shovel probes were employed to further expose the ground surface for inspection. Approximately 3-acres were surveyed. Digital photos were taken of the project area and surroundings (Attachment C).

VIII. STUDY FINDINGS AND MANAGEMENT RECOMMENDATIONS

Study Findings

A cultural resources inventory was conducted to address the responsibilities of the CEQA, as codified in Public Resource Code sections 5097, and its implementing guidelines 21082 and 21083.2. No cultural resources were identified within the project area as a result of this investigation. Based on the proximity to Laguna de Santa Rosa Creek and the flat topography it is likely this location floods in heavy rain events, which further reduces the probability of intact substantial deposits in this location.

Management Recommendations

Unanticipated subsurface archaeological finds in the Sonoma County are common—despite the substantial alluvial deposition and disturbance in the area, it is possible re-deposited archaeological resources can be present. Further, the cultivation proposed is consistent with existing land use in the area and no additional infrastructure is proposed; no substantial alteration of the existing setting is proposed. Therefore, the following recommendations are provided as mitigation to ensure that cultural resources are not adversely affected by the proposed project. The project as presently designed is not expected to have an adverse effect on cultural resources.

Unanticipated Discovery of Cultural Resources

If previously unidentified cultural resources are encountered during project implementation, avoid altering the materials and their stratigraphic context. A qualified professional archaeologist should be contacted to evaluate the situation. Project personnel should not collect cultural resources. Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

Encountering Native American Remains

Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a “Most Likely Descendant” can be designated and further recommendations regarding treatment of the remains is provided.



Figure 3. Survey Coverage

IX. REFERENCES CITED

Barrett, Samuel A.
1908 The Ethnogeography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1):1-332. Berkeley

Basgall, M. E.
1982 Archaeology and Linguistics: Pomoan Prehistory as Viewed from Northern Sonoma County. *Journal of California and Great Basin Anthropology* 4(1):3-22.

Beck, Warren A. and Ynez D. Hasse
1974 *Historical Atlas of California*. University of Oklahoma Press, Oklahoma.

Billat, Lorna
2000 Site Record for P-49-002805. Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Bloomfield, Anne
1989 Report S-048798. Cultural Heritage Survey of the City of Santa Rosa, California. Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Fredrickson, David A.
1974 Cultural Diversity in Early Central California: A view from the North Coast Ranges. *Journal of California Anthropology* 1(1)41-53.

1984 The North Coast Region. In *California Archaeology*, ed. Michael J. Moratto, pp. 471-527. Academic Press, Orlando, Florida.

Fredrickson, David A. and Gregory G. White
1988 The Clear Lake Basin and Early Complexes in California's North Coast Ranges, *In Early Human Occupation in the Far Western North America: The Clovis-Archaic Interface*, edited by Judith A. Willig, C. Melvin Aikens, and John L. Fagan. Nevada State Museum Anthropological Papers, No. 21, pp.75-86.

Fredrickson, David A., Lynn Eisenman, Christian Gerike and Jennie L. Goodrich
1979 A preliminary Cultural Resources Study of the Lakeville-Sobrante 230kV T/L Project Area. Prepared for Pacific Gas and Electric Company, San Francisco California.

General Land Office
1866 Plat Map Township 6 North, Range 9 West. September 21, 1866.

Gudde, Edwin G.
2004 *California Place Names: The Origin and Etymology of Current Geographical Names.* University of California press, Berkeley.

Hayes, J. F.
1978 Site Record for P-49-001022 (CA-SON-1094). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Hildebrandt, W.R. and J.F. Hayes
1984 *Archaeological Investigations on South Fork Mountain, Six Rivers National Forest*. Ms. On file, Northwest Information Center of the California Historical Resources Inventory System, Sonoma State University, Rohnert Park, California.

Hope, Andrew
1992 Site Record for P-49-003201 (CA-SON-974). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Jaffke, T.
2006 Site Record for P-49-000482 (CA-SON-517). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Jennings, C.W., and Strand, R.G.
1960 *Geologic map of California*, Olaf P. Jenkins edition, Ukiah sheet, scale 1:250,000.

Jennings, C.W., Strand, R.G., Rogers, T.H., Boylan, R.T., Moar, R.R., and Switzer, R.A.
1977 *Geologic Map of California*: California Division of Mines and Geology, Geologic Data Map 2, scale 1:750,000.

Jones, Terry L. and John F. Hayes
1993 Problems and Prospects in Sonoma County Archaeology. *In There Grows a Green Tree: Papers in Honor of David A Fredrickson.* Ed. Greg White, Pat Mikkelsen, William Hildebrandt, and Mark Basgall. Center for Archaeological Research at Davis, Publication Number 11.

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology* Bulletin 78. Washington D.C.

Laguna Foundation
2020 Website, http://www.lagunafoundation.org/about_ecology.html. Accessed December 3, 2020.

Layton, T. N.
1990 *Western Pomo Prehistory: Excavations at Albion Head, Nightbird's Retreat, and Three Chop Village, Mendocino County, California.* Institute of Archaeology, University of California, Los Angeles, Monograph 32.

McLendon, Sally and Robert L. Oswalt

1978 Pomo: Introduction. In *Handbook of the Indians of North America, Volume 8 California*. Smithsonian Institution, Washington.

Meighan, C.W.
1955 The Archaeology of the North Coast Ranges. *University of California Archaeological Survey Reports* 30:1-39. Berkley.

Menefee, C. A.
1873 Historical and Descriptive Sketchbook of Napa, Sonoma, Lake and Mendocino. Reporter Publishing House, Napa City, reprinted in 1993 by James D. Stevenson, Fairfield, California.

Miller, Jeanne T.
1967 *Seeing Historic Sonoma Today*. The Miller Associates. Santa Rosa.

Origer, T. and C. Weichel
1970 Site Record for P-49-000606 (CA-SON-656). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Palmer, Lyman
1880 *History of Mendocino County*. Slocum, Bowmen & Co. San Francisco, reprinted in 1967 by the Mendocino County Historical Society, California.

Reynolds & Proctor
1898 Illustrated Atlas of Sonoma County, Santa Rosa, T6N R8W, Page 57.

Schoenheer, Allan A.
1992 *A Natural History of California*, California Natural History Guides Number 56. University of California Press, Berkeley.

Sonoma State
1977a Site Record for P-49-000911 (CA-SON-974). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

1977b Site Record for P-49-000912 (CA-SON-975). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

1977c Site Record for P-49-000913 (CA-SON-976). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Stewart, Omar C.
1943 Notes on Pomo Ethnogeography. *University of California Publications in American Archaeology and Ethnology* 40(No. 2):29-62.

Stewart, Suzanne
1989 Site Record for P-49-002278 (CA-SON-1769). Manuscript on file at the Northwest

Information Center of the California Historical Resources Information Center.

Stewart, Suzanne, M. Jablonowski and J. Salter
1989 Site Record for P-49-002277 (CA-SON-1768). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Stindt, Fred.
1964 *The Northwestern Pacific Railroad, Redwood Empire Route*. Published by the Northwestern Pacific Railroad, Volume 2, Kelseyville, CA.

Thos. H. Thompson & Co.
1877 New Historical Atlas of Sonoma County, Farm Map No. 8, page 50.

Tiley, Shelly and Shannon Tushingham
2011 *Native American Ethnogeography, Traditional Resources, and Contemporary Communities and Concerns: Cultural Resource Inventory of Caltrans District I, Rural Conventional Highways: Del Norte, Humboldt, Mendocino, and Lake Counties. Volume I: Report and Appendices A-E.* Report on file at the Northwest Information Center, California Historical Resources Information System, S-38865.

United States Geological Survey
1935 Sebastopol Topographic Map, 48,000 scale.
1942 Sebastopol Topographic Map, 62,500 scale.
1954 Sebastopol Topographic Map, 24,000 scale.
1968 Sebastopol Topographic Map, 24,000 scale.
1980 Sebastopol Topographic Map, 24,000 scale.

White, Gregory et al.
2002 *Cultural Diversity and Cultural Change in Prehistoric Clear Lake Basin: Final Report of the Anderson Flat Project*. Center for Archaeological Research at Davis, Publication Number 13. University of California at Davis.

Attachment A – Records Search Results

FAMILY FLORALS
2409 MEIER ROAD
SEBASTOPOL, CALIFORNIA

Confidential Information

This report contains confidential information. The distribution of material contained in this report is restricted to a need to know basis. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the location of cultural resources should be kept confidential. The provision protecting the confidentially of archaeological resources is in California Government Code 6245 and 6245.10, and the National Historic Preservation Act of 1996, Section 304.

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

11/4/2020 NWIC File No.: 20-0793

Dean Martorana
Alta Archaeological Consulting
15 3rd Street
Santa Rosa

re: ALTA_83 Family Florals, 2409 Meier Rd., Sebastopol

The Northwest Information Center received your record search request for the project area referenced above, located on the Sebastopol USGS 7.5' quad. The following reflects the results of the records search for the project area:

Resources within project area:	None
Reports within project area (in addition to those on your list):	S-442.

Resource Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☐ not requested	☒ nothing listed
Report Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☒ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☒ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

Soil Survey: http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=CA

Shipwreck Inventory: http://www.slc.ca.gov/Info/Shipwrecks.html

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

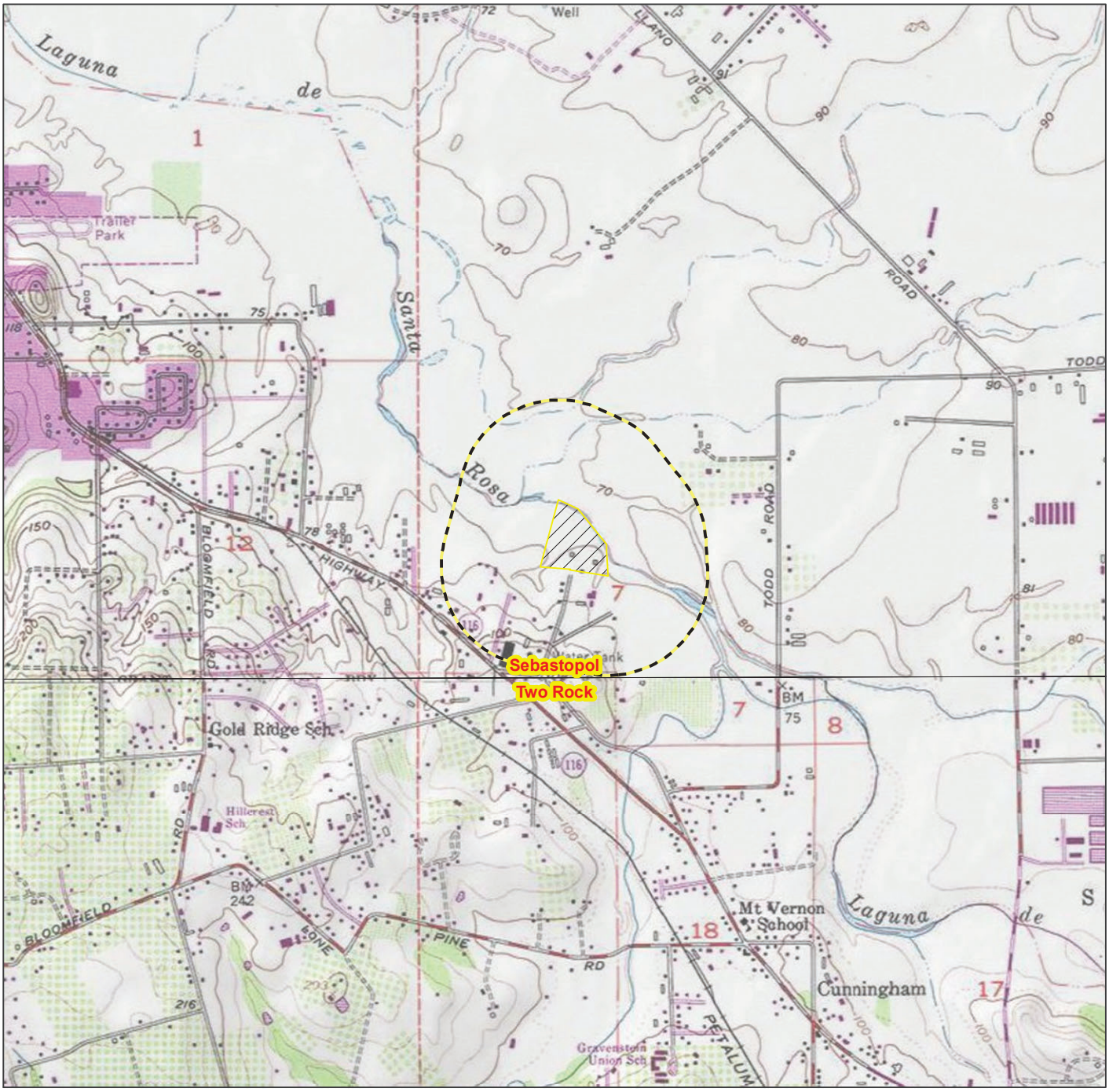
Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

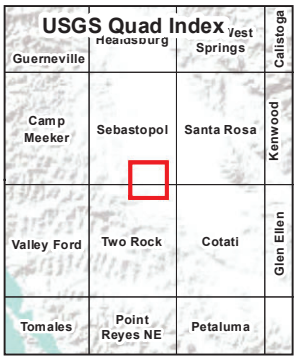
Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher





USGS 7.5' Sebastopol Quad;T6N, R19W, Unsectioned; Llano de Santa Rosa; MDBM.
13-acre parcel;APN 063-150-010

Quarter Mile Buffer
Project Parcel
USGS Quad Index

1:24,000

0 0.125 0.25 0.5 Miles

0 0.15 0.3 0.6 Kilometers

Family Florals
2409 Meier Rd
Sebastopol

ALTA ARCHAEOLOGICAL CONSULTING

ALTA 2020-83

Attachment B – Native American Communication

FAMILY FLORALS
2409 MEIER ROAD
SEBASTOPOL, CALIFORNIA

Confidential Information

This report contains confidential information. The distribution of material contained in this report is restricted to a need to know basis. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the location of cultural resources should be kept confidential. The provision protecting the confidentially of archaeological resources is in California Government Code 6245 and 6245.10, and the National Historic Preservation Act of 1996, Section 304.

Local Government Tribal Consultation List Request

NATIVE AMERIAN HERITAGE COMMISSION

915 Capitol Mall, RM 364
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

11/3/2020

Type of List Requested

■ **CEQA Tribal Consultation List (AB 52) –** ***Per Public Resource Code §21080.3, subs. (b), (d), (e) and 21080.3.2***

☐ **General Plan (SB 18) –** ***Per Government Code §65352.3.***

Local Action Type:
__General Plan __General Plan Element__General Plan Amendment
__Specific Plan __Specific Plan Amendment __Pre-planning Outreach

Required Information

Project Title: ALTA2020_83 Family Florals 2409 Meier Rd Sebastopol
Local Government/Lead Agency: Sonoma County
Contact Person: Dean Martorana (Alta Archaeological Consulting)
Street Address: 15 Third Street
City: Santa Rosa Zip: 95404
Phone: (707) 544-4206 Fax: (707) 546-2135
Email: dean@altaac.com

Specific Area Subject to Proposed Action

County: Sonoma **City/Community:** Sebastopol

Project Description: The project applicant is proposing to develop a cultivation area on an empty parcel (Map 1).

Additional Request

■ ***Sacred Lands File Search – Required Information***

USGS 7.5' Sebastopol Quad(s); T6N, R16W; Unsectioned Llano de Santa Rosa Land Grant; MDBM; 13-Acres

NATIVE AMERICAN HERITAGE COMMISSION

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

November 6, 2020

Dean Martorana, MA, RPA, Staff Archaeologist
Alta Archaeological Consulting, LLC

Via Email to: dean@altaac.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, ALTA2020-83 Family Florals 2409 Meier Rd Sebastopol Project, Sonoma County

Dear Mr. Martorana:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

  All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Sarah.Fonseca@nahc.ac.gov.

Sincerely,

Sarah Fonseca
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
Sonoma County
11/6/2020

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
Donald Duncan, 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
Loren Smith, Tribal Historic Preservation Officer
1420 Guerneville Road, Ste 1 — Pomo
Santa Rosa, CA, 95403
Phone: (707) 591 - 0580
Fax: (707) 591-0583

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

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

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road — Wappo
Windsor, CA, 95492
Phone: (707) 494 - 9159
scottg@mishewalwappotribe.com

Pinoleville Pomo Nation
Leona Willams, Chairperson
500 B Pinoleville Drive — Pomo
Ukiah, CA, 95482
Phone: (707) 463 - 1454
Fax: (707) 463-6601

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 Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed ALTA2020-83 Family Florals 2409 Meier Rd Sebastopol Project, Sonoma County.

Dean Martorana <dean@altaac.com>

Request for Comment: ALTA2020-83 Family Florals 2409 Meier Road Sebastopol

Dean Martorana <Dean@altaac.com> Tue, Dec 1, 2020 at 1:55 PM
Draft To: Dean Martorana <dean@altaac.com>
Bcc: info@cloverdalerancheria.com, lynnl@drycreekrancheria.com, Buffy McQuillen <bmcquillen@gratonrancheria.com>, admin@guidiville.net, dino@stewartspoint.org, margiemejia@aol.com, Sierra Shope <sshope@middletownrancheria.com>, scottg@mishewalwappotribe.com

Dear Chairperson,

Alta Archaeological Consulting (ALTA) has been retained by a consultant to provide archaeological services for a private development in Sebastopol.

The project is located within the city limits of Sebastopol in Sonoma County. The project is located on the Sebastopol Quadrangle(s); T6N, R19W, of the Mount Diablo Base and Meridian (see attached).

We are contacting you to provide notification of this project pursuant Section 5 of Public Resources Code 21080.3.1(d). The regulations require that you contact us within 30 days from your receipt of this letter to request a consultation regarding any potential impacts of this project on tribal cultural resources. If you do not contact us within 30 days following receipt of this letter, the County will proceed with the project with the assumption that the project will not have a potential effect on tribal cultural resources (an archaeological survey of the parcels will be conducted in support of the permit process). If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The County will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request. Thank you in advance for your efforts.

Sincerely,

--
Dean Martorana, MA, RPA
Staff Archaeologist
==========

Alta Archaeological Consulting LLC
15 Third Street
Santa Rosa, CA 95401
o: 707.544.4206 | f: 707.546.2135 | c: 916.205.6087
Dean@AltaAC.com
ProfessionalArchaeologist.com | CremainsRecovery.com
DBE | WOSB | WBE | SB | GSA

--
Dean Martorana, MA, RPA
Staff Archaeologist
==========

Alta Archaeological Consulting LLC
15 Third Street
Santa Rosa, CA 95401
o: 707.544.4206 | f: 707.546.2135 | c: 916.205.6087
Dean@AltaAC.com
ProfessionalArchaeologist.com | CremainsRecovery.com
DBE | WOSB | WBE | SB | GSA

Map 2 (ALTA2020-83) Project Location NAHC.pdf
2395K

Alta Archaeological Consulting, LLC
15 Third Street
Santa Rosa, CA 95401
office (707) 544-4206
fax (707) 546-2135
www.altaac.com

December 1, 2020

Chairperson Patricia Hermosillo
Cloverdale Rancheria of Pomo Indians
555 S. Cloverdale Blvd., Suite A
Cloverdale, CA 95425

Re: ALTA2020-83 Family Florals 2409 Meier Road Sebastopol

Dear Chairperson Hermosillo,

Alta Archaeological Consulting (ALTA) has been retained by a consultant to provide archaeological services for a private development in Sebastopol.

The project is located within the city limits of Sebastopol in Sonoma County. The project is located on the Sebastopol Quadrangle(s); T6N, R19W, of the Mount Diablo Base and Meridian (see attached).

We are contacting you to provide notification of this project pursuant Section 5 of Public Resources Code 21080.3.1(d). The regulations require that you contact us within 30 days from your receipt of this letter to request a consultation regarding any potential impacts of this project on tribal cultural resources. If you do not contact us within 30 days following receipt of this letter, the County will proceed with the project with the assumption that the project will not have a potential effect on tribal cultural resources (an archaeological survey of the parcels will be conducted in support of the permit process). If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The County will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request. Thank you in advance for your efforts.

Sincerely,

Dean Martorana, M.A., RPA
Staff Archaeologist
15 Third Street
Santa Rosa, CA 95401
dean@altaac.com
(707) 544-4206 office
(707) 546-2135 fax

Alta Archaeological Consulting, LLC
15 Third Street
Santa Rosa, CA 95401
office (707) 544-4206
fax (707) 546-2135
www.altaac.com

December 1, 2020

Tribal Heritage Preservation Officer Loren Smith
Kashia Band of Pomo Indians of the Stewarts Point Rancheria
1420 Guerneville Rd. Ste 1
Santa Rosa, CA 95403

Re: ALTA2020-83 Family Florals 2409 Meier Road Sebastopol

Dear Tribal Heritage Preservation Officer Smith,

Alta Archaeological Consulting (ALTA) has been retained by a consultant to provide archaeological services for a private development in Sebastopol.

The project is located within the city limits of Sebastopol in Sonoma County. The project is located on the Sebastopol Quadrangle(s); T6N, R19W, of the Mount Diablo Base and Meridian (see attached).

We are contacting you to provide notification of this project pursuant Section 5 of Public Resources Code 21080.3.1(d). The regulations require that you contact us within 30 days from your receipt of this letter to request a consultation regarding any potential impacts of this project on tribal cultural resources. If you do not contact us within 30 days following receipt of this letter, the County will proceed with the project with the assumption that the project will not have a potential effect on tribal cultural resources (an archaeological survey of the parcels will be conducted in support of the permit process). If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The County will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request. Thank you in advance for your efforts.

Sincerely,

Dean Martorana, M.A., RPA
Staff Archaeologist
15 Third Street
Santa Rosa, CA 95401
dean@altaac.com
(707) 544-4206 office
(707) 546-2135 fax

Alta Archaeological Consulting, LLC
15 Third Street
Santa Rosa, CA 95401
office (707) 544-4206
fax (707) 546-2135
www.altaac.com

December 1, 2020

Chairperson Leona Williams
Pinoleville Pomo Nation
500 B Pinoleville Dr.
Ukiah, CA 95482

Re: ALTA2020-83 Family Florals 2409 Meier Road Sebastopol

Dear Chairperson Williams,

Alta Archaeological Consulting (ALTA) has been retained by a consultant to provide archaeological services for a private development in Sebastopol.

The project is located within the city limits of Sebastopol in Sonoma County. The project is located on the Sebastopol Quadrangle(s); T6N, R19W, of the Mount Diablo Base and Meridian (see attached).

We are contacting you to provide notification of this project pursuant Section 5 of Public Resources Code 21080.3.1(d). The regulations require that you contact us within 30 days from your receipt of this letter to request a consultation regarding any potential impacts of this project on tribal cultural resources. If you do not contact us within 30 days following receipt of this letter, the County will proceed with the project with the assumption that the project will not have a potential effect on tribal cultural resources (an archaeological survey of the parcels will be conducted in support of the permit process). If consultation is requested, please provide the name and contact information of the designated lead contact person as part of your request. The County will contact the designated person to set a meeting date to begin consultation within 30 days of our receipt of your request. Thank you in advance for your efforts.

Sincerely,

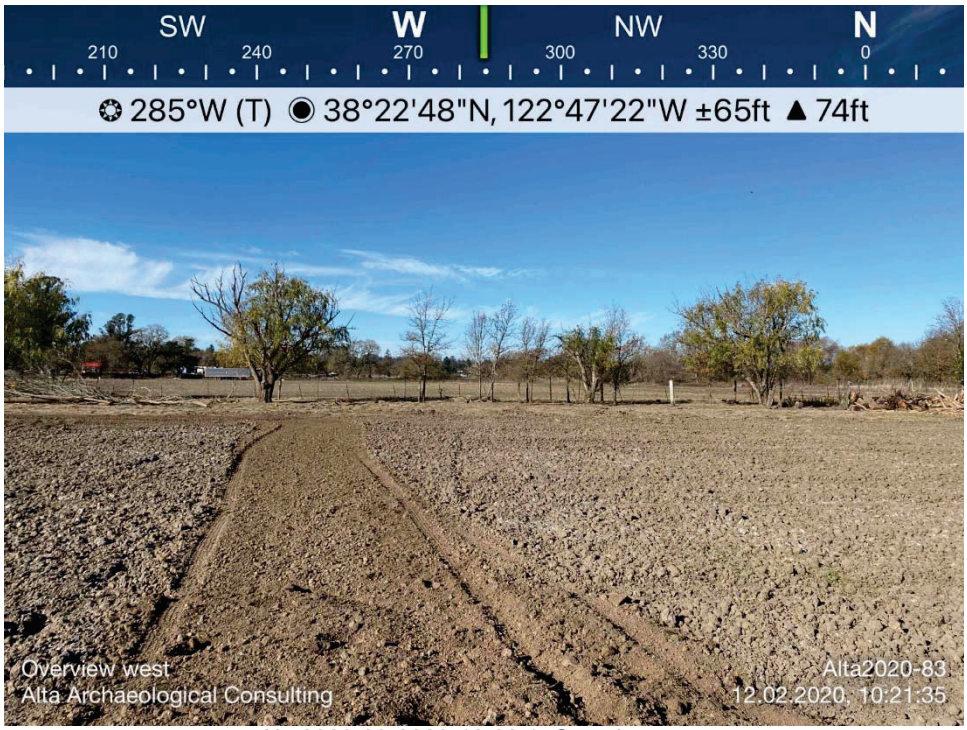
Dean Martorana, M.A., RPA
Staff Archaeologist
15 Third Street
Santa Rosa, CA 95401
dean@altaac.com
(707) 544-4206 office
(707) 546-2135 fax

Attachment C – Photographic Record

FAMILY FLORALS
2409 MEIER ROAD
SEBASTOPOL, CALIFORNIA

Confidential Information

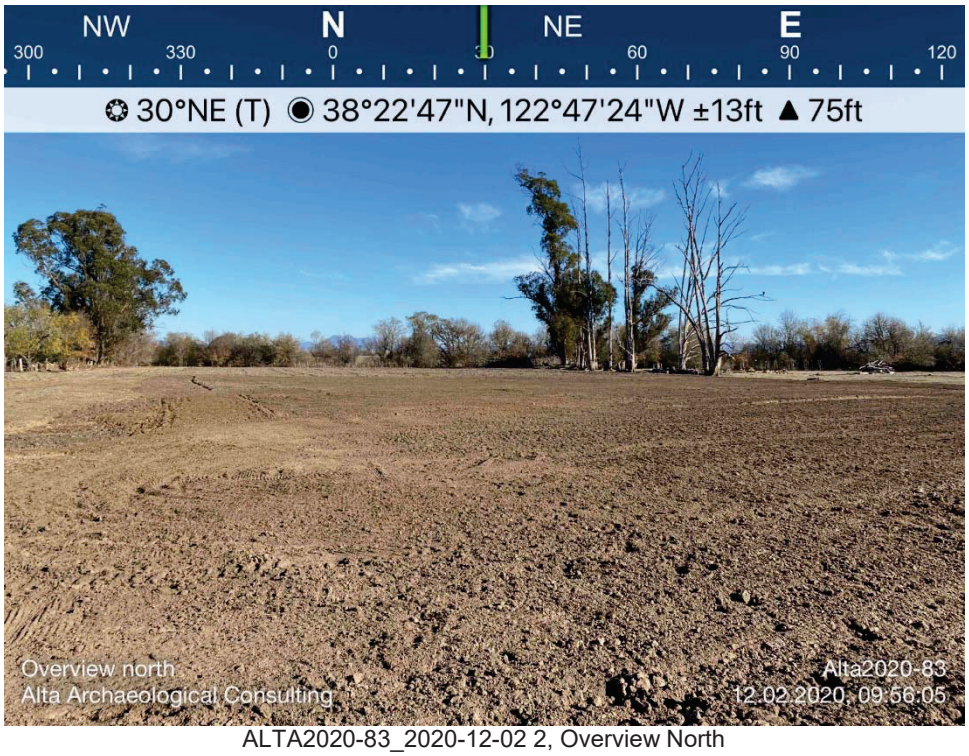
This report contains confidential information. The distribution of material contained in this report is restricted to a need to know basis. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the location of cultural resources should be kept confidential. The provision protecting the confidentially of archaeological resources is in California Government Code 6245 and 6245.10, and the National Historic Preservation Act of 1996, Section 304.



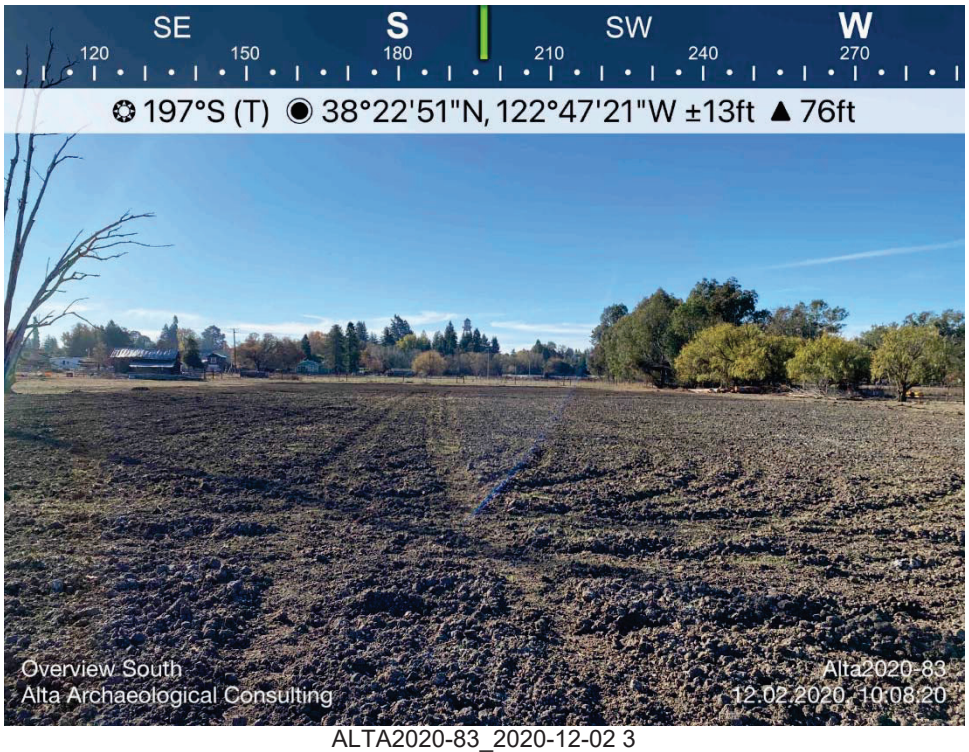
Alta2020-83-2020-12-02 1, Overview west



Alta2020-83_2020-12-02 4, Overview East



ALTA2020-83_2020-12-02 2, Overview North



ALTA2020-83_2020-12-02 3

PHOTO LOG

Project Name: ALTA2020-83 Family Florals 2408 Meier Road Sebastopol
Photographer: Dean Martorana
Camera Type: iPhone 11 (Solocator App)
Lens Size: variable
Images on File: Alta Archaeological Consulting

Photo file Name	Date	Time	Capture Mode Detail	Photo Description
Alta2020-83_2020-12-02	2-Dec-20	9:56:05	Bearing: 30° NE	Overview north
Alta2020-83_2020-12-02	2-Dec-20	10:08:20	Bearing: 197° S	Overview South
Alta2020-83_2020-12-02	2-Dec-20	10:21:20	Bearing: 117° SE	Overview east
Alta2020-83_2020-12-02	2-Dec-20	10:21:35	Bearing: 285° W	Overview west
Alta2020-83_2020-12-02	2-Dec-20	10:24:54	Bearing: 187° S	View of barn off project area

ARCHAEOLOGICAL SURVEY REPORT

2515 GRAVENSTEIN HWY SOUTH
CANNABIS CULTIVATION PROJECT
SEBASTOPOL, SONOMA COUNTY, CALIFORNIA

(APC 180001)

Prepared for:

Adam Davidoff
Family Florals
2505 Gravenstein Highway South
Sebastopol, California, 95472

Prepared by:

Marlene McVey, M.A.
Alex DeGeorgey, M.A., RPA
Alta Archaeological Consulting
15 Third Street
Santa Rosa, CA 95401

Project: Alta2018-45

Key Words: USGS 7.5' Sebastopol Quadrangle; 7.44-acre Survey Area; Township 6 North, Range 8 West, Section 7 of the Mount Diablo Base and Meridian; Negative Results.

June 20, 2018

TABLE OF CONTENTS

I. SUMMARY OF FINDINGS 1
II. INTRODUCTION 1
III. PROJECT DESCRIPTION AND LOCATION 1
IV. BACKGROUND 3
Environment 3
Ethnography 3
Prehistory 4
History 4
V. SOURCES CONSULTED 5
Records Search 5
Historic Map Review 8
Ethnographic Literature Review 9
Native American Consultation 9
VI. FIELD METHODS 10
VII. STUDY FINDINGS AND MANAGEMENT RECOMMENDATIONS 10
Study Findings 10
Management Recommendations 10
VII. REFERENCES CITED 12

LIST OF MAPS

Map 1. Project Location 2
Map 2. Project Area and Survey Coverage 11

LIST OF TABLES

Table 1. Summary of Previous Cultural Resource Studies within Search Radius 6
Table 2. Summary of Cultural Resources within Search Radius 7

ATTACHMENTS

Attachment A – Records Search Results
Attachment B - Native American Consultation
Attachment C - Photo Sheets

I. SUMMARY OF FINDINGS

The following Archaeological Survey Report (ASR) documents the adequacy of identification efforts and presents the results of investigations within the Study Area boundaries. The study was designed to identify any archaeological, historical, or cultural resources located within the Area of Potential Effect(s) (APE). Fieldwork was conducted on June 6, 2018 by Marlene McVey and Nickolas Radtkey. The survey entailed a cultural resources inventory of the APE (7.44 acres). Ground surface visibility was good due to exposed recently tilled mineral soils. No cultural resources were identified within the project area as a result of this investigation. The project as presently designed is not anticipated to have an adverse effect on significant cultural resources and should be allowed to proceed.

II. INTRODUCTION

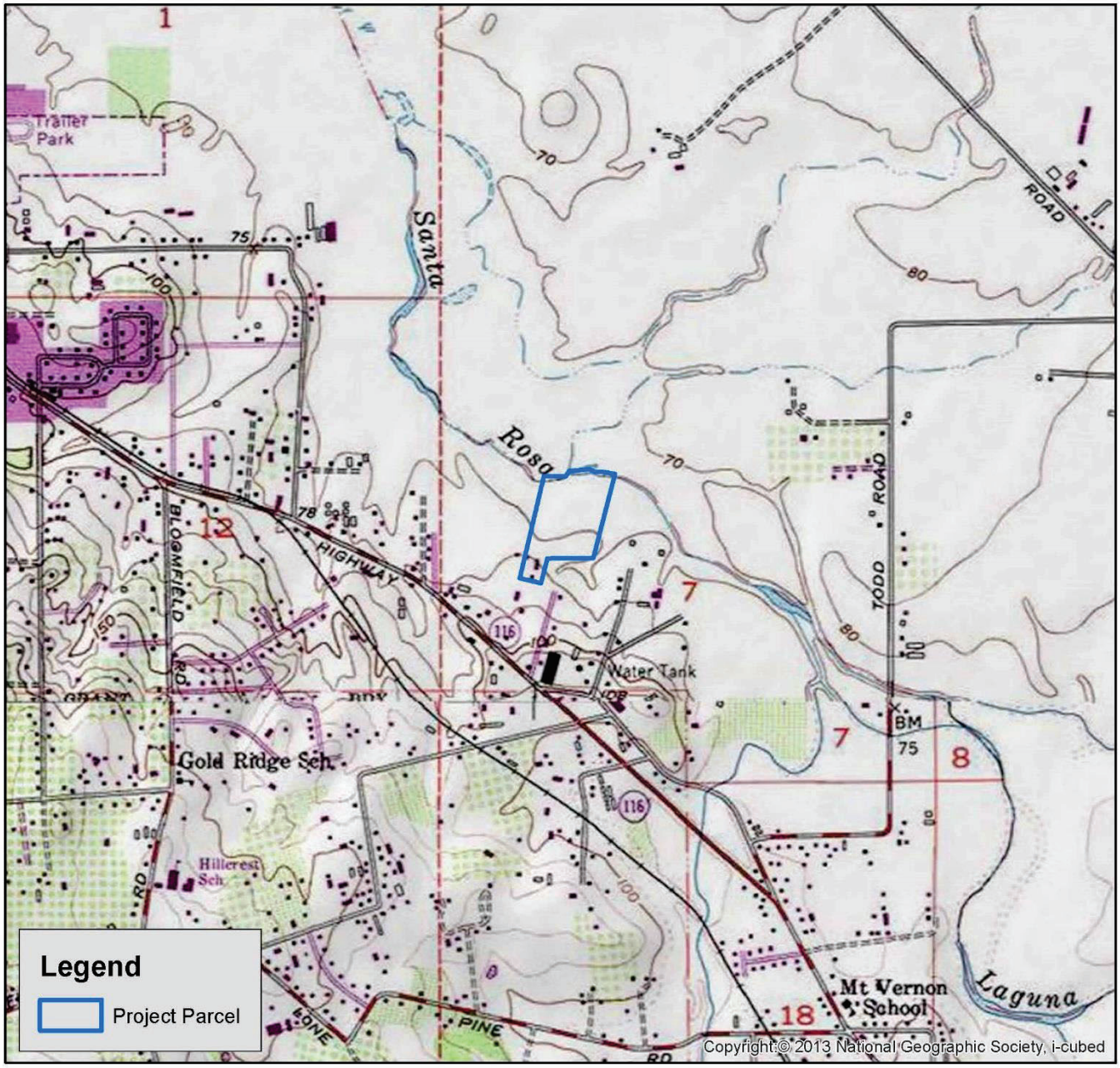
A cultural resources inventory was conducted to satisfy requirements of the California Environmental Quality Act (CEQA) of 1970, and the responsibilities codified in Public Resource Code sections 5097, and it's implementing guidelines 21082 and 21083.2. An archaeological field survey was completed for the purpose of identifying cultural resources within the APE. Fieldwork was completed by ALTA on June 6, 2018 for the purpose of identifying cultural resources within the APE. No cultural resources were identified within the project area. The resulting document addresses these regulatory responsibilities.

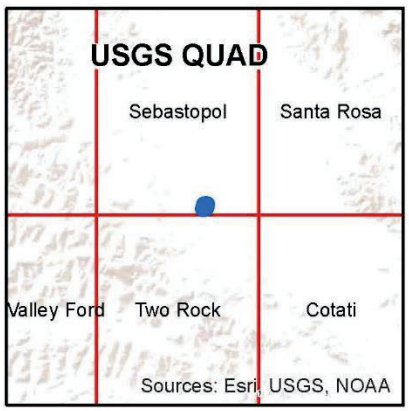
III. PROJECT DESCRIPTION AND LOCATION

The project proponent is applying to the Sonoma County Permit & Resource Management Department for the permitting of commercial cannabis cultivation. Cultivation will be rotated throughout a 6 acre field in conjunction with vegetable farming on the property. The current water source is a permitted reclaimed water source located on site. Existing structures are concentrated in the southern half of the parcel and consist of a residence, an agricultural barn and a garage. These structures are not part of the current project. The property is zoned for mixed agricultural use.

The project is situated on the USGS 7.5' Sebastopol Quadrangle map in Township 6 North, Range 8 West, Section 7 of the Mount Diablo Base and Meridian (MDBM) (Map 1). The entire parcel includes about 16.55 acres of land.

The project is located southwest of the city of Sebastopol in Sonoma County, California. The project area includes one parcel (APN 076-072-001). The physical address of the parcel is 2515 Gravenstein Highway South, Sebastopol. The project area is located on relatively level terrain along the south side of the Laguna de Santa Rosa in the northern half of the project parcel.





USGS 7.5' Sebastopol Quad.
(2013 National Geographic Society)
T6N, R8W, Section 7, MDBM

1:24,000
Miles
0 0.25 0.5 1
0 0.25 0.5 1
Kilometers

Commercial Cannabis
Cultivation Project
2515 Gravenstein Hwy South
Sebastopol, CA
(APN 063-150-024)

ALTA ARCHAEOLOGICAL CONSULTING
ALTA 2018-45
Map Date: 6/19/2018

Map 1. Project Location

IV. BACKGROUND

As the significance of cultural resources is best assessed with regard to environmental and cultural contexts, descriptions of the natural and cultural setting of the project region are presented below.

Environment

The project area is situated within the Coast Range geologic province (Jennings and Strand 1960). The North Coast Range is comprised of a geologic feature unique to California, the Franciscan Formation, which dictates the vegetative communities (Schoenherr 1992:274-276). The Franciscan Formation is comprised of serpentine, sandstone, and other sedimentary rocks. This area is characterized by a Mediterranean climate that averages about 50-60 inches of rainfall annually. The winters are cool and wet, and the summers are warm and dry.

The project is located in Sonoma County on a flat at approximately 75 feet above mean sea level. The project parcel is situated in a valley on the south side of the Laguna de Santa Rosa. Laguna de Santa Rosa is a perennial river, which runs along the northern border of the project parcel. As the largest tributary of the Russian River, the Laguna drains a 254-square-mile watershed which encompasses nearly the entire Santa Rosa Plain. “It is a unique ecological system covering more than 30,000 acres and comprised of a mosaic of creeks, open water, perennial marshes, seasonal wetlands, riparian forests, oak woodlands and grasslands” (LagunaFoundation.org).

The project APE is in a rural residential area characterized by small farms. Native and nonnative annual and perennial grasses thrive throughout the parcel. Dense deciduous forest is located on the south side of the project parcel and along the creek.

Ethnography

The Southern Pomo, who inhabited this region prior to Euro-American intrusion, were one of several groups of Pomo Indians distributed over the lands of Mendocino, Lake, and Sonoma Counties. Seven distinct and mutually unintelligible languages are recognized under the rubric of Pomo (Barrett 1908; Kroeber 1925; McLendon & Oswalt 1978). These languages are delineated by geographic divisions, which include: Northern, Central, Southern, Eastern, Southeastern, Northeastern, and Southwestern (Stewart 1943). The following ethnographic summary is not intended as a thorough description of Southern Pomo culture but instead is meant to provide a background to the present cultural resource investigation with specific references to the project area. In this section, the past tense is sometimes used when referring to native peoples because this is a historical study. This convention is not intended to suggest that Southern Pomo people only existed in the past. To the contrary, many Pomo groups have strong cultural and social identities today.

Prior to Euro-American occupation, the project area was occupied by speakers of the Southern Pomo language. Southern Pomo speakers occupied central to southern Sonoma County from the coast to the Russian River, extending just south of Gualala in the north, to Sebastopol in the south (McLendon & Oswalt 1978:278). The Southern Pomo had a narrow extension of territory in the north that allowed them access to the coast, where they went to in the summer to collect seafood. In the winter the Southern Pomo would move inland to fish in the Russian River, hunt deer and gather acorns (McLendon & Oswalt 1978:276). The Southern Pomo population was decimated early on by missionization, especially in the southern part of Sonoma County around Santa Rosa (McLendon & Oswalt 279). The closest ethnographic village to the project area was the Southern Pomo village of

bati'klētcawī, meaning "at elderberry house," located in the southern part of modern day Sebastopol (Barrett 1908: 213). It was a large village at one time and there were still a few Southern Pomo families living in the village area in the early 1900s (Barrett 1908:214). No ethnographically described resources are situated within the current project area.

Prehistory

Over half a century of archaeological investigations in the North Coast Ranges has revealed a record of hunter-gatherer occupation spanning 12,000 years. The cultural chronology of this area is best described as part of the overall cultural chronology for the central North Coast Ranges. A number of cultural chronologies have been developed for this region (cf. Basgall 1982; Fredrickson 1974; Fredrickson and White 1988; Hildebrandt and Hayes 1984; Jones and Hayes 1993; Layton 1990; Meighan 1955; White and King 1993; and White et al. 2002).

In his 1974 doctoral dissertation David A. Fredrickson proposed five chronological periods and related cultural patterns. The Paleo-Indian Period (10,000 to 6000 BC) is represented as a hunting adaptation characterized by large fluted projectile points. The Lower Archaic Period (6000 to 2000 BC) is distinguished by an emphasis on plant exploitation as evidenced by high frequencies of milling tools. The Middle Archaic (3000-1000 BC) is characterized by the introduction of mortar and pestle technology and the assumed exploitation of acorns. The Upper Archaic Period (1000 BC to AD 100) is represented growing social complexity marked by status differentiation, complex trade networks, and the development of "group oriented religious activities" (Fredrickson 1974: 48). The Emergent Period (AD 500 to Historic times) is marked by the use/introduction of bow and arrow technology, expansion of exchange relations, and the establishment of clearly defined territorial systems.

History

Early Exploration

The first European to set foot in present day Sonoma County was the Spanish explorer Juan Francisco de la Bodega y Cuedra in the year 1775. While Europeans had been exploring the California coast since the 16th century, they had failed to make land in Sonoma until then. The Spanish claimed the region for Spain and by the 1800s were colonizing the area. In 1823 the Mission San Francisco Solano de Sonoma was established.

Early Settlement

The first non-native peoples to explore the inland areas of Sonoma County were Russian and Aluet trappers staged from Fort Ross on the Sonoma Coast. Fort Ross was the southern-most outpost of Russian settlement in North American from 1812 to 1842 (Beck and Haase 1974). During the Mexican Period (1822-1847) large private rancho land grants were being issued to prominent Spanish families, and the land in Sonoma was being used heavily for the grazing of livestock and ranching. Between 1840 and 1845 American settlers began arriving in the County and, along with agriculture and livestock, the logging industry began to prosper (Fredrickson et. al 1979).

In 1845, the Rancho Caňada de Jonive was granted to James Black, which encompassed 10,787 acres of land west of what would later become Sebastopol (Beck & Haase 1974). The next year a three square league section of the Rancho Llano de Santa Rosa, located in the western part of Santa Rosa valley, was granted to Joaquin Carrillo. He built a ranch house on the banks of the Laguna de Santa Rosa (Miller 1967). By 1855, H. P. Morris settled on a 120 acre claim named the

settlement Pine Grove. The name was changed to Sebastopol in 1856. Three years later the Sebastopol post office was officially established (Gudde 2004).

Railroads
One of the earliest railroads in Sonoma County was the Petaluma and Haystack railroad. The railroad started construction in 1862 and was the precursor to the Sonoma and Marin Railroad built in 1876. The San Francisco and North Pacific Railroad, incorporating the Sonoma and Marin Railroad in 1877, connected Haystack Landing to a ferry connection in San Rafael (Stindt 1964:13). The railroads were built to support hauling lumber, then freight and finally as part of the burgeoning tourism industry. This continued until the great depression and the collapse of the lumber market caused many railroad closures throughout the county (Stindt 1964:53).

At the turn of the 20th century the Petaluma and Santa Rosa Electric Railroad was built, including a stop in Sebastopol along its route. The railroad incorporated the two city's electric railways in 1903 and began construction to Sebastopol in 1904. The railroad was bought by the Northwest Pacific Railroad in 1932 at which time passenger service was discontinued. The rail was shut down in 1946 (Stindt 1964:54).

Logging Industry
In Sonoma County, market logging began in 1836 when the first commercial sawmill, Rancho El Molino, was built by Captain John Cooper on the Russian River. Soon thereafter in 1842, Steven Smith's steam-powered mill was constructed in the town of Bodega. The timber boom, that was to deforested much of the Russian River valley and its surrounding slopes, did not occur until the growth of towns in the 1850s.

Logging of redwoods was the economic focus of the area for a period of about 45 years, from 1865 to the 1910s. Intensive logging combined with wild fires depleted the redwood forests resulting in a decline in the timber industry. As one of the main railroad hubs in the area, the timber shipping industry was big business for the town of Sebastopol. Following the decline of the timber industry, economic activity shifted to focus on agricultural (Stindt 1964).

Gold Ridge
After the majority of the trees in the Sebastopol area were cut down by logging activities. Farmers recognized the local sandy soil was well suited to produce apple orchards, which were soon grown in abundance. The area became known as the "Gold Ridge" due to apple orchards littering the land between Laguna de Santa Rosa and the crest of the western hills beyond Green Valley with apples (Menefee 1873). Other Signiant agricultural production in the Sebastopol area include raspberries, cherries, blueberries and fresh vegetables, which has been farmed since the early 1900s.

V. SOURCES CONSULTED

Records Search
On May 21, 2018, Marlene McVey, Archaeologist with ALTA, conducted a records search (File Number 17-2779) at the Northwest Information Center (NWIC) located on the campus of Sonoma State University. The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of archaeological and historical records and reports for an 18-county area that includes Sonoma County. The records search included a review of all study reports on file within a one-half mile radius of the project area. A search of cultural resources included a

one-half mile radius. Sources consulted include archaeological site and survey base maps, survey reports, site records, and historic General Land Office (GLO) maps.

Included in the review were:

- *California Inventory of Historical Resources* (California Department of Parks and Recreation 1976)
- *California Historical Landmarks* for Sonoma County (CA-OHP 1990)
- *California Points of Historical Interest* (CA-OHP 1992)
- *Historic Properties Directory Listing* (CA-OHP April 2012)
- *Historic Properties Directory* includes the National Register of Historic Places (April 2012) of the California Historical Landmarks and California Points of Historical Interest

Review of historic registers and inventories indicate that no historical landmarks or points of interest are present in the project area. No National Register listed or eligible properties are located within the 0.5-mile visual area of the APE.

A review of archaeological site and survey maps revealed that seven cultural resource studies have been previously performed within a one-half mile radius of the current project area (Table 1). One study includes a portion of the project area within its survey coverage (S-048798). Less than 30% of the project area and surrounding 0.5-mile radius have been previously surveyed.

Table 1. Summary of Previous Cultural Resource Studies within Search Radius

Number	Author(s)	Year	Report Title
S-000477	Thomas M. Origer and David A. Fredrickson	1977	An Archaeological Survey of the Proposed Santa Rosa Wastewater Disposal System, Sonoma County, California
S-000851	John F. Hayes	1978	An Archaeological Survey of the Merrill Property, Sebastopol, Sonoma County, California, A.P. 63-17
S-000860	Robert J. Jackson	1978	An Archaeological Investigation of the Toussaint Property, 2601 Gravenstein Highway, Sebastopol, Sonoma County, California, County File Number MS-6304.
S-010554	Suzanne B. Stewart	1989	An Archaeological Study for the Todd Road Pipeline Project, near Santa Rosa, Sonoma County, California
S-012123	Leigh Jordan	1990	Archaeological Archival Study for the City of Santa Rosa Wastewater Project Alternatives: Bloomfield Reservoir Site, Laguna Wetland Restoration Study Areas, Ocean Pipeline Alignment, and the South County Alternative/Lakeville Pipeline Alignment and Reservoir Site, Sonoma County, California
S-048798	Anne Bloomfield	1989	Cultural Heritage Survey of the City of Santa Rosa, California
S-048798	Dan Peterson, Anne Bloomfield, Dennis Harris, Adrian Praetzellis, Jack Bookwalter, and Paula Cook	1990	City of Santa Rosa Cultural Heritage Survey; Historic Properties Inventory

S-048798 is a cultural heritage survey of the City of Santa Rosa. This study included a review of historical records, maps and relevant cultural resource documents as part of a historical study of the City of Santa Rosa and the surrounding area (Bloomfield 1989). While the northern end of the

project parcel is within the study area, none of the project parcel was subjected to an archaeological field survey.

Ten cultural resources are documented within one-half mile radius of the project area. There are eight prehistoric midden and lithic scatter sites and two historic-era structures. There are no cultural resources documented within the project area. Table 2 provides a summary of documented cultural resources within the search radius.

Table 2. Summary of Documented Cultural Resources within Search Radius

Primary	Trinomial	Type	Description
P-49-000482	CA-SON-000517	Prehistoric, Protohistoric	Mitchley Site; Midden Site
P-49-000606	CA-SON-000656	Prehistoric	Midden Site
P-49-000911	CA-SON-000974	Prehistoric	Lithic Scatter Site
P-49-000912	CA-SON-000975	Prehistoric	Lithic Scatter Site
P-49-000913	CA-SON-000976	Prehistoric	Lithic Scatter Site
P-49-001022	CA-SON-001094	Prehistoric	Lithic Scatter Site
P-49-002277	CA-SON-001768	Prehistoric	Midden Site
P-49-002278	CA-SON-001769	Prehistoric	Lithic Scatter Site
P-49-002805		Historic	CA2290A (water tower)
P-49-003201		Historic	2555 South Gravenstein Highway

Site P-49-000482 (CA-SON-517) is a prehistoric midden and flake scatter site. The site consists of a shell midden deposit, obsidian tools and debitage and fire-affected rock. The site is currently either destroyed or underneath a parking lot (Jaffke 2006). The site is located approximately 0.45 miles west of the project parcel.

Site P-49-000606 (CA-SON-656) is a prehistoric midden site consisting of a moderately dense shell midden, mortar fragment, point fragment and a chalcedony core (Origer & Weichel 1970). The site is located approximately 0.05 miles west of the project area.

Site P-49-000911 (CA-SON-974) is a prehistoric lithic scatter site consisting of obsidian flakes with one chert flake (Sonoma State 1977). The site is located approximately 0.45 miles north of the project area.

Site P-49-000912 (CA-SON-975) is a prehistoric lithic scatter site consisting of a light scatter of obsidian flakes adjacent to a seasonal creek (Sonoma State 1977). The site is located approximately 0.4 miles north of the project area.

Site P-49-000913 (CA-SON-976) is a prehistoric lithic scatter site consisting of obsidian flakes to the north and south of a well-developed midden (Sonoma State 1977). The site is located approximately 0.4 miles northwest of the project area.

Site P-49-001022 (CA-SON-1094) is a prehistoric lithic scatter site consisting of a moderate scatter of obsidian flakes and some possible flaked tools (Hayes 1978). The site is located approximately 0.4 miles southeast of the project area.

Site P-49-002277 (CA-SON-1768) is a prehistoric midden site consisting of a dark midden with obsidian and chert flakes and shell and bone debris (Stewart et al 1989). The site is located approximately 0.45 miles southeast of the project area.

Site P-49-002278 (CA-SON-1769) is a prehistoric lithic scatter site consisting of a sparse scatter of Annadel flakes (Stewart 1989). The site is located approximately 0.3 miles southeast of the project area.

Site P-49-002805 is a historic-era site consisting of a 130 foot tall water tank on steel support legs (Billat 2000). The site is located approximately 0.3 miles south of the project area.

Site P-49-003201 is a historic-era site consisting of a small wood frame 1 ½ story residence (Hope 1992). The site is located approximately 0.25 miles south of the project area.

Attachment A provides the confidential records search results.

Historic Map Review

Review of historic maps of the area was completed to better understand the timing of development within the project area and recognize historic features. The following historic maps were reviewed as part of this investigation.

General Land Office
- 1856 Plat Map Township 6 North, Range 8 West. June 19, 1856.
- 1866 Plat Map Township 6 North, Range 8 West. September 29, 1866.

Reynolds & Proctor
- 1898 Illustrated Atlas of Sonoma County, Santa Rosa, T6N R8W, Page 57.

Thos. H. Thompson & Co.
- 1877 New Historical Atlas of Sonoma County, Farm Map No. 8, page 50.

United States Geological Survey
- 1935 Sebastopol Topographic Map, 48,000 scale.
- 1942 Sebastopol Topographic Map, 62,500 scale.
- 1954 Sebastopol Topographic Map, 24,000 scale.
- 1968 Sebastopol Topographic Map, 24,000 scale.
- 1980 Sebastopol Topographic Map, 24,000 scale.

The earliest map of the area (1856) depicts the project area as part of an 80 acre parcel (GLO 1856). By 1866 the project area has been subdivided into its current parcel size to the south of Laguna de Santa Rosa and totaling 16.33 acres (GLO 1866). The project parcel remained unowned until post 1877 (Thompson & Co. 1877). In 1898, the project parcel is part of a 131.66 acre parcel owned by S.C. and W.P. Morse (Reynolds & Proctor 1898). At this time Sebastopol and the surrounding areas had been developing rapidly, including the development of roads, residences, schools and churches (Thompson 1877; Reynolds & Proctor 1898). The project area remained undeveloped from the 1930s into the 1960s (USGS 1935, 1942, 1954, 1968). The earliest record of structures on the project parcel is in 1980 with two structures mapped on the southwest corner of the project parcel (USGS 1980). Over the course of the mid-1900s the city of Sebastopol and surrounding area continued to develop into its current status (USGS 1980).

Ethnographic Literature Review
Available ethnographic literature was reviewed to identify cultural resources in the project vicinity. The following sources were consulted.

Barrett, Samuel A.
1908 The Ethnogeography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1):1-332. Berkeley

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology* Bulletin 78. Washington D.C.

McLendon, Sally and Robert L. Oswalt
1978 Pomo: Introduction. In *Handbook of the Indians of North America, Volume 8 California*. Smithsonian Institution, Washington.

Stewart, Omer C.
1943 Notes on Pomo Ethnogeography. *University of California Publications in American Archaeology and Ethnology* 40(2):29-62.

Tiley, Shelly and Shannon Tushingham
2011 *Native American Ethnogeography, Traditional Resources, and Contemporary Communities and Concerns: Cultural Resource Inventory of Caltrans District I, Rural Conventional Highways: Del Norte, Humboldt, Mendocino, and Lake Counties. Volume I: Report and Appendices A-E.* Report on file at the Northwest Information Center, California Historical Resources Information System, S-38865.

The Southern Pomo held the territories surrounding Sebastopol (Barrett 1908, McLendon & Oswalt 1978:278). There are eight villages located within five miles of the project area, all located along the Laguna de Santa Rosa. The closest ethnographically known village was *bati'klētcawī*, meaning "at elderberry house," located in the southern part of modern day Sebastopol (Barrett 1908:213). The village is located approximately one and a half miles northwest of the project area. There are no ethnographically described villages located within one-half mile of the project area in any of the above reference sources.

Native American Consultation
The Native American Heritage Commission (NAHC) was contacted on May 11, 2018 to review the Sacred Lands Files for any resources present within the project area. In the NAHC response dated May 15, 2018, Sharaya Souza (Staff Services Analyst) indicated that a search of the Sacred Lands File returned a negative result. The Sonoma County Planning Department is in charge of consulting with Native American tribes for this project. Attachment B provides copies of the Native American correspondences.

VI. FIELD METHODS

ALTA staff archaeologists, Nicolas Radtkey and Marlene McVey, conducted a field survey of the project area on June 6, 2018. Project design drawing, project maps and aerial imagery were used to correctly identify the project area. Ground surface visibility was good, about 80%, throughout the survey area due to recent agricultural tilling, which exposed mineral soils to a depth of about 18 inches. The cultivation area, well and other facilities, within the northern half of the parcel, were surveyed totaling about 7.44 acres (Map 2). The project parcel was surveyed using intensive survey coverage with transects no greater than 10 meter intervals. No cultural resources were identified during this archaeological survey. Digital photos were taken of the project area and surroundings (Attachment C).

VII. STUDY FINDINGS AND MANAGEMENT RECOMMENDATIONS

Study Findings

A cultural resources inventory was conducted to address the responsibilities of CEQA, as codified in Public Resource Code sections 5097, and its implementing guidelines 21082 and 21083.2. No cultural resources were identified within the project area as a result of the records search, literature review, Native American consultation or archaeological field survey. The project, as presently designed, is not anticipated to have an adverse effect on cultural resources and should be allowed to proceed.

Management Recommendations

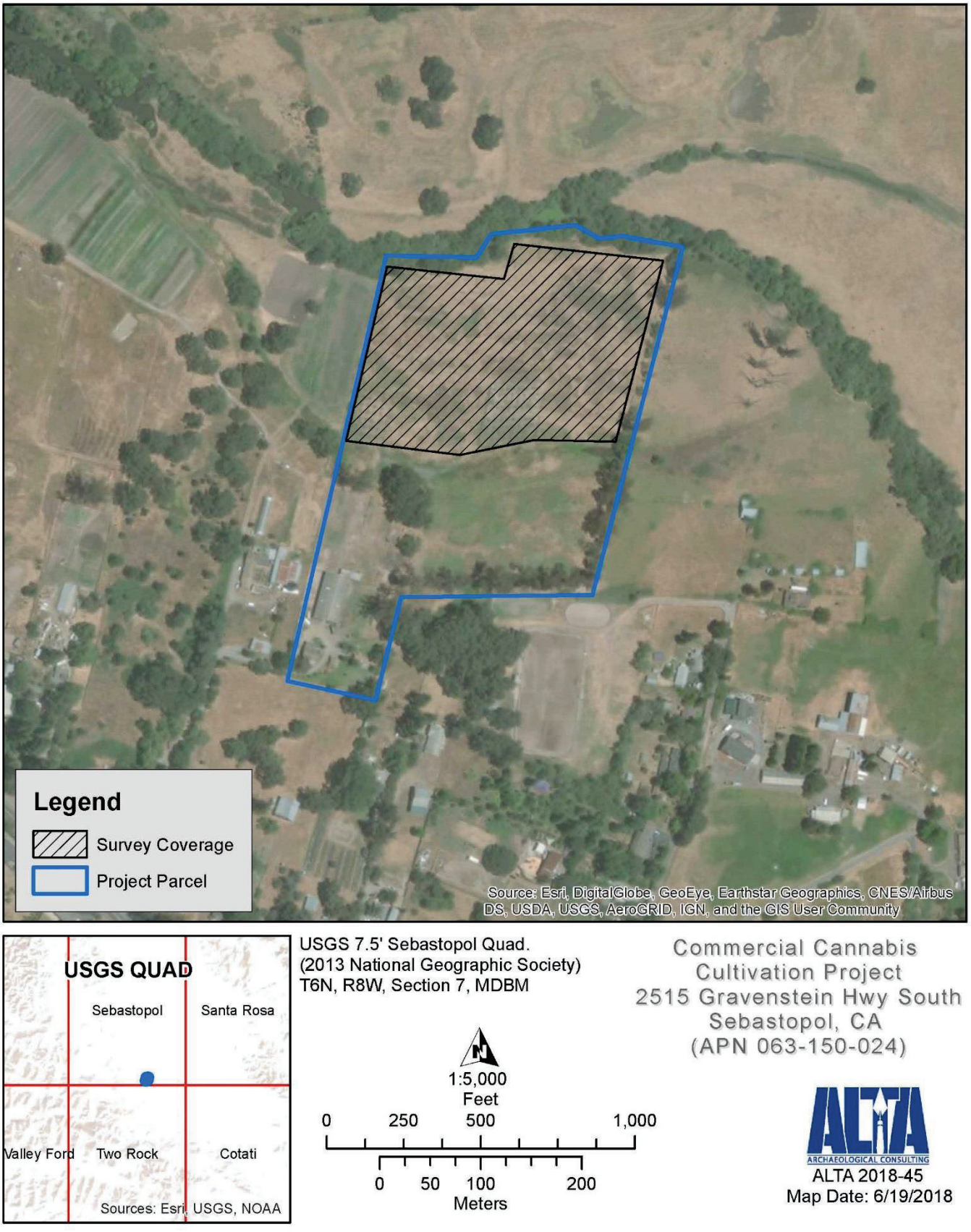
We make the following recommendations to ensure that cultural resources are not adversely affected by the proposed project. The project as presently designed is not expected to have an adverse effect on cultural resources. The project should be allowed to proceed given the following recommendations.

Unanticipated Discovery of Cultural Resources

If previously unidentified cultural resources are encountered during project implementation, avoid altering the materials and their stratigraphic context. A qualified professional archaeologist should be contacted to evaluate the situation. Project personnel should not collect cultural resources. Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

Encountering Native American Remains

Although unlikely, if human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a “Most Likely Descendant” can be designated and further recommendations regarding treatment of the remains is provided.



Map 2. Project Area and Survey Coverage

VII. REFERENCES CITED

Barrett, Samuel A.
1908 The Ethnogeography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1):1-332. Berkeley

Basgall, M. E.
1982 Archaeology and Linguistics: Pomoan Prehistory as Viewed from Northern Sonoma County. *Journal of California and Great Basin Anthropology* 4(1):3-22.

Beck, Warren A. and Ynez D. Hasse
1974 *Historical Atlas of California*. University of Oklahoma Press, Oklahoma.

Billat, Lorna
2000 Site Record for P-49-002805. Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Bloomfield, Anne
1989 Report S-048798. Cultural Heritage Survey of the City of Santa Rosa, California. Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Fredrickson, David A.
1974 Cultural Diversity in Early Central California: A view from the North Coast Ranges. *Journal of California Anthropology* 1(1)41-53.

1984 The North Coast Region. In *California Archaeology*, ed. Michael J. Moratto, pp. 471-527. Academic Press, Orlando, Florida.

Fredrickson, David A. and Gregory G. White
1988 The Clear Lake Basin and Early Complexes in California's North Coast Ranges, *In Early Human Occupation in the Far Western North America: The Clovis-Archaic Interface*, edited by Judith A. Willig, C. Melvin Aikens, and John L. Fagan. Nevada State Museum Anthropological Papers, No. 21, pp.75-86.

Fredrickson, David A., Lynn Eisenman, Christian Gerike and Jennie L. Goodrich
1979 A preliminary Cultural Resources Study of the Lakeville-Sobrante 230kV T/L Project Area. Prepared for Pacific Gas and Electric Company, San Francisco California.

General Land Office
1866 Plat Map Township 6 North, Range 9 West. September 21, 1866.

Gudde, Edwin G.
2004 *California Place Names: The Origin and Etymology of Current Geographical Names.* University of California press, Berkeley.

Hayes, J. F.
1978 Site Record for P-49-001022 (CA-SON-1094). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Hildebrandt, W.R. and J.F. Hayes
1984 *Archaeological Investigations on South Fork Mountain, Six Rivers National Forest*. Ms. On file, Northwest Information Center of the California Historical Resources Inventory System, Sonoma State University, Rohnert Park, California.

Hope, Andrew
1992 Site Record for P-49-003201 (CA-SON-974). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Jaffke, T.
2006 Site Record for P-49-000482 (CA-SON-517). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Jennings, C.W., and Strand, R.G.
1960 *Geologic map of California*, Olaf P. Jenkins edition, Ukiah sheet, scale 1:250,000.

Jennings, C.W., Strand, R.G., Rogers, T.H., Boylan, R.T., Moar, R.R., and Switzer, R.A.
1977 *Geologic Map of California*: California Division of Mines and Geology, Geologic Data Map 2, scale 1:750,000.

Jones, Terry L. and John F. Hayes
1993 Problems and Prospects in Sonoma County Archaeology. *In There Grows a Green Tree: Papers in Honor of David A Fredrickson.* Ed. Greg White, Pat Mikkelsen, William Hildebrandt, and Mark Basgall. Center for Archaeological Research at Davis, Publication Number 11.

Kroeber, A. L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology* Bulletin 78. Washington D.C.

Laguna Foundation
2018 http://www.lagunafoundation.org/about_ecology.html. Web search 06-20-2018.

Layton, T. N.
1990 *Western Pomo Prehistory: Excavations at Albion Head, Nightbird's Retreat, and Three Chop Village, Mendocino County, California.* Institute of Archaeology, University of California, Los Angeles, Monograph 32.

McLendon, Sally and Robert L. Oswalt
1978 Pomo: Introduction. In *Handbook of the Indians of North America, Volume 8 California*. Smithsonian Institution, Washington.

Meighan, C.W.
1955 The Archaeology of the North Coast Ranges. *University of California Archaeological Survey Reports* 30:1-39. Berkley.

Menefee, C. A.
1873 Historical and Descriptive Sketchbook of Napa, Sonoma, Lake and Mendocino. Reporter Publishing House, Napa City, reprinted in 1993 by James D. Stevenson, Fairfield, California.

Miller, Jeanne T.
1967 *Seeing Historic Sonoma Today*. The Miller Associates. Santa Rosa.

Origer, T. and C. Weichel
1970 Site Record for P-49-000606 (CA-SON-656). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Palmer, Lyman
1880 *History of Mendocino County*. Slocum, Bowmen & Co. San Francisco, reprinted in 1967 by the Mendocino County Historical Society, California.

Reynolds & Proctor
1898 Illustrated Atlas of Sonoma County, Santa Rosa, T6N R8W, Page 57.

Schoenheer, Allan A.
1992 *A Natural History of California*, California Natural History Guides Number 56. University of California Press, Berkeley.

Sonoma State
1977a Site Record for P-49-000911 (CA-SON-974). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

1977b Site Record for P-49-000912 (CA-SON-975). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

1977c Site Record for P-49-000913 (CA-SON-976). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Stewart, Omar C.
1943 Notes on Pomo Ethnogeography. *University of California Publications in American Archaeology and Ethnology* 40(No. 2):29-62.

Stewart, Suzanne
1989 Site Record for P-49-002278 (CA-SON-1769). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Stewart, Suzanne, M. Jablonowski and J. Salter
1989 Site Record for P-49-002277 (CA-SON-1768). Manuscript on file at the Northwest Information Center of the California Historical Resources Information Center.

Stindt, Fred.
1964 *The Northwestern Pacific Railroad, Redwood Empire Route*. Published by the Northwestern Pacific Railroad, Volume 2, Kelseyville, CA.

Thos. H. Thompson & Co.
1877 New Historical Atlas of Sonoma County, Farm Map No. 8, page 50.

Tiley, Shelly and Shannon Tushingham
2011 *Native American Ethnogeography, Traditional Resources, and Contemporary Communities and Concerns: Cultural Resource Inventory of Caltrans District I, Rural Conventional Highways: Del Norte, Humboldt, Mendocino, and Lake Counties. Volume I: Report and Appendices A-E.* Report on file at the Northwest Information Center, California Historical Resources Information System, S-38865.

United States Geological Survey
1935 Sebastopol Topographic Map, 48,000 scale.
1942 Sebastopol Topographic Map, 62,500 scale.
1954 Sebastopol Topographic Map, 24,000 scale.
1968 Sebastopol Topographic Map, 24,000 scale.
1980 Sebastopol Topographic Map, 24,000 scale.

White, Gregory et al.
2002 *Cultural Diversity and Cultural Change in Prehistoric Clear Lake Basin: Final Report of the Anderson Flat Project*. Center for Archaeological Research at Davis, Publication Number 13. University of California at Davis.

ARCHAEOLOGICAL CONSULTING

Attachment A – Records Search Results

2515 GRAVENSTEIN HWY SOUTH
CANNABIS CULTIVATION PROJECT
SEBASTOPOL, SONOMA COUNTY, CALIFORNIA

(APC 180001)

Confidential Information

This report contains confidential information. The distribution of material contained in this report is restricted to a need to know basis. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the location of cultural resources should be kept confidential. The provision protecting the confidentially of archaeological resources is in California Government Code 6245 and 6245.10, and the National Historic Preservation Act of 1996, Section 304.

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

NWIC Billing Worksheet

IC File Number: 17-2779

Client Name: Marlene McVey Phone: (541) 544-9625

Affiliation: Alta Archaeological Consulting Email: Marlene@altaac.com

Proj Name/Number: ALTA18-38; ALTA18-42; ALTA18-44; ALTA18-45; ALTA18-46

Date Request Rec'd: 5/21/2018 Date of Response: 5/21/2018

Check In: 12:29:00 PM Check Out: 2:25:00 PM Check In: Check Out:

In-person Time:	Hour(s):	1.93	$	200.00
Staff Time:	Hour(s):		$	0.00
Shape Files:	Number:		$	0.00
Custom Map Features:	Number:		$	0.00
Digital Database Record:	Number of Row(s):	135	$	33.75
Quads:	Number:		$	0.00
Address-mapped Flat Fee:			$	0.00
Hard Copy (Xerox/Computer) Pages:	Page(s):	31	$	4.65
Labor Charge:	Hour(s):	1	$	40.00
PDF Pages:	Page(s):	253	$	37.95
PDF Flat Fee:			$	0.00
Other: CHRIS Data Request			$	0.00
		Subtotal	$	**316.35**
Multi-Day Start:	Multi-Day End:		$	0.00

Rapid response surcharge of 50% of total cost: $ 0.00

Total: $ **316.35**

Information Center Staff:

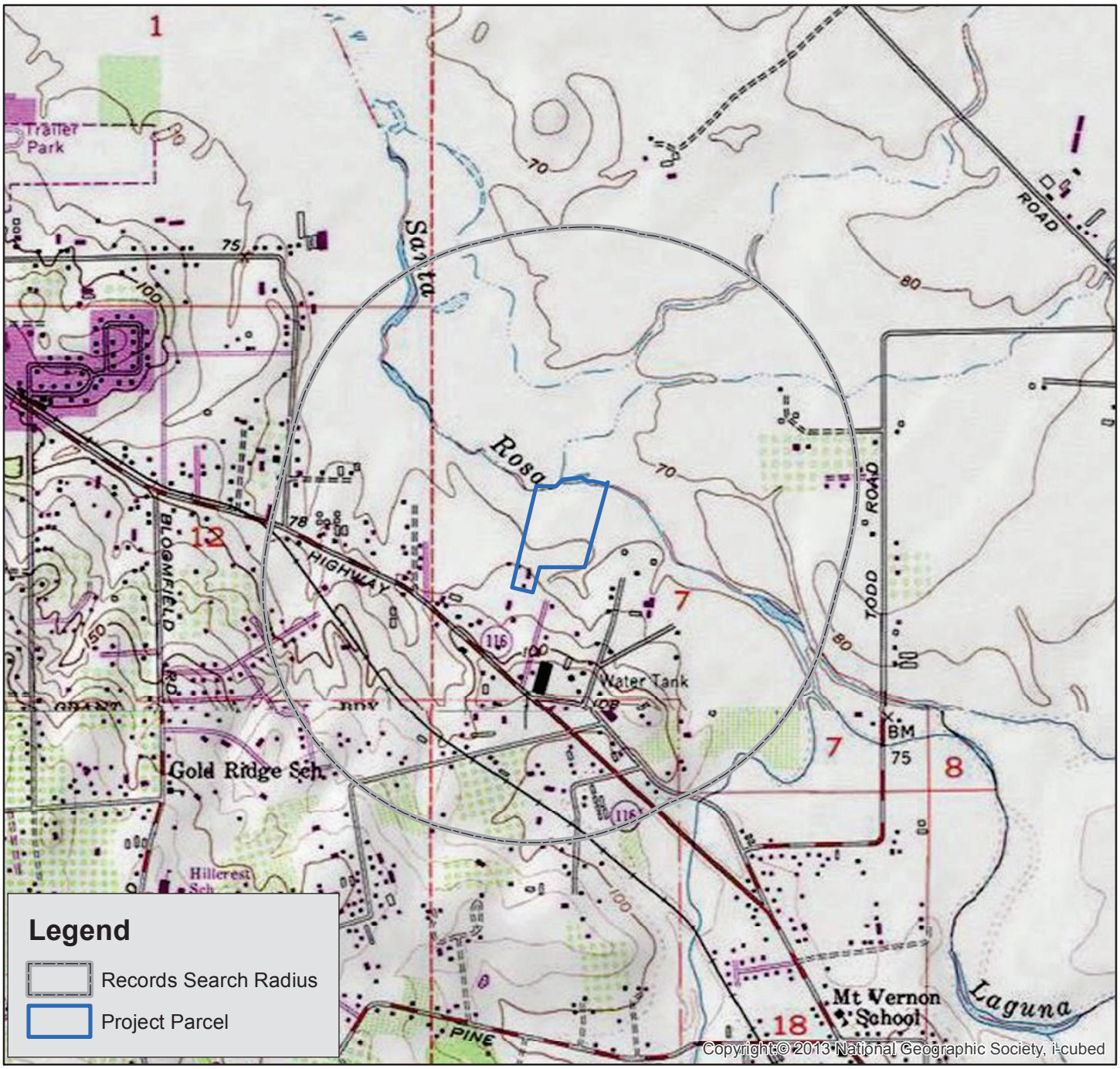
Sonoma State University Customer ID: 0001001960

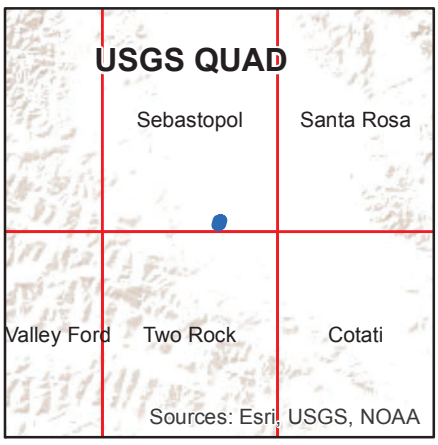
Sonoma State University Invoice No.:

CHRIS Access and Use Agreement No.: 014

This is not an invoice. Sonoma State University will send separate invoice.

Map 1. Records Search





USGS 7.5' Sebastopol Quad.
(2013 National Geographic Society)
T5N, R5W, Section 7, MDBM

1:24,000
Miles
0 0.25 0.5 1
0 0.25 0.5 1
Kilometers

Commercial Cannabis Cultivation Project
2515 Gravenstein Hwy South
Sebastopol, CA
(APN 063-150-024)

ALTA ARCHAEOLOGICAL CONSULTING
ALTA 2018-45
Map Date: 5/11/2018

Attachment B – Native American Consultation

2515 GRAVENSTEIN HWY SOUTH
CANNABIS CULTIVATION PROJECT
SEBASTOPOL, SONOMA COUNTY, CALIFORNIA

(APC 180001)

Confidential Information

This report contains confidential information. The distribution of material contained in this report is restricted to a need to know basis. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the location of cultural resources should be kept confidential. The provision protecting the confidentially of archaeological resources is in California Government Code 6245 and 6245.10, and the National Historic Preservation Act of 1996, Section 304.

Local Government Tribal Consultation List Request

NATIVE AMERIAN HERITAGE COMMISSION

915 Capital Mall, RM 364
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

05/11/2018

Type of List Requested

- ■ **CEQA Tribal Consultation List (AB 52) –** ***Per Public Resource Code §21080.3, subs. (b), (d), (e) and 21080.3.2***

- ☐ **General Plan (SB 18) –** ***Per Government Code §65352.3.***

Local Action Type:

__General Plan __General Plan Element __General Plan Amendment
__Specific Plan __Specific Plan Amendment __Pre-planning Outreach

Required Information

Project Title: Cannabis Cultivation Project (ALTA18-45)
Local Government/Lead Agency: County of Sonoma
Contact Person: Marlene McVey (Alta Archaeological Consulting)
Street Address: 15 Third Street
City: Santa Rosa Zip: 95404
Phone: (707) 544-4206 Fax: (707) 546-2135
Email: Marlene@AltaAC.com

Specific Area Subject to Proposed Action

County: Sonoma **City/Community:** Sebastopol

Project Description: The project proponent is applying for a cannabis cultivation permit. The property is located on one parcel (APN 063-150-024) totaling 17 acres. The physical address of the parcel is 2515 Gravenstein Highway South in Sebastopol, California (Map 1).

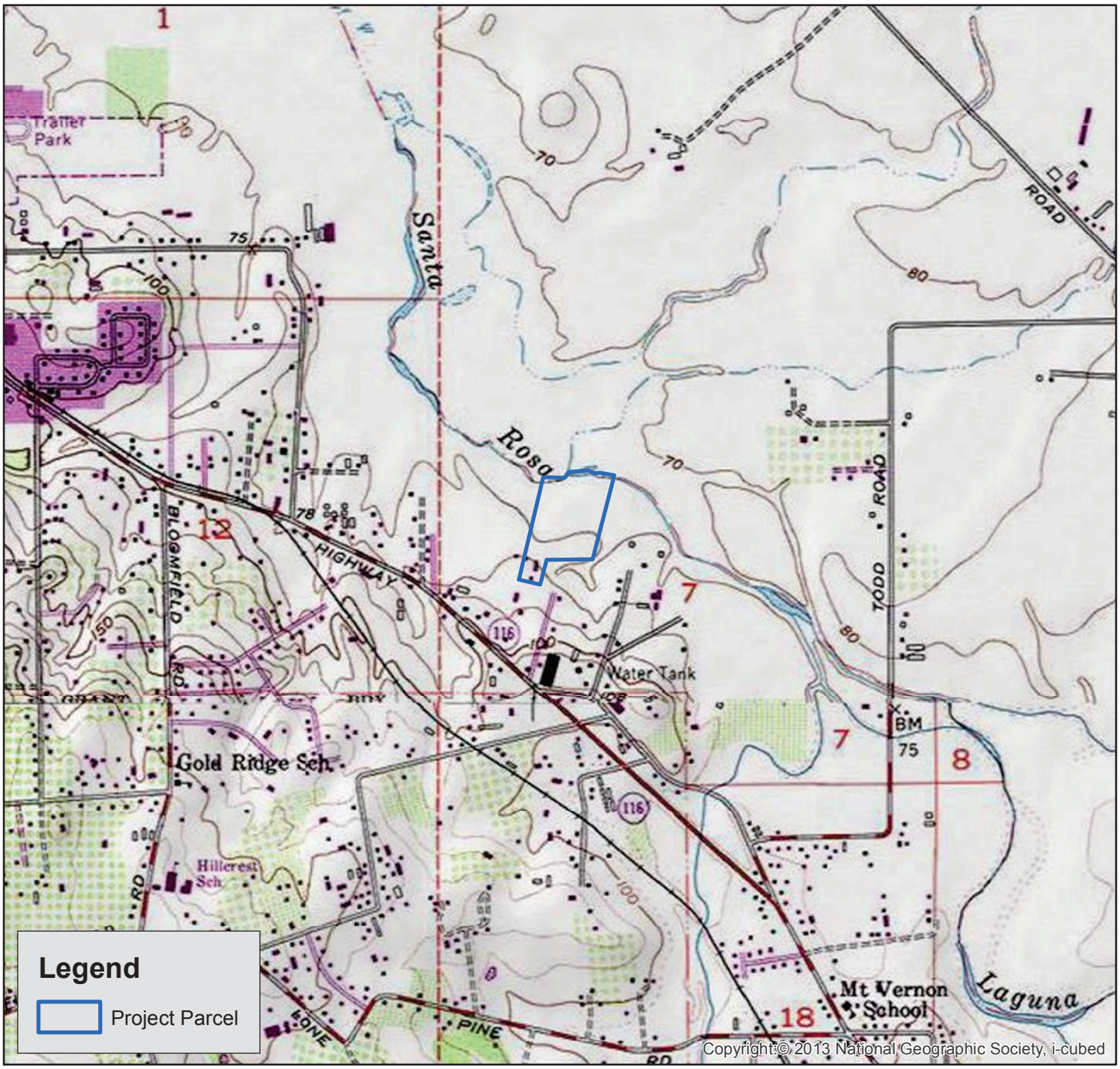
Additional Request

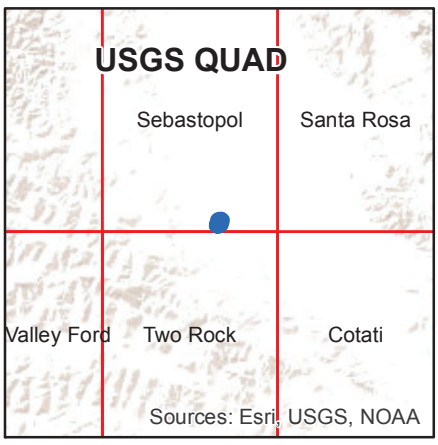
- ■ ***Sacred Lands File Search – Required Information***

USGS 7.5' Quadrangle(s): Sebastopol

Legal Description: Township 5 North, Range 5 West, Section 7, Mount Diablo B.M.

Map 1. Project Location





USGS 7.5' Sebastopol Quad.
(2013 National Geographic Society)
T6N, R8W, Section 7, MDBM

1:24,000
Miles
0 0.25 0.5 1
0 0.25 0.5 1
Kilometers

Commercial Cannabis Cultivation Project
2515 Gravenstein Hwy South
Sebastopol, CA
(APN 063-150-024)

ALTA ARCHAEOLOGICAL CONSULTING
ALTA 2018-45
Map Date: 6/19/2018

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

May 15, 2018

Marlene McVey
Alta Archeological Consulting

Sent by Email: marlene@altaac.com
Number of Pages: 2

RE: Cannabis Cultivation Project ALTA18-45, Sebastopol, Sonoma County

Dear Ms. McVey:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult**. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: sharaya.souza@nahc.ca.gov.

Sincerely,

Sharaya Souza
Staff Services Analyst
(916) 573-0168

Native American Heritage Commission
Native American Contacts
5/15/2018

Cloverdale Rancheria of Pomo Indians of California
Patricia Hermosillo, Chairperson
555 S. Cloverdale Blvd., Suite A — Pomo
Cloverdale , CA 95425
(707) 894-5775
(707) 894-5727

Dry Creek Rancheria Band of Pomo Indians
Chris Wright, Chairperson
P.O. Box 607 — Pomo
Geyserville , CA 95441
(707) 522-4233
(707) 522-4286

Federated Indians of Graton Rancheria
Gene Buvelot
6400 Redwood Drive, Ste 300 — Coast Miwok
Rohnert Park , CA 94928 — Southern Pomo
gbuvelot@gratonrancheria.com
(415) 279-4844 Cell
(707) 566-2288 ext 103

Federated Indians of Graton Rancheria
Greg Sarris, Chairperson
6400 Redwood Drive, Ste 300 — Coast Miwok
Rohnert Park , CA 94928 — Southern Pomo
(707) 566-2288 Office
(707) 566-2291 Fax

Kashia Band of Pomo Indians of the Stewarts Point Ranch
Chairperson
1420 Guerneville Rd. Ste 1 — Pomo
Santa Rosa , CA 95403
(707) 591-0580 Office
(707) 591-0583 Fax

Lytton Rancheria of California
Marjorie Mejia, Chairperson
437 Aviation Blvd. — Pomo
Santa Rosa , CA 95403
margiemejia@aol.com
(707) 575-5917
(707) 575-6974 - Fax

Middletown Rancheria
Jose Simon III, Chairperson
P.O. Box 1035 — Pomo
Middletown , CA 95461 — Lake Miwok
(707) 987-3670 Office
(707) 987-9091 Fax

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road — Wappo
Windsor , CA 95492
scottg@mishewalwappotribe.com
(707) 494-9159

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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 Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:
Cannabis Cultivation Projects, Sonoma County

ARCHAEOLOGICAL CONSULTING

Attachment C – Photo Sheets

2515 GRAVENSTEIN HWY SOUTH
CANNABIS CULTIVATION PROJECT
SEBASTOPOL, SONOMA COUNTY, CALIFORNIA

(APC 180001)

Confidential Information

This report contains confidential information. The distribution of material contained in this report is restricted to a need to know basis. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the location of cultural resources should be kept confidential. The provision protecting the confidentially of archaeological resources is in California Government Code 6245 and 6245.10, and the National Historic Preservation Act of 1996, Section 304.



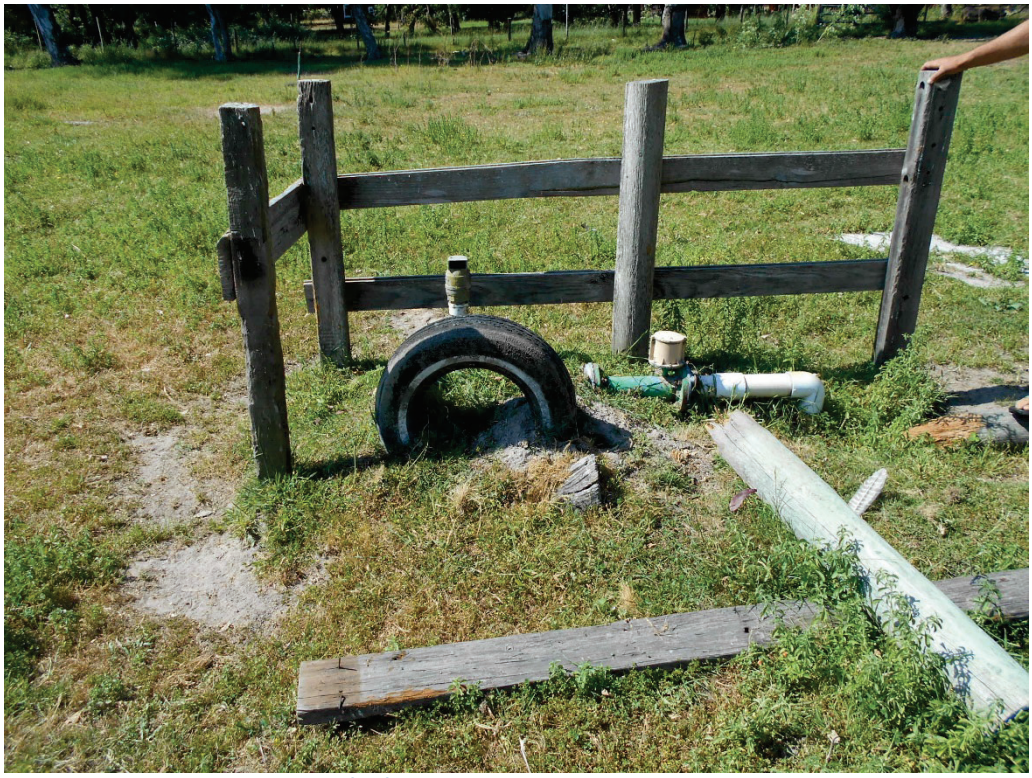
DSCN0916, View northeast, 06/06/2018, Overview of project area, north end of parcel



DSCN0918, Close-up view, 06/06/2018, View of excavated post-hole within project area



DSCN0919, View northeast, 06/06/2018, Overview of project area, current cannabis cultivation



DSCN0921, View south, 06/06/2018, View of reclaimed water pipe system for irrigation