# INITIAL STUDY/NEGATIVE DECLARATION

JDI FARMS, INC.

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

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# 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 ..... 1-3
1.5 Environmental Baseline of Analysis ..... 1-4
2 Project Description ..... 2-1
2.1 Overview ..... 2-1
2.2 Proposed Project Purpose and Objectives ..... 2-1
2.3 Proposed Project Location and Setting ..... 2-2
2.4 General Description of Regulated Cannabis Cultivation Processes and Cannabis Business Activities ..... 2-5
2.4.1 Overview of Cultivation Operations ..... 2-5
2.4.2 Processing ..... 2-7
2.4.3 Distribution ..... 2-9
2.4.4 State Cannabis Regulations ..... 2-9
2.4.5 Local Cannabis Ordinances and Regulations ..... 2-10
2.4.6 Site Specific Approval ..... 2-10
2.5 Proposed Project Characteristics ..... 2-10
2.5.1 Proposed Project Facilities ..... 2-10
2.5.2 Project Site Development ..... 2-14
2.6 Construction Activities ..... 2-17
2.7 Permits and Approvals ..... 2-17
3 Environmental Checklist ..... 3-1
3.1 Aesthetics ..... 3.1-1
3.1.1 Regulatory Setting ..... 3.1-1
3.1.2 Environmental Setting ..... 3.1-2
3.1.3 Discussion of Checklist Responses ..... 3.1-3
3.2 Agriculture and Forestry Resources ..... 3.2-1
3.2.1 Regulatory Setting ..... 3.2-1
3.2.2 Environmental Setting ..... 3.2-4
3.2.3 Discussion of Checklist Responses ..... 3.2-4
3.3 Air Quality ..... 3.3-6
3.3.1 Regulatory Setting ..... 3.3-6
3.3.2 Environmental Setting ..... 3.3-11

3.3.3 Discussion of Checklist Responses ..... 3.3-15
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 ..... 3.4-8
3.5 Cultural Resources ..... 3.5-1
3.5.1 Regulatory Setting ..... 3.5-1
3.5.2 Environmental Setting ..... 3.5-4
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 ..... 3.7-3
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 ..... 3.8-6
3.8.3 Discussion of Checklist Responses ..... 3.8-7
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 ..... 3.9-10
3.10 Hydrology and Water Quality ..... 3.10-1
3.10.1 Regulatory Setting ..... 3.10-1
3.10.2 Environmental Setting ..... 3.10-10
3.10.3 Discussion of Checklist Responses ..... 3.10-11
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 ..... 3.14-2
3.15 Public Services ..... 3.15-1
3.15.1 Regulatory Setting ..... 3.15-1
3.15.2 Environmental Setting ..... 3.15-4
3.16 Recreation ..... 3.16-1
3.16.1 Regulatory Setting ..... 3.16-1
3.16.2 Environmental Setting ..... 3.16-2
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 ..... 3.18-3
3.19 Utilities and Service Systems ..... 3.19-1
3.19.1 Regulatory Setting ..... 3.19-1
3.19.2 Environmental Setting ..... 3.19-6
3.19.3 Discussion of Checklist Responses ..... 3.19-7
3.20 Wildfire ..... 3.20-1
3.20.1 Regulatory Setting ..... 3.20-1
3.20.2 Environmental Setting ..... 3.20-6
3.20.3 Discussion of Checklist Responses ..... 3.20-6
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

## FIGURES

Figure 2.3-1. Proposed Project Vicinity ..... 2-3

Figure 2.3-2. Proposed Project Location ..... 2-4
Figure 2.5-1. Proposed Project Site Plan ..... 2-13
Figure 3.4-1. CNDDB Occurrences of Special-Status Wildlife Species within a 5-Mile Radius of the Project Site ..... 3.4-7

## TABLES

Table 2.5-1. Existing and New Facilities ..... 2-11
Table 2.5-2. Local Utility Agencies Serving the Project Area ..... 2-14
Table 2.7-1. Applicable Permit and Regulatory Requirements ..... 2-18
Table 3.3-1. Attainment Status of the State and Federal Ambient Air Quality Standards ..... 3.3-7
Table 3.3-2. SJVAPCD Air Quality CEQA Significance Thresholds ..... 3.3-11
Table 3.5-1. Pre-Contact Native American Archaeological Periods of the Central Valley ..... 3.5-4
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 ..... 3.13-4
Table 3.13-3. Maximum Allowable Noise Exposure – Stationary Noise Sources ..... 3.13-5
Table 3.13-4. Exterior Noise Level Standards ..... 3.13-6
Table 3.13-5. Cumulative Duration Allowance Standards ..... 3.13-6
Table 3.18-1. Native American Outreach ..... 3.18-4

## APPENDICES

Appendix A – Air Quality and Greenhouse Gas Calculations
Appendix B – Special-Status Species Desktop Review for JDI Farms Site

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| AB | Assembly Bill |
| AFVs | alternative fuel vehicles |
| ALUCP | Airport Land Use Compatibility Plan |
| Applicant | JDI Farms, Inc. |
| 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 |
| CVRWQCB | Central Valley Regional Water Quality Control Board |
| 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/ND | 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 |
| SCSD | Stanislaus County Sheriff's Department |
| SDWA | Safe Drinking Water Act |
| SGMA | Sustainable Groundwater Management Act |
| RHNP | Regional Housing Needs Plan |
| SJVAB | San Joaquin Valley Air Basin |
| SJVAPCD | San Joaquin Valley Air Pollution Control District |
| SMARA | Surface Mining and Reclamation Act |
| SOI | Sphere of Influence |
| SPCC | Spill Prevention, Control, and Countermeasure |
| StanCOG | Stanislaus Council of Governments |
| SRA | State Responsibility Area |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TACs | toxic air contaminants |
| TCPs | Traditional Cultural Properties |
| TCRs | tribal cultural resources |
| TISG | Transportation Impact Study Guide |
| TPZs | timber protection zones |
| TTC | temporary traffic control |
| UID | Universal Identification |
| USACE | U.S. Army Corps of Engineers |
| USDA | U.S. Department of Agriculture |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| UST | underground storage tank |
| VdB | Vibration Decibel |
| VMT | Vehicle Miles Traveled |
| WDRs | waste discharge requirements |
| VHFHSZ | Very High Hazard Severity Zones |

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# 1 INTRODUCTION AND PURPOSE

The California Department of Cannabis Control (DCC) has prepared this initial study/negative declaration (IS/ND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed JDI Farms 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. 4 [CEQA Guidelines], § 15000 et seq.).

DCC is evaluating the proposed development of a mixed-light commercial cannabis cultivation and nursery business. JDI Farms (Applicant) proposes to utilize 15 greenhouses for cultivation, five greenhouses for nursery production, and existing accessory buildings for office, storage, distribution, and processing activities in the A-2-20 (General Agriculture) zoning district of unincorporated Stanislaus County. Stanislaus County issued a use permit for the Proposed Project in June 2019. Applicant has applied to DCC for annual cultivation and distribution 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 cultivation and distribution licenses.

This chapter describes the intent and scope of this IS/ND, 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/ND has been prepared in accordance with CEQA, under which the Proposed Project is evaluated at a project level (CEQA Guidelines, § 15378). DCC, as the lead agency under CEQA, will consider the Proposed Project's potential environmental impacts when considering whether to approve the Proposed Project. This IS/ND 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/ND 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/ND 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 Negative Declaration.

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

Kevin Ponce, Senior Environmental Scientist Supervisor
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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/ND contains the following components:

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

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/ND.

Appendices

Appendix A. Air Quality and Greenhouse Gas Calculations

Appendix B. Special-Status Species Desktop Review for JDI Farms Site

## 1.3 Impact Terminology

This IS/ND 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/ND 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 other compliance 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 almond orchards. As such, the previous activities or operations would have resulted in certain environmental impacts. These activities and resulting impacts would be considered to represent baseline existing conditions. The impact analysis in this document, therefore, focuses on the increment of change that would result from the development and operation of the cannabis operation since the time of the application for an annual license, and therefore will analyze impacts of both current and future cannabis business development and operations.

The Proposed Project received local approval to begin development and operation of the Proposed Project in June 2019 upon issuance of a Use Permit. The Proposed Project received provisional cultivation, nursery, and distribution licenses from the State of California in April 2019. Based on these approvals, the Applicant constructed 10 greenhouses on the project site and began legal cannabis business operations using these structures. Although it is possible that the construction of these structures may have resulted in impacts to the environment, there is no way to complete an analysis of every potential impact to the environment that could have occurred as a result of the site development.

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

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

# 2 PROJECT DESCRIPTION

## 2.1 Overview

DCC is evaluating the proposed development of a mixed-light commercial cannabis cultivation and nursery business, including 15 greenhouses to be utilized for cultivation, five greenhouses to be utilized for nursery production, and an existing agricultural storage building and two accessory storage buildings to be utilized for office, storage, distribution, and processing activities in the A-2-20 (General Agriculture) zoning district.

On December 4, 2018, Applicant applied to the California Department of Food and Agriculture (CDFA)[1] for an annual nursery license, a medium mixed-light cultivation license, and a distribution license. CDFA issued State provisional licenses for these activities on April 25, 2019. The Proposed Project was approved by Stanislaus County on June 25, 2019 and was issued a use permit. On the basis of those state and local approvals, the facility began legal operations. As discussed in Section 1.5, the CEQA baseline for this environmental analysis is the date the Proposed Project applied for annual cultivation and distribution licenses with the State of California, in December 2018. Therefore, facilities and settings described as "existing" or "pre-existing" in this chapter are intended to refer to items that existed as of that date.

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 a mixed-light commercial cannabis cultivation, nursery, and distribution operation. The Proposed Project would consist of up to 21,966 square feet of cultivation canopy and 23,040 square feet of nursery canopy.

Specific project objectives are as follows:

- Develop the Proposed Project area into a commercial cannabis cultivation and distribution business facility;
- Construct 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;
- Construct a facility that meets all local laws, regulations, and ordinances that may apply to site development and building standards (e.g., building codes, local ordinances); and
- Build a facility that provides employment to up to 20 full-time employees.

[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

## 2.3 Proposed Project Location and Setting

The site is located at 1631 Fig Avenue, between Sycamore and Elm Avenues, in the Patterson area of unincorporated Stanislaus County. The APN is 048-007-012-000. The project site is in a rural area surrounded by agriculturally zoned parcels. Adjacent land uses include orchards, row crops, and scattered single-family dwellings in all directions. The City of Patterson is located approximately 1¼ mile to the west of the project site. The property is approximately 20 acres; however, the project site portion of the parcel is 7.1 acres.

The area is zoned as A-2-20 (General Agriculture). The County's Commercial Cannabis Ordinance includes a local setback requirement of 200 feet from the proposed use to a residence located on an adjacent property under different ownership. There is one residence located within the 200-foot setback, approximately 150 feet from the project site area at the southwestern corner. Accordingly, the Applicant has requested, and the Stanislaus County Board of Supervisors has approved, a reduction to the local residential setback. (Stanislaus County 2019.) **Figure 2.3-1** depicts the Proposed Project Vicinity; and **Figure 2.3-2** shows the Proposed Project Location.

The topography of the site is relatively flat. The 7.1 acre portion of the parcel that would be used for the Proposed Project contains 10 greenhouses that pre-existed the Applicant's state provisional cannabis business licenses, a 660 square-foot accessory building (Building B) used for storage, an employee break room, and a 144 square-foot accessory building (Building C) that would be used as an office. The finished product is dried, trimmed, stored, and packaged in the existing 2,750 square-foot agricultural storage building, identified as Building D on the Site Plan, **Figure 2.5-1**. In addition, the Proposed Project includes 10 additional greenhouses that have been constructed since the time of the local and state approvals of the project. The portion of the parcel that would not be used for the Proposed Project contains an existing almond orchard; and would continue to be used for that purpose.

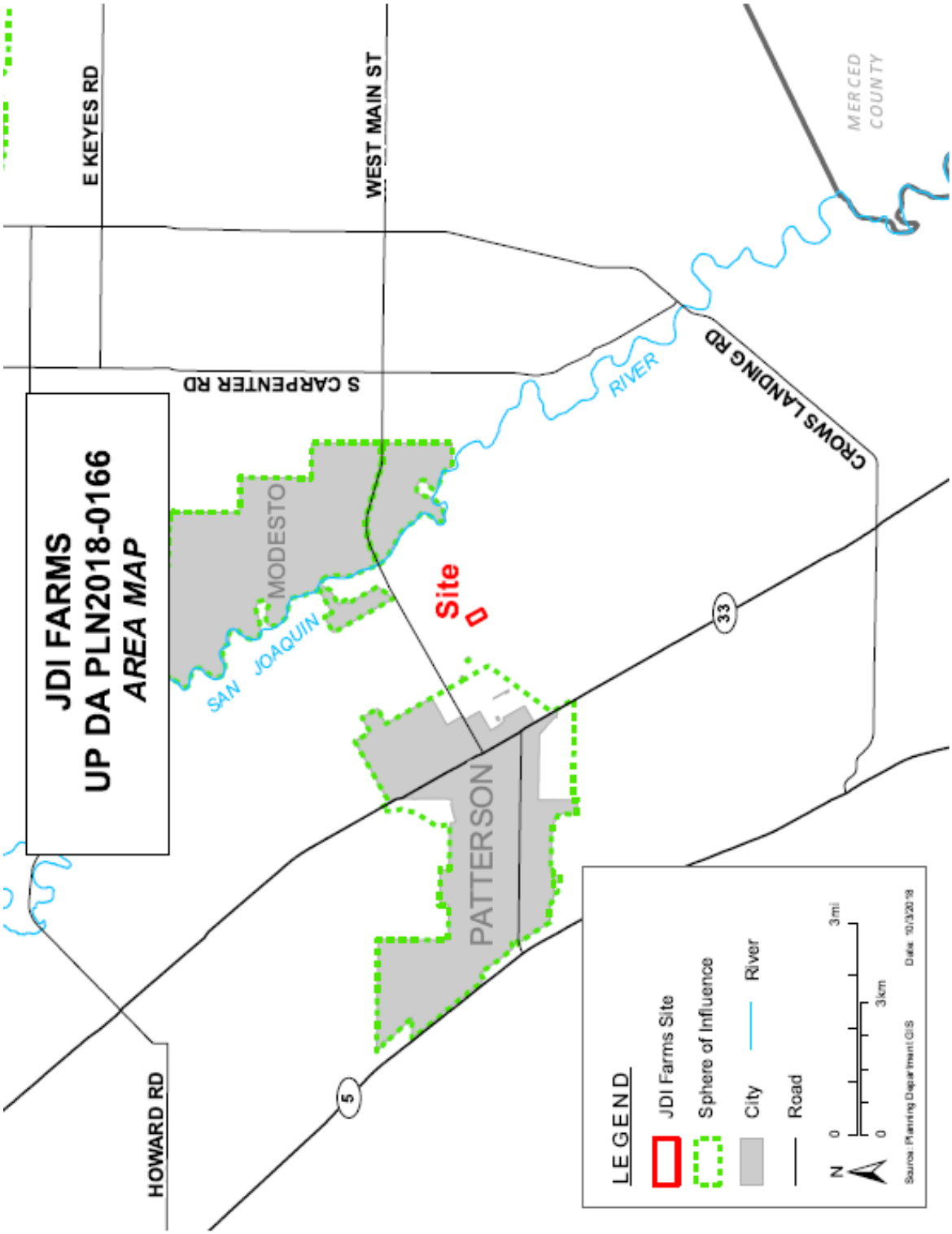



Figure 2.3-1. **Proposed Project Vicinity**




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.

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

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

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

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

Harvesting is the next step in producing the raw cannabis material and occurs when most of the plant's trichomes[2] have changed from clear to either a light amber or cloudy white color. The primary portion of the plant that is harvested is the cannabis flowers, which are generally located at the top of the plant. Flowers are removed using 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.

[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.

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.

#### *2.4.1.1 Mixed-Light Cultivation*

Mixed-light cultivation is typically conducted within greenhouses. The photoperiod in the greenhouse is manipulated using a variety of lighting and shading techniques, including a combination of natural and artificial light, to accomplish multiple harvests per year.

Instead of relying solely on artificial light for photosynthesis, however, the primary light source is the sun, supplemented by artificial light. The photoperiod is altered by using tarps or other material to block out sunlight and shorten the photoperiod, and/or by using artificial light to extend the photoperiod. Low-intensity lighting is used to extend the photoperiod of a plant to keep it in the vegetative state and prevent flowering. High-intensity lighting can be used to supplement sunlight in promoting photosynthesis and flower growth. Mixed-light operations typically use greenhouses with shading equipment. Like other cultivation methods, mixed-light cultivation activities may include on-site propagation from seeds or cuttings to generate their crops.

#### *2.4.1.2 Nursery Cultivation (Propagation)*

Nurseries produce only clones, immature plants, seeds, and other agricultural products used specifically for the propagation and cultivation of cannabis. Nurseries maintain plants in their vegetative stage, the period of growth between germination and flowering during which the plant has no observable flowers or buds. During this stage, plants focus on photosynthesis and accumulating resources that will be needed for flowering and reproduction. While some nurseries propagate from seed, most create clones by taking cuttings from “mother plants.” Nurseries may also produce seeds from mature plants. Nursery operations may be entirely indoors or may use a combination of outdoor, indoor, and mixed-light techniques.

The nursery cultivation process generally involves the following steps:

1. **Preparing cutting materials and growth medium** includes sterilizing the tools that are used to remove the cuttings (e.g., razor or sharp scissors) to reduce the possibility of fungi, viruses, or diseases affecting the cuttings, and presoaking the growing medium in pH-balanced water.
2. **Taking cuttings from the mother plant** involves selecting branch tips that have at least three nodes (areas where the leaves come out of an individual stem), cutting off one or two leaves at the nodes (farthest from the branch tip), and making a cut at an approximately 45-degree angle (approximately 0.25 inch below the last node). Branch tips selected typically range from 2 to 6 inches in length.
3. **Treating and planting the cuttings** may involve applying a rooting product (gel or powder) to the tip of the cutting to stimulate root growth. The cutting is then placed in the growth medium (typically rockwool cubes, but possibly other media such as a mix of perlite and peat moss), and multiple cuttings are placed in a plastic tray. Some cultivators may use a layer of perlite between the tray and the growth medium to allow space for roots to grow once they emerge from the growth medium. Metal shelving units can be used to hold multiple trays at one time.

4. **Growing the cuttings until roots are well established** involves daily adjustments to lighting, temperature, and moisture. Once all cuttings and their growth medium have been placed on a tray, the cuttings and (when used) the inside of a humidity dome are misted with water and the humidity dome is placed over the tray. To ensure ideal climate conditions for the cuttings, they are kept at a temperature range of approximately 72-80 degrees Fahrenheit (°F) and remain covered, apart from removing the humidity dome two to three times each day to mist the cuttings and allow fresh air under the dome. The cuttings are watered to prevent the growth medium from drying out. For faster root development, heating pads can be placed underneath the trays, if the temperatures are maintained in the ideal range. The cuttings are typically exposed to bright, but not intense, light for 18-24 hours per day. Fluorescent lighting can be placed within a few inches of the cannabis plants, or more intense lighting can be placed 2-6 feet away from the plants, depending on bulb wattage.
5. **Preparing the rooted cuttings for transport and distribution** is the final step in the cultivation process. Once the cuttings have established roots, a quality assurance/ quality control check is completed to verify the health of the plants, check for the presence of established roots, and inspect for pests. The checked final cuttings are then placed in transport containers for distribution. Nurseries typically distribute plants within two to three days of roots becoming established, although some facilities have reported holding plants for several weeks to meet client needs. Once plants are available for distribution, they are generally provided to retail dispensaries or directly to cannabis cultivators.

The total length of time between planting a cutting and distribution of a rooted cannabis plant is approximately 10 days to 3 weeks. Seed production would require a similar length of time to cultivation of flowers, which varies based on the technique (as discussed above).

In addition to the plant propagation activities described above, nurseries may conduct research on cannabis plants. As an example, researchers may conduct projects and tests related to developing plant types with specific genetic properties.

### 2.4.2 Processing

Once cannabis plants are harvested, they then go through a series of processing steps to become cannabis products. Processing operations consist of trimming, drying, curing, labeling, and packaging of cannabis. Under DCC's regulations, licensees may conduct processing on the premises of the licensed cultivation site or obtain a separate processing license to perform the activities at a separate facility. A processor may collate harvested cannabis from multiple farms to perform post-harvest processing activities.

Processing techniques also vary based on the end users of the plant. Because cannabinoids are produced only in the trichomes and most cannabinoids are found in these tiny resin-filled glands, these are the core material in many types of cannabis extracts and concentrates. "Kief" is the resin from glandular trichomes from a cannabis plant. Mature buds ("calyx") also have high cannabinoid content and are the other main parts to be used in cannabis products. Sugar leaves, which are smaller leaves on the flower, are typically used to make edible cannabis products after they are trimmed, dried, and cured. Pistils on the plant are the female reproductive organs and are not used for any products because they do not contain cannabinoids. Except for the fibers in cannabis plant stalks and the corresponding uses as hemp for fabric, rope, and oil, cannabis plant stalks are not considered a usable part of the plant. Fan leaves (the larger, well-known cannabis leaves) have low cannabinoid content and are

typically disposed of during plant trimming (VivoSun 2024). However, some growers distribute the remaining plant material after flower removal for manufacturing.

#### 2.4.2.1 Trimming

Trimming involves removal of plant parts that are not useful to prepare the plants for the next step in the production process. The trimming process occurs either immediately after the harvest (wet trim) or during/after the drying process (dry trim) to remove all or most of the sugar leaves that sit between the cannabis buds, along with any other unwanted leaf matter. Trimmers use small scissors appropriate for the delicate process. Trimming machines may also be used. Buds are handled gently and touched as little as possible during the final production processes to avoid removal of cannabinoids from the plant onto anything that may touch them. Sugar leaves may be kept for use in manufactured products. Trimming techniques vary based on whether the flower is intended to be sold as is (in which case the trimming is conducted to maximize the aesthetic quality of the flower) or processed into another product (in which case the trimming is focused on other aspects of the flower, such as odor and chemical composition).

#### 2.4.2.2 Drying

Following harvesting or trimming, flower buds and other cannabis products are dried and then cured. Drying methods may include hanging the flowers or branches from wire or rope lines; hanging them from mobile, self-supporting wire cages; or spreading flower buds onto screens. Screen drying is used for small buds that cannot be hung to dry; it is more labor intensive than the other methods and therefore not preferred. Drying takes place in a dark, well-ventilated environment. Removing extra leaf matter during the trimming stage allows for increased airflow around the flowers and decreased humidity in the drying rooms. Dehumidifiers can be used to lower the drying room's humidity to an optimal humidity level (below 30 percent). Drying can take approximately 5-10 days, depending on the thickness of the plant and length of the stem. At the end of the drying process, buds are clipped from the stems to a preferred size, no more than approximately 3 inches long. The removed stems are discarded and disposed of (Marijuana Growers Headquarters 2011) or used for manufacturing.

#### 2.4.2.3 Curing

Curing is a slow, controlled drying of the cannabis product to allow chlorophyll in the plant to naturally degrade, enhancing the cannabinoid content and flavor of the end product. Curing involves placing the buds into uncovered plastic tubs in the drying room, rotating the buds into new uncovered tubs twice a day, covering the bins at night, and repeating this process for about 1 week until the buds are sufficiently dry.

#### 2.4.2.4 Packaging and Labeling

Following curing, the cannabis buds are packaged in an airtight container or plastic bag and stored in a dark area to prevent exposure to air, light, and especially high heat, which can cause the buds to become dry and brittle. Other packaging activities may include producing pre-rolled cannabis. DCC regulations establish packaging and labeling requirements for the distribution and transport of all nonmanufactured products produced by cultivation licensees. These packaging requirements are designed to protect the cannabis consumer by preventing contamination, as well as to protect children from accidental ingestion of the cannabis products. Both packages and labels are prohibited from imitating any product commonly marketed to children. Other labeling requirements include identifying the product and the product's weight, providing the Universal Identification

(UID) assigned to the product through the track-and-trace system, and complying with all label size and text requirements (some of which are specified in Business and Professions Code Section 26120).

### 2.4.3 Distribution

Commercial cannabis distribution includes storing, labeling, transporting, and arranging for the testing of cannabis and manufactured cannabis products. Under MAUCRSA, licensed cannabis cultivators and manufacturers are required to send cannabis and cannabis products to a licensed distributor prior to retail sale. The commercial cannabis distributor is responsible forarranging for the testing of representative samples of the products by a licensed third-party testing laboratory. Commercial cannabis distributors must store batches of cannabis or cannabis products while samples from those batches are being tested. Commercial cannabis distributors may also package cannabis and nonmanufactured cannabis products; store, destroy, and label/relabel cannabis and cannabis products at their licensed facilities; act as product wholesalers; and transport cannabis and cannabis products to and/or from other licensed commerical cannabis businesses.

### 2.4.4 State Cannabis Regulations

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

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

The California Department of Pesticide Regulation (CDPR) oversees state pesticide laws, including pesticide labeling, and is vested by EPA 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. 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.)

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

### 2.4.5 Local Cannabis Ordinances and Regulations

Commercial cannabis activities were added to the Stanislaus County Code on December 5, 2017. The County adopted two separate ordinance amendments addressing commercial cannabis activities: Title 21, the Stanislaus County Zoning Ordinance, which specifies the zoning districts where each commercial cannabis activity may be permitted, subject to the discretionary review process; and Chapter 6.78 of the County Code, which regulates the cultivation, manufacturing, processing, storing, laboratory testing, labeling, transportation, destruction, delivery, and sale of medicinal and adult-use cannabis and cannabis products. All cannabis businesses in Stanislaus County must obtain and renew annually a Commercial Cannabis Activity Permit (CCA) permit in order to operate.

Refer to Chapter 3, *Environmental Checklist,* for local laws, regulations, and policies pertaining to specific environmental resources.

### 2.4.6 Site Specific Approval

The site is zoned A-2-20 (General Agriculture). Pursuant to Section 21.20.XXX(H) of the Stanislaus County Zoning Ordinance, commercial cannabis distribution, and cultivation or nursery activities (mixed-light or indoor) are permitted when conducted within a greenhouse or accessory agricultural storage building in the A-2 zoning district, subject to the approval of a use permit. The Stanislaus County Board of Supervisors (BOS) approved the Use Permit and Development Agreement (DA) Application Number PLN2018-0166 on June 25, 2019 (Stanislaus County 2019).

#### Conditions of Approval

The Stanislaus County BOS found that the Proposed Project is consistent with both the Title 21, Zoning, and Title 22, Development Agreement, Ordinances and conforms to the requirements of Chapter 6.78 of the County Code. In addition, the Proposed Project would be required to comply with a number of Conditions of Approval. These conditions include the preparation and submittal of a security plan, the installation of shielded light fixtures, the installation of a seven-foot-tall opaque fence, the preparation and submittal of a grading and drainage plan, the preparation and submittal of a landscaping plan, and compliance with all state and local laws and regulations.

## 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

In December 2018 when the project proponents applied for annual state cannabis business licenses, the site contained ten greenhouses, each measuring approximately 96’ x 30’. The Proposed Project would utilize these ten existing greenhouses for cultivation and nursery operations. The Proposed Project would also utilize several other buildings and structures that were present on the project site as of December 2018. These existing structures include:

- Building B measures approximately 30’ x 22’ and would be used for an employee break area, product intake, product storage, and packaging and labeling of products.
- Building C measures approximately 12’ x 12’ and would be used for shipping and receiving.

- Building D measures 2,750 square feet and would be used for processing of cannabis flower and products and for storage of products and materials.

The site also contains an existing single-family home, approximately 1,615 square feet. In addition to the larger structures, the site contains a parking lot with 23 spaces, small storage sheds, water tanks, and trees. The pre-existing chain link fence that surrounded the site was replaced by a 7-foot-tall opaque fence in 2024. No additional structures would require demolition.

In addition to the greenhouses already pre-existing at the project site, the Proposed Project includes the construction and use of ten additional greenhouse structures for cultivation and nursery operations, each measuring approximately 96' x 30'. These greenhouses were constructed in 2024. At that time, approximately 160 trees were removed from the existing almond orchard.

A summary of the existing and proposed structures that would be used for the Proposed Project are shown in **Table 2.5-1**. **Figure 2.5-1** is a site plan showing the locations of all Proposed Project facilities, both existing and proposed.

**Table 2.5-1. Existing and New Facilities**

| | **Pre-Existing** | **Constructed as Part of Project** | **Total Project** |
|---|---|---|---|
| **Large Structures** | | | |
| Greenhouses | 10 (approx. 96' x 30') | 10 (approx. 96' x 30') | 20 (approx. 96' x 30') |
| Accessory Buildings | Building B: Break Area, Product storage, packaging, labeling (660 $ft^2$) | N/A | Building B: Break Area, Product storage, packaging, labeling (660 $ft^2$) |
| | Building C: Shipping and Receiving (144 $ft^2$) | N/A | Building C: Shipping and Receiving (144 $ft^2$) |
| | Building D: Processing and Storage (2750 $ft^2$) | N/A | Building D: Processing and Storage (2750 $ft^2$) |
| | | | |
| **Accessory Structures** | Chain link fence (to be replaced) | 7' tall opaque fence | 7' tall opaque fence |
| | Water tanks (5) | Water tanks (5) | Water tanks (5) |
| | Graveled Parking Area | Internal road/driveway | Graveled Parking Area Internal road/driveway |

### *2.5.1.1 Cultivation and Processing Facilities*

The Proposed Project would include 20 greenhouse structures that would house canopy cultivation. Each 2,880 square foot greenhouse would contain four planter beds measuring 350 square feet, for a total of 1,400 square feet of canopy per greenhouse. At full buildout, the Proposed Project would accommodate a canopy of 21,966 square feet of commercial cannabis cultivation.

Five of the 20 greenhouses would house nursery operations. The nursery structures would provide space for both plant incubation and strain/varietal development. The nursery greenhouses would be used as follows:

- Greenhouse E: 2,880 $ft^2$, Mother Plants Reproduction

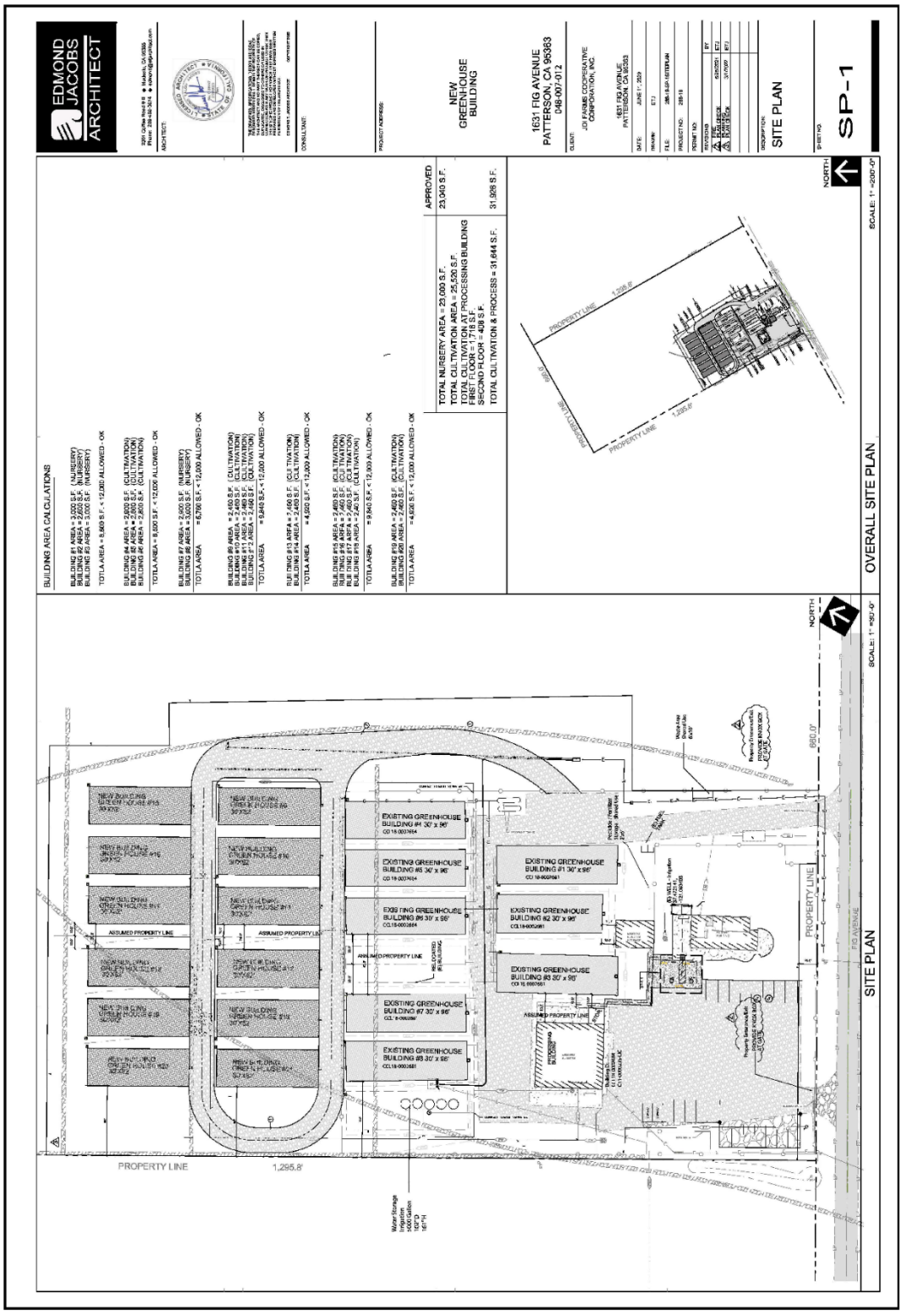
- Greenhouse F: 2,880 $ft^2$, Immature and Vegetation
- Greenhouse P: 2,880 $ft^2$, Seed Production
- Greenhouse Q: 2,880 $ft^2$, Research and Development
- Greenhouse R: 2,880 $ft^2$, Immature and Vegetation

(Stanislaus County 2019).

These structures would utilize state-of-the-art greenhouses that would harness readily available sunlight while controlling factors such as pests and contaminants. Each greenhouse would be optimized for the plant varietal(s) it houses. In addition, the structures would contain light fixtures to add supplemental light in order to maximize the number of harvests per growing season. (Stanislaus County 2019.) The supplemental lighting for the Proposed Project would consist of a series of string lights mounted on the greenhouse structure. Each greenhouse would have four strings of lights, with each string containing 24 15-watt bulbs, for a total maximum of 1,440 watts per greenhouse. (JDI Farms 2018.)

In addition to the agricultural well on site, the irrigation system consists of five (5) 5,000-gallon water tanks, a small reverse osmosis water purification system, a 15 horsepower water pump, and 1-inch water lines running to each greenhouse. Three ½-inch drip-irrigation lines are run from the 1-inch line in each greenhouse to feed each of the planter beds in all of the greenhouses, respectively. At the time of nutrient application, nutrients are mixed through a “dosatron” system and fed directly through the 1-inch water lines then through the irrigation drip lines. Water is not recycled. Irrigation runoff is not present as only enough water to diffuse into each smart pot/plant with no pour-over or seepage is administered. Nonetheless, each greenhouse may be outfitted with straw wattles around the exterior of the structure to prevent runoff from seeping off site. (JDI Farms 2024a.)

The existing agricultural building, labeled as Building D on the site plan, Figure 2.5-1, would be used for processing of cannabis, including drying, trimming, and curing of cannabis products.




Source: Edmond Jacobs, 2020

**Figure 2.5-1. Proposed Project Site Plan**

#### 2.5.1.2 Distribution Facilities

The Proposed Project's distribution facilities would be located in existing facilities. Building B, an existing accessory building, would be used to store products, with an additional separate area for labeling and packaging products. Building C, an existing accessory building, would be used as the shipping and receiving offices. Distribution vehicles would enter the project site via the main project entrance on Fig Avenue. Products would be loaded and unloaded in the gravel parking area, adjacent to the existing accessory buildings. Supplies are typically delivered via non-commercial, passenger pickup trucks not to exceed 2,500 pounds cargo capacity. Vehicles delivering cannabis products to and from the site are delivery vans typically ranging from small Ford Transit models to larger Mercedes Sprinter Van models, up to SU-40 cargo vehicles (single unit three-axle trucks). (JDI Farms 2024a.)

Any products produced onsite would be made available to the regulated market and sold in bulk to retail facilities, cannabis manufacturers, or distributors that hold the required local and state permits to purchase and transport cannabis products.

#### 2.5.1.3 Administration

The administrative facilities would be located in three existing buildings. Building C would contain offices for shipping and receiving. Building D contains a 150 square-foot room that would be used for security and supplies. Building B would include an employee break area. Employees and visitors would use restroom facilities located in the existing onsite residence.

### 2.5.2 Project Site Development

#### 2.5.2.1 Utilities

**Table 2.5-2** lists anticipated utility service agencies that would serve the Proposed Project.

**Table 2.5-2. Local Utility Agencies Serving the Project Area**

| Utility Service | Utility Agency |
|---|---|
| Water Supply | Private Well |
| Sanitary Sewer | Private Septic System |
| Electrical Service | Turlock Irrigation District |
| Fire Protection Service | West Stanislaus County Fire Protection District |
| Police Protection Service | Stanislaus County Sheriffs Office |

#### Electrical

The project site has existing access to electricity infrastructure. The Proposed Project facilities are connected to overhead electricity lines on the site, which are connected to the existing power grid and would be used to supply power to the site. The Proposed Project would use 271,610 kWh per year. (JDI Farms 2024b.) Twenty percent of electrical demand would come from the nursery operations, and 80 percent of the energy would be used for the cultivation operations. (JDI Farms 2024b.)

### Water

The Proposed Project would rely on the site's existing agricultural well for agricultural water supply. The well has a capacity of 750 gallons per minute. The well water is run through a reverse osmosis system for both domestic and irrigation uses.

The site is located within the Delta-Mendota Groundwater basin. The groundwater storage in this basin is considered to be in critical overdraft. The Patterson Irrigation District, as part of the Delta-Mendota sustainability plan, the goal for reduction overall is to reduce pumping by 9,000 acre-feet per year by 2030. However, the plan exempts wells that produce less than 2 acre-feet per year, and wells constructed before November 25, 2014 that pump less than 10 acre-feet annually. (Stanislaus County 2024.) The historic volume of water used for the almond orchard annually is 8,640,000 gallons. (JDI Farms 2024a.)

The existing agricultural well on the site would provide both domestic and irrigation water to the site. The estimated water use for the facility is 300,000 gallons annually. (JDI Farms 2024a.)

### Sewer System

Existing restrooms are connected to an existing septic system. No changes or modifications to the existing septic system would be required for the Proposed Project.

### Communications

Existing communications infrastructure at the site is sufficient to serve the Proposed Project.

#### *2.5.2.2 Stormwater Drainage*

Irrigation runoff from the existing almond orchard is conveyed via a tile drain system to a drainage ditch on the western side of the site. (JDI Farms 2024c.) The Proposed Project would include minimal changes to impervious surfaces. The new greenhouses would not be placed on concrete pads, so would not include new permanent impervious surfaces. The only new impervious surface would be the paved parking area, measuring 600 square feet. The remaining areas of the 20-acre property would remain unchanged and mostly pervious, including landscaping, and the existing almond orchard. Stormwater management features include the use of gravel roadways throughout the facility to maintain soil compaction and prevent erosion; erosion control blankets on exposed earth adjacent to greenhouses; and catch basins running to Acrylonitrile Butadiene Styrene (ABS) sewer pipes for surface water collection.

#### *2.5.2.3 Site Access and Circulation*

The entrance and exit for all employees and deliveries is on Fig Avenue. All vehicles and pedestrians would enter through a controlled gate in the chain link fence that surrounds the project site.

A gravel parking area is located inside the gated entrance, in the southwestern corner of the site. The parking area is graveled and permeable. The parking area would have sufficient space to provide approximately 23 standard parking spaces. The Proposed Project would provide sufficient parking to accommodate the buildout total of 20 employees plus visitors.

### 2.5.2.4 Other Site Elements

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

#### Staffing

At full project build out, the Proposed Project would have up to 20 employees. This would include operations staff, administration, and security personnel. The hours of operation for the facility are 6:00 A.M. to 6:00 P.M., seven days per week. The first work shift is 5:00 A.M. to 1:30 P.M., second shift is 6:00 A.M. to 2:30 P.M., and the third shift is 9:30 A.M. to 6:00 P.M. The employees per shift are distributed as follows:

- 5:00 A.M. to 1:30 P.M. – 5 Employees
- 6:00 A.M. to 2:30 P.M. – 5 Employees
- 9:30 A.M. to 6:00 P.M. – 10 Employees

(JDI Farms 2024c.)

#### Deliveries

Operation of the Proposed Project would require regular deliveries of cultivation and maintenance equipment and materials (e.g., soil and soil amendments, equipment, fertilizers, chemicals, and), fuel, deliveries of office supplies and other equipment, and disposal of hazardous materials generated on-site. The facility would dispatch regular deliveries of products from the facility. Delivery vehicles would be loaded and unloaded in the parking area near the southwest portion of the facility.

Waste disposal services would be conducted by Bertolotti Disposal. Waste would be transported to a manned fully permitted solid-waste landfill or transformation facility. (JDI Farms n.d.)

#### Waste Storage

The site contains a six-foot by 10-foot waste area as a staging area for cannabis waste. Cannabis waste materials are self-hauled to the local waste collection facility.

#### Hazardous Materials Storage

Hazardous materials are stored within an existing pesticide and fertilizer storage shed with impermeable floor and lockable doors on site. Hazardous materials that would be used on site include: Calcium Sulfate (1,815 pounds maximum); Mission Fertilizer Grow 3-1-2 (55 gallons maximum); Mission Fertilizer Root (55 gallons maximum); PH-Up (55 gallons maximum); and Silver Bullet Terpene Enhancer (55 pounds maximum). These materials are managed and disposed in accordance with the facility's Consolidated Emergency Response/Contingency Plan on file with the State of California and local Department of Health as registered through the California Environmental Reporting System (CERS) on April 3, 2024. (JDI Farms 2024a.)

#### Landscaping and Irrigation

A double row of landscaping, made up of evergreen trees at least 15 feet in height, have been planted along the western border of the project site. Landscaping has also been installed along the project site bordering Fig Avenue to provide a visual buffer from the roadway. Existing and proposed landscaping would be irrigated with water from the site's agricultural well.

#### *2.5.2.5 Ancillary Improvements*

##### Fencing

The site has been enclosed by a seven-foot-tall chain link fence with 100 percent privacy slats.

##### Security

Fifty-watt security lights are located at the south end (entry point) of each of the greenhouses on site, outfitted with hoods facing downward to prevent light pollution. A total of 13 security cameras are located on the interior and exterior of the existing buildings.

## 2.6 Construction Activities

From May 2024 to July 2024, ten premanufactured greenhouse structures were delivered and assembled on site. Construction of buildings and structures included the following activities:

- Grading and site preparation;
- Delivery and assembly of premanufactured structures;
- Installation of electrical/instrumentation equipment; and
- Installation of mechanical equipment and piping.

All construction activities are complete. Approximately 500 cubic ft of earth was moved across the entire site for ground leveling. Concrete footings are included on five of the 20 greenhouses; there are no other concrete foundations for the greenhouses. Compacted natural earth, with compacted class 2 aggregate road base gravel was added to construct roadways. Minimal trenching was required for water drainage, and installation of 1-inch water lines to each greenhouse. No trenching was required for wastewater pipelines. (JDI Farms 2024a.)

## 2.7 Permits and Approvals

CEQA defines a responsible agency as “a public agency, other than the lead agency, which has responsibility for carrying out or approving a project’. (Pub. Resources Code, § 21069.) A trustee agency is ‘a state agency that has jurisdiction by law over natural resources affected by a project, that are held in trust for the people of the State of California” (Pub. Resources Code, § 21070). For the Proposed Project, the California Department of Fish and Wildlife, Central Region, is considered a trustee agency. Responsible agencies for the Proposed Project are California Department of Transportation (Caltrans), Central Valley Regional Water Quality Control Board, San Joaquin Valley Air Pollution Control District, and Stanislaus 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 | Cannabis Cultivation License(s)<br>Cannabis Distribution License |
| Stanislaus County | General Plan, zoning ordinance, development requirements, Ordinance 519 | Establish requirements related to building, landscaping, and other construction- and design-related activities; Use Permit for cannabis operations | Building Permit, Use Permit |

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# 3 ENVIRONMENTAL CHECKLIST

This chapter of the Initial Study/Mitigated Negative Declaration (IS/ND) assesses the environmental impacts of the JDI Farms (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: | JDI Farms |
| **2.** | Lead Agency Name and Address: | California Department of Cannabis Control, 2920 Kilgore Rd. Rancho Cordova, CA 95670-6157 |
| **3.** | Contact Person, Phone Number and Email | Kevin Ponce, Senior Environmental Scientist Supervisor, (916) 247-1659, kevin.ponce@cannabis.ca.gov |
| **4.** | Project Location and Assessor's parcel number (APN) | 1631 Fig Avenue, between Sycamore and Elm Avenues, in the Patterson area of unincorporated Stanislaus County.<br>APN 048-007-012-000. |
| **5.** | Property Owner(s): | JDI Farms, Inc. |
| **6.** | General Plan Designation: | Agriculture |
| **7.** | Zoning: | A-2-20 (General Agriculture) |
| **8.** | Description of Project: | Development of a mixed-light commercial cannabis cultivation and nursery business. JDI Farms (Applicant) proposes to utilize 15 greenhouses for cultivation, 5 greenhouses for nursery production, and existing accessory buildings for office, storage, distribution, and processing activities in the A-2-20 (General Agriculture) zoning district of unincorporated Stanislaus County |
| **9.** | Surrounding Land Uses and Setting: | Orchards, row crops, scattered single-family dwellings in all directions, and City of Patterson to the west |
| **10.** | Other Public Agencies whose Approval or Input May Be Needed: | Stanislaus County |
| **11.** | Native American Consultation | On January 9, 2025, letters were sent to the 8 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. To |

date, no responses have been received. As planning proceeds, DCC will continue to communicate with interested tribal representatives regarding the project and incorporate their concerns into project planning and mitigation as warranted.

# 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 Kevin Ponce Digitally signed by Kevin Ponce Date: 2025.07.15 19:31:48 -07'00' Date 7/15/2025

Kevin Ponce
Environmental Program Manager
Department of Cannabis Control

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# 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 points). 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

### *3.1.1.1 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 National Wild and Scenic Rivers System (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 National Wild and Scenic Rivers System 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.

#### 3.1.1.2 State Laws, Regulations, and Policies

*California Scenic Highway Program*

The California 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)).

#### 3.1.1.3 Local Laws, Regulations, and Policies

*Stanislaus County Zoning Ordinance*

Chapter 6.78.080 Commercial Cannabis Cultivation

D. Visibility. In no case, shall cannabis plants be visible from off site, including transfer. No visual markers indicating that cannabis is cultivated on the site shall be visible from off site. All greenhouse cultivation activities shall be fully enclosed by an opaque fence, made of uniform material, at least seven feet in height. The fence must be adequately secured by a locked gate to prevent unauthorized entry. The fence design and construction material shall be approved by the county.

E. Enclosure. All commercial cannabis cultivation operations shall occur within a greenhouse or fully enclosed building. If conducted within a greenhouse, supplemental lighting shall not exceed twenty-five watts per square foot to be used up to one hour before sunrise or after sunset, unless the greenhouse or facility is equipped with light-blocking measures to ensure that no light escapes.

F. Outdoor Cultivation. No outdoor commercial cannabis cultivation is allowed within the unincorporated areas of the county of Stanislaus.

### 3.1.2 Environmental Setting

#### 3.1.2.1 Visual Character and Quality of the Site

The Proposed Project is located within unincorporated Stanislaus County, in an agricultural area. The project site is visually defined by the largely flat open space with mountains faintly visible to the west, the surrounding area is characterized by agricultural development and low-density residential buildings.

#### 3.1.2.2 Light and Glare

Existing sources of light and glare within the Project 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.

#### 3.1.2.3 Scenic Highways and Corridors

There are no designated scenic highways or federal scenic byways in the project area and the closest officially designated route is approximately 4.4 miles to the west of the project site (Caltrans 2018).

#### 3.1.2.4 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, it is expected that they would be least sensitive to changes to the viewshed.

### 3.1.3 Discussion of Checklist Responses

#### *a. Have a Substantial Adverse Effect on a Scenic Vista (No 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. Therefore, the Proposed Project would not have an adverse effect on a scenic vista. Therefore, the Proposed Project would have **no impact** on scenic vistas.

#### *b. Substantially Damage Scenic Resources, Including, but not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway (No Impact)*

There are no eligible or officially designated California Scenic Highways near the project site. the closest officially designated route is State Route 5 (SR-5), approximately 4.4 miles to the west of the project site, and the site would not be visible from that route. (Caltrans 2018). 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 Public Views of the Site and its Surroundings (Less-than-Significant Impact)*

The site is located in a rural area, approximately 1.3 miles east of the City of Patterson. Zoning and other regulations which apply to the site do not have any specific requirements with regards to scenic quality. Furthermore, in accordance with Stanislaus County cannabis ordinance section 6.78.080 an opaque 7-foot tall fence with a locked gate has been installed on-site to provide screening from the public road and neighboring properties. Additionally, the Applicant has planted immature Cypress trees along the inner perimeter of the screening fence. The Proposed Project buildings are generally in keeping with the scale and general appearance

of the existing development in the surrounding area. Furthermore, the site is partly obscured by existing vegetation. Therefore, the impact would be **less than significant**.

### *d. Create a New Source of Substantial Light or Glare (Less-than-Significant Impact)*

Typically, construction impacts of light and glare 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.

DCC regulations require 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).) The Proposed Project includes security lights, located at the south end (entry point) of each of the greenhouses on site, outfitted with hoods facing downward to prevent light pollution which reduces light spillage.

The greenhouses utilize supplemental lighting sources to maximize grow time. Section 6.78.080(E) of the Stanislaus County Code of Ordinances requires that supplemental lighting in the greenhouse shall either not exceed twenty-five watts per square foot and only be used up to one hour before sunrise or after sunset, or each greenhouse shall be equipped so that no light is visible from within when viewed from outside the greenhouse. Additionally, DCC regulations require that lighting for mixed-light operations must be fully shielded between sunset and sunrise such that no light escapes the facility, in order to minimize nighttime glare. (Cal Code Regs., tit. 4, § 16304, subd. (a)(7).)

Distribution activities would involve small trucks and vans, which would use headlights. The use of distribution vehicles would occur primarily during daylight hours, would be in an industrial area, and would be similar to previous activities at the site.

The Proposed Project's compliance with local and state regulations would ensure that the impact would be **less than significant**.

## 3.2 Agriculture and Forestry Resources

| | 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

#### *3.2.1.1 Federal Laws, Regulations, and Policies*

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

#### *3.2.1.2 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 non-irrigated orchards or vineyards as found in some climatic zones. Unique Farmland must have been cropped at some time during the four 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.

### *Forest Land, Timberland, and the Taxation Reform Act*

Forest land is defined as native tree cover greater than 10 percent that allows for the management of timber, aesthetics, fish and wildlife, recreation, and other public benefits. (Pub. Resources Code § 12220(g).) A subset of forest land, timberland, is defined under the Forest Practice Act as all non-federal land that is available for, and capable of, growing a crop of trees of commercial species, as designated by the Board of Forestry. (Pub. Resources Code, § 4526; Cal. Code Regs., tit. 14, § 895.1.) A "crop of trees" includes any number of trees that may be harvested commercially. (Cal. Code Regs., tit. 14, § 895.1.)

The Forest Taxation Reform Act, enacted in 1976, provides guidelines that allow cities and counties with qualifying timberland to adopt timber protection zones (TPZs). Government Code 51104, subdivision (g) defines defines TPZs as areas zoned in accordance with Sections 51112 and 51113 for the purposes of growing and harvesting timber, or for growing and harvesting timber and compatible uses. TPZs are privately owned land or land acquired for State forest purposes. When a TPZ is established, a private landowner agrees to commit the land to forest production for at least 10 years. In return, the approving jurisdiction grants the landowner a property tax reduction. The California Department of Forestry and Fire Protection (CAL FIRE) has regulatory authority over timber harvest and timberland conversion decisions in TPZs.

*California Department of Forestry and Fire Protection*

The California Forest Practice Act, adopted in 1973, requires owners of non-federal timberland to apply for a Timberland Conversion Permit from the Director of the California Department of Forestry and Fire Protection (CAL FIRE) for the conversion of timberland to another use. CAL FIRE may grant exemptions for conversions of less than three acres. To qualify for an exemption from CAL FIRE, applicants must comply with applicable provisions of the Forest Practice Act and regulations, county general plans, zoning ordinances, and other implementing ordinances of the local jurisdiction. The Forest Practice Act and implementing regulations also govern the removal of commercial timber species from areas of pending new construction (CAL FIRE 2020).

### *3.2.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Zoning Ordinance*

21.20.45 Uses on Lands Subject to Williamson Contract

A. As required by Government Code Section 51238.1, the planning commission and/or board of supervisors shall find that uses requiring use permits that are approved on lands under California Land Conservation Contracts (Williamson Act Contracts) shall be consistent with all of the following principles of compatibility:

   1. The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district.

   2. The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.

   3. The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

6.78.080 Commercial Cannabis Cultivation

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

G. Commercial cannabis cultivation activities in the A-2 zoning district shall be limited to cultivation, nursery, or distribution (limited to permitted commercial cannabis product grown on-site) within the following type of structure:

1. Greenhouse.

2. Accessory storage buildings may be utilized provided the following criteria is met:

a. The building must meet the requirements of Section 6.78.120(B).

b. No more than ten thousand square feet of cultivation or nursery canopy shall be allowed.

H. The cumulative total canopy size of cannabis cultivated at the cultivation site shall not exceed the canopy size authorized under the county's CCA permit or state permit, whichever is least.

I. Commercial cannabis cultivation activities shall not be considered agriculture for the purpose of the county's right-to-farm policy or sphere of influence policy.

### 3.2.2 Environmental Setting

The Proposed Project is located in a rural area. The project site is located on land partly classified by the DOC as "Rural Residential Land" and partly as "Prime Farmland" (DOC 2022a). The Proposed Project is not identified as being under a Williamson Act contract (DOC 2022b).

### 3.2.3 Discussion of Checklist Responses

#### *a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to Non-agricultural Use (No Impact)*

According to DOC, the project site is partially situated on lands designated as Prime Farmland (DOC 2022a) and completely on land which has been used for agricultural, and agricultural residential purposes since at least 1998. The purpose of the Proposed Project is to use the land for agricultural purposes and any non-greenhouse development would be to support cannabis growing on-site. Therefore, the Project would not convert the site to non-agricultural use, or result in a loss of agricultural lands. Therefore, the Proposed Project would have **no impact** on Farmland as a result of conversion to non-agricultural use.

#### *b. Conflict with Existing Zoning for Agricultural 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 Stanislaus 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. Therefore, the Proposed Project would have **no impact** on land zoned for agricultural use or a Williamson Act contract.

### *c. Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production (No Impact)*

As discussed above, the Proposed Project would take place on land which has been used for agricultural and residential purposes since at least 1998. There are no forests on the site of the Proposed Project. According to Pub. Res. Code section 4526, "timberland" is defined as non-federal land which is both available and capable of growing a commercial crop of trees to produce lumber and other forest products. There is no timberland zoning designation which applies to the Project site. Almond trees have previously been grown on-site for agricultural purposes, and not grown to supply lumber or forest products. Therefore, there would be no conflict with forest or timberland zoned land, and the Proposed Project would have **no impact** on forest land or timberland.

### *d. Result in the Loss of Forest Land or Conversion of Forest Land to Non-forest Use (No Impact)*

As there are no forests on the project site, and the Proposed Project would not convert forest land to non-forest use. Therefore, the Proposed Project would have **no impact** related to 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 (No Impact)*

The purpose of the Proposed Project is to use the land for agricultural purposes and any non-greenhouse development would be to support cannabis growing on-site. There is no forest land 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. Therefore, the Proposed Project would have **no impact** related to other changes that could convert Farmland or forest land.

# 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

### *3.3.1.1 Federal and State Laws, Regulations, and Policies*

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less ($PM_{10}$), particulate matter of aerodynamic radius of 2.5 micrometers or less ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide ($NO_2$), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health. Ground level ozone is caused by emissions of ozone precursor, nitrous oxides ($NO_X$) and reactive organic gases (ROG).

The California Air Resources Board (CARB) sets the California Ambient Air Quality Standards (CAAQS), standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The Proposed Project is located within the San Joaquin Valley Air Basin (SJVAB), which is comprised of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and includes San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare Counties and the San Joaquin Valley Air Basin portion of KernCounty. The SJVAPCD manages air quality within Stainslaus County portion of the SJVAB for attainment and permitting purposes.

**Table 3.3-1** shows the current attainment status in Stanislaus County for the state and federal ambient air quality standards. The area is designated as nonattainment for the state $PM_{10}$ standard.

**Table 3.3-1. Attainment Status of the State and Federal Ambient Air Quality Standards**

| Contaminant | Averaging Time | Concentration | State Standards Attainment Status[1] | Federal Standards Attainment Status[2] |
|---|---|---|---|---|
| Ozone ($O_3$) | 1-hour | 0.09 ppm | N (Severe) | See footnote 3 |
| | 8-hour | 0.070 ppm | N | |
| | | 0.070 ppm | | N (Extreme) |
| Carbon Monoxide (CO) | 1-hour | 20 ppm | U/A | |
| | | 35 ppm | | U/A |
| | 8-hour | 9.0 ppm | U/A | U/A |
| Nitrogen Dioxide ($NO_2$) | 1-hour | 0.18 ppm | A | |
| | | 0.100 ppm[5] | | U/A |
| | Annual arithmetic mean | 0.030 ppm | A | |
| | | 0.053 ppm | | U/A |
| Sulfur Dioxide ($SO_2$) | 1-hour | 0.25 ppm | A | |
| | | 0.075 ppm | | U/A |
| | 24-hour | 0.04 ppm | A | |
| | | 0.14 ppm | | U/A |
| | Annual arithmetic mean | 0.030 ppm | | U/A |
| Particulate Matter (PM10) | 24-hour | 50 µg/m$^3$ | N | |
| | 24-hour | 150 µg/m$^3$ | | A |
| | Annual arithmetic mean | 20 µg/m$^3$ | N | |
| Fine Particulate Matter (PM2.5) | 24-hour | 35 µg/m$^3$ | | N (Moderate) |
| | Annual arithmetic mean[7] | 12 µg/m$^3$ | N | |
| | | 9 µg/m$^3$ | | N (Moderate) |
| Sulfates | 24-hour | 25 µg/m$^3$ | A | |
| Lead (Pb)[6] | 30-day average | 1.5 µg/m$^3$ | A | |

| Contaminant | Averaging Time | Concentration | State Standards Attainment Status[1] | Federal Standards Attainment Status[2] |
|---|---|---|---|---|
| Hydrogen Sulfide (H2S) | 1-hour | 0.03 ppm | U | |
| Vinyl Chloride[6] (chloroethene) | 24-hour | 0.010 ppm | A | |
| Visibility-Reducing Particles | 8-hour (10:00 to 18:00 PST) | See footnote 4 | U | |

A – attainment
N – non-attainment
U – unclassified
ppm – parts per million
$\mu g/m^3$ – micrograms per cubic meter
PST – Pacific Standard Time

**Notes:**

1. California standards for ozone, carbon monoxide, sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - $PM_{10}$, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour, or 24-hour average (i.e., all standards except for lead and the $PM_{10}$ annual standard), then some measurements may be excluded. In particular, measurements that are excluded include those that the CARB determines would occur less than once per year on average.
2. National standards shown are the "primary standards" designed to protect public health. National air quality standards are set by USEPA at levels determined to be protective of public health with an adequate margin of safety. National standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once per year. The 1-hour ozone standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.075 ppm (75 parts per billion) or less. The 24-hour $PM_{10}$ standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 $\mu g/m^3$. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 $\mu g/m^3$. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for $PM_{10}$ is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met by spatially averaging annual averages across officially designated clusters of sites and then determining if the 3-year average of these annual averages falls below the standard.
3. The national 1-hour ozone standard was revoked by USEPA on June 15, 2005. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 ppm to 0.070 ppm. An area meets the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. This table provides the attainment statuses for the 2015 standard of 0.070 ppm.
4. Statewide Visibility-Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
5. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average of nitrogen dioxide at each monitoring station within an area must not exceed 0.100 ppm (effective January 22, 2010).

6. CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure below which there are no adverse health effects determined.
7. On February 7, 2024 the USEPA strengthened the NAAQS for the annual PM2.5 to 9.0 micrograms per cubic meter. New designations for this standard will be available within two years of issuing the revised NAAQS. It is anticipated that Stanislaus County would not meet the new standard.

*Source: SJVAPCD 2025, USEPA 2024a*

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

- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines – Standards for Non-vehicular Diesel Fuel
- ATCM for Stationary Compression Ignition Engines

CARB has several vehicle fleet regulations that cover fossil-fueled equipment operated at a facility. These regulations require owners of equipment and vehicle fleets to meet fleet-wide specified engine emission levels over time. Obligations include equipment registration, equipment labeling, and reporting requirements. These regulations include the following fleet rules:

- In-Use Off-Road Disel-Fueled Fleets Regulation,
- Portable Equipment Registration Program (PERP),
- Large Spark-Ignition Engine Fleet Requirements Regulation, and
- Small Off-Road Engines Regulation
- Advanced Clean Truck Regulation
- Advanced Clean Fleet Regulation
- Advanced Clean Cars Program

The Clean Air Act allows California to seek a waiver of the preemption which prohibits states from enacting emission standards for new motor vehicles. EPA must grant a waiver, however, before California's rules may be enforced. At this time, California has withdrawn its request for a waiver for the Advance Clean Fleet Regulation. CARB is not enforcing the existing portions of the Advanced Clean Fleets Regulation that require a federal waiver or authorization, such as the portions of the Advanced Clean Fleets 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. The state and local government fleets portion of the Advanced Clean Fleets Regulation remains unaffected.

### 3.3.1.2 Local Laws, Regulations, and Policies

*San Joaquin Valley Air Pollution Control District*

Stanislaus County is located within in the San Joaquin Valley Air Basin (SJVAB) and is subject to the San Joaquin Valley Air Pollution Control District (SJVAPCD) requirements and regulations. SJVAPCD is 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. SJVAPCD has developed several air quality plans to address pollutants and improve air quality in the region. The SJVAPCD's most recent air quality plans are listed below. These plans establish a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the SJVAB.

**2024 Plan for the 2012 Annual $PM_{2.5}$ Standard:** The District adopted the 2024 Plan for the 2012 Annual $PM_{2.5}$ Standard on June 20, 2024. This Plan addresses the EPA federal 2012 annual $PM_{2.5}$ standard of 12 µg/m³ (SJVAPCD 2024).

**2006 $PM_{10}$ Plan:** The District adopted the 2006 $PM_{10}$ Plan in February 2006. This plan addresses the $PM_{10}$ NAAQS (SJVAPCD 2006).

**2022 Plan for the 2015 8-Hour Ozone Standard:** The District adopted the 2022 Plan for the 2015 8-Hour Ozone Standard on December 15, 2022. This Plan satisfies Clean Air Act requirements and ensures expeditious attainment of the 70 parts per billion 8-hour ozone standard (SJVAPCD 2022).

Regulation VIII (Fugitive Dust Prohibitions). Regulation VIII (Rules 8011-8081). This regulation is a series of rules designed to reduce particulate emissions generated by human activity, including construction and demolition activities, carryout and trackout, paved and unpaved roads, bulk material handling and storage, unpaved vehicle/traffic areas, open space areas, etc.

Rule 4102 (Nuisance). Applies to any source operation that emits or may emit air contaminants or other materials.

Rule 4601 (Architectural Coatings). Limits volatile organic compounds from architectural coatings.

Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). This rule applies to the manufacture and use of cutback, slow cure, and emulsified asphalt during paving and maintenance operations.

Rule 9510 (Indirect Source Review - ISR). Requires developers of larger residential, commercial, recreational, and industrial projects to reduce smog-forming and particulate emissions from their projects' baselines. If project emissions still exceed the minimum baseline reductions, a project's developer will be required to mitigate the difference by paying an off-site fee to the District, which would then be used to fund clean-air projects. For projects subject to this rule, the ISR rule requires developers to mitigate and/or offset emissions sufficient to achieve: (1) 20-percent reduction of construction equipment exhaust NOx; (2) 45-percent reduction of construction equipment exhaust $PM_{10}$; (3) 33-percent reduction of operational NOx over 10 years; and (4) 50-percent reduction of operational $PM_{10}$ over 10 years. SJVAPCD ISR applications must be filed "no later than applying for a final discretionary approval with a public agency."

The SJVAPCD has outlined CEQA thresholds of significance in its Guidance for Assessing and Mitigating Air Quality Impacts (GAQMAQI) (SJVPACD 2015). Table 3.3-2 outlines the thresholds of significance established for air quality impacts for both construction and operation. Projects with emissions below these thresholds would be considered less than significant.

**Table 3.3-2. SJVAPCD Air Quality CEQA Significance Thresholds**

| Pollutant/Precursor | Construction Emissions (tons/year) | Operational Emissions (tons/year) – Permitted Equipment and Activities | Operational Emissions (tons/year) – Permitted Equipment and Activities |
|---|---|---|---|
| CO | 100 | 100 | 100 |
| NOx | 10 | 10 | 10 |
| ROG | 10 | 10 | 10 |
| SOx | 27 | 27 | 27 |
| $PM_{10}$ | 15 | 15 | 15 |
| $PM_{2.5}$ | 15 | 15 | 15 |

*Stanislaus County Ordinance***s**

Title 6.78 Commercial Cannabis Activities

6.78.120 General Operational Standards

**D.** Odor Control. Odor Control devices and techniques shall be incorporated into all commercial cannabis activities to ensure that odors from cannabis are not detectable off-site. Commercial cannabis activities shall provide a sufficient odor absorbing ventilation and exhaust system so that cannabis odors are not detected outside of the facility, anywhere on adjacent property or public rights-of-way, on or about the exterior or interior common area walkways, hallways, breezeways, foyers, lobby areas, or any other areas available for use by common tenants or the visiting public, or within any other unit located inside the same building as a commercial cannabis activity. As such, the permittees shall install and maintain an exhaust air filtration system or other similar equipment with odor control that prevents internal odors from being emitted externally.

1. In no case shall untreated air be vented outside of any building used to conduct a commercial cannabis activity.

2. The devices and techniques to be used to control odor shall be reviewed and approved by a certified professional approved by the county and an audit of the devices and techniques to be used shall be conducted within thirty days of the commercial cannabis activity being conducted upon issuance of a CCA permit.

6.78.110 Commercial Cannabis Distribution

D. **Air Quality.** Distributors shall to the extent practicable use zero emissions vehicles in their transportation fleet.

### 3.3.2 Environmental Setting

Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that produce emissions. Air pollution from significant anthropogenic activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. Activities that tend to increase mobile activity include increases in population, increases in general traffic activity (including automobiles, trucks, aircraft, and rail), urban sprawl (which will increase commuter driving distances), and general

local land management practices as they pertain to modes of commuter transportation. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The San Joaquin Valley's (SJV) topography and meteorology provide ideal conditions for trapping air pollution for long periods of time and producing harmful levels of air pollutants, including ozone and particulate matter. Low precipitation levels, cloudless days, high temperatures, and light winds during the summer in the SJV are conducive to high ozone levels resulting from the photochemical reaction of nitrogen oxides (NOx) and volatile organic compounds (VOC). Inversion layers in the atmosphere during the winter can trap emissions of directly emitted $PM_{2.5}$ (particulate matter that is 2.5 microns or less in diameter) and $PM_{2.5}$ precursors (such as NOx and sulfur dioxide [$SO_2$]) within the SJV for several days, accumulating to unhealthy levels.

As shown in Table 3.3-1, the SJVAB is in non-attainment of the federal (extreme) and state ozone standards as well as the federal (moderate) and state $PM_{2.5}$ standards as well as the state $PM_{10}$ standards.

The project site is surrounded by existing agriculture operations and farmland. There are residences located on the adjacent parcels 50 feet and 375 feet away. The nearest schools, daycares, and other types of sensitive receptors are located more than a mile away.

#### *3.3.2.1 Air Pollutants*

Several air pollutants of concern would be associated with Proposed Project activities. These air pollutants are discussed briefly below. Two main categories of air pollutants are described: criteria air pollutants and toxic air contaminants (TACs). Criteria air pollutants are air pollutants with national and/or state air quality standards that define allowable concentrations of these substances in the ambient (or background) air. TACs are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations.

#### *3.3.2.2 Carbon Monoxide*

Carbon monoxide (CO) is an odorless, colorless gas that is highly toxic. CO is formed by the incomplete combustion of fuels and is emitted directly into the air. Ambient CO concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distribution of vehicular traffic. CO concentrations are also influenced by wind speed and atmospheric mixing. Under inversion conditions (when a low layer of warm air, along with its pollutants, is held in place by a higher layer of cool air), CO concentrations may be distributed more uniformly over an area to some distance from vehicular sources. CO binds with hemoglobin, the oxygen-carrying protein in blood, and thereby reduces the blood's capacity to carry oxygen to the heart, brain, and other parts of the body. At high concentrations, CO can cause heart difficulties in people with chronic diseases, impair mental abilities, and cause death.

#### *3.3.2.3 Ozone*

Ozone ($O_3$) is a reactive gas that, in the troposphere (the lowest region of the atmosphere), is a product of the photochemical process involving the sun's energy. It is a secondary pollutant that is formed when nitrogen oxides and reactive organic gases react in the presence of sunlight. Ozone at the Earth's surface causes numerous adverse health effects and is a criteria pollutant. It is a major component of smog. In the stratosphere, ozone exists naturally and shields the Earth from harmful incoming ultraviolet radiation. High concentrations of ground-level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many

respiratory ailments. Ozone also damages natural ecosystems such as forests and foothill natural communities, agricultural crops, and some human-made materials (e.g., rubber, paint, and plastics).

#### 3.3.2.4 Nitrogen Oxides

Nitrogen oxides ($NO_X$) are a family of gaseous nitrogen compounds that are precursors to the formation of ozone and particulate matter. The major component of $NO_X$, nitrogen dioxide ($NO_2$), is a reddish-brown gas that is toxic at high concentrations. $NO_X$ results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion (use of natural gas for heating, cooking, and industrial use) are the major sources of this air pollutant.

#### 3.3.2.5 Reactive Organic Gases

Reactive organic gases (ROG) consist of hydrocarbon compounds that exist in the ambient air. ROG contributes to the formation of smog and/or may itself be toxic. ROG emissions are a primary precursor to the formation of ozone. Sources of ROG include consumer products, paints, trees that emit ROGs, and the combustion of fossil fuels.

#### 3.3.2.6 Particulate Matter

Particulate matter (PM) is a complex mixture of extremely small particles and liquid droplets. PM is made up of various components, including acids, organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to the potential for causing health problems. PM particles that are smaller than 10 micrometers in diameter, called PM10, are of most concern because these particles pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. $PM_{10}$ particles are typically found near roadways and industrial operations that generate dust. $PM_{10}$ particles are deposited in the thoracic region of the lungs. Fine particles, called $PM_{2.5}$, are particles less than 2.5 micrometers in diameter and are found in smoke and haze. $PM_{2.5}$ particles penetrate deeply into the thoracic and alveolar regions of the lungs.

#### 3.3.2.7 Sulfur Dioxide

Sulfur dioxide (SO2) is a colorless, irritating gas with a “rotten egg” smell formed primarily by the combustion of sulfur-containing fossil fuels. Suspended SO2 particles contribute to poor visibility in the SFBAAB and are a component of PM10.

#### 3.3.2.8 Lead

Lead is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. There is no known safe exposure level to lead. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage. Lead poisoning can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract and can reduce mental capacity.

Gasoline-powered automobile engines were a major source of airborne lead due to the use of leaded fuels. The use of leaded fuel has been mostly phased out since 1996, which has resulted in dramatic reductions in ambient concentrations of lead. Because lead persists in the environment forever, however, areas near busy highways continue to have high levels of lead in dust and soil.

#### 3.3.2.9 Hydrogen Sulfide

Hydrogen sulfide ($H_2S$) is associated with geothermal activity, oil and gas production, refining, sewage treatment plant operations, and confined animal feeding operations. $H_2S$ is extremely hazardous in high concentrations and can cause death.

#### 3.3.2.10 Sulfates

Sulfates are the fully oxidized, ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds result primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to $SO_2$ during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of $SO_2$ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features. CARB's sulfate standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility, and because they are usually acidic, can harm ecosystems and damage materials and property.

#### 3.3.2.11 Vinyl Chloride

Vinyl chloride is a colorless gas that does not occur naturally. It is formed when other substances, such as trichloroethane, trichloroethylene, and tetrachloroethylene, are broken down. Vinyl chloride is used to make polyvinyl chloride for a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

#### 3.3.2.12 Toxic Air Contaminants

Hundreds of different types of toxic air contaminants exist, with varying degrees of toxicity. Many TACs are confirmed or suspected carcinogens or are known or suspected to cause birth defects or neurological damage. For some chemicals, such as carcinogens, no thresholds exist below which exposure can be considered risk-free. Examples of TAC sources in the Proposed Project area include fossil fuel combustion sources, industrial processes, and gas stations.

Sources of TACs include stationary sources, area-wide sources, and mobile sources. The United States Environmental Protection Agency (USEPA) maintains a list of 187 TACs, also known as hazardous air pollutants. These hazardous air pollutants are also included on CARB's list of TACs. According to the California Almanac of Emissions and Air Quality (CARB 2013), many researchers consider diesel particulate matter (DPM) to be a primary contributor to health risk from TACs because particles in diesel exhaust carry a mixture of many harmful organic compounds and metals, rather than being a single substance as are other TACs. Unlike many TACs, outdoor DPM is not monitored by CARB because no routine measurement method has been identified. However, using the CARB emission inventory's PM10 database, ambient PM10 monitoring data, and results from several studies, CARB has made preliminary estimates of DPM concentrations throughout the state (CARB 2013).

### Valley Fever

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is one of the most studied and oldest known fungal infections. Valley Fever varies with the season and most commonly affects people who live in hot dry areas with alkaline soil. This disease affects both humans and animals and is caused by inhalation of

arthroconidia (spores) of the fungus *Coccidioides immitis* (CI). CI spores are found in the top few inches of soil and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte (an organism, especially a fungus or bacterium, which grows on and derives its nourishment from dead or decaying organic matter) in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who are outdoors and are exposed to wind, dust, and disturbed topsoil are at an elevated risk of contracting Valley Fever (CDPH 2025a).

Most people exposed to the CI spores will not develop the disease. Of 100 people who are infected with Valley Fever, approximately 40 will exhibit some symptoms and two to four will have the more serious disseminated forms of the disease. After recovery, nearly all, including the asymptomatic, develop a life-long immunity to the disease.

The Proposed Project is located in an area designated as "suspected endemic" for Valley Fever. In 2023 the number of new cases were reported in Stanislaus County for a total of 120 cases or a case rate of 21.9 cases per 100,000 people (CDPH 2025b). Project construction activities could encounter and disperse CI spores and create the potential for additional Valley Fever infections.

#### *3.3.2.13 Odors*

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, headache). The ability to detect odors varies considerably among the population and overall is subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be acceptable to another (e.g., roasting coffee). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is known as odor fatigue; a person can become desensitized to almost any odor, after which recognition occurs only with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the concentration in the air. When an odor sample is progressively diluted, the odor concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odor reaches a level that is no longer detectable.

### 3.3.3 Discussion of Checklist Responses

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

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in the applicable air quality plan, which, in turn, would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth

would exceed the growth rates included in the relevant air quality plans. SJVAPCD's ozone, PM10 and PM2.5 plans demonstrate how the SJVAB will achieve attainment with the ambient air quality standards. These plans focus on protecting public health and outlines strategies it will implement to reduce pollution levels for these criteria pollutants. The Proposed Project would not lead to a substantial increase in jobs; therefore, the Proposed Project is consistent with air quality plans. SJVAPCD also considers if a project would exceed any of its CEQA thresholds of significance as being inconsistent with their air quality plans. As discussed in part b. below, the Proposed Project does not exceed any of the thresholds of significance for emissions or health impacts.

The Proposed Project would follow all federal, state, and local regulations related to stationery and area sources of air pollutants. In addition, construction will follow local air district regulations and best management practices described above for fugitive dust. Therefore, because the Proposed Project would be consistent with the applicable general plan policies and would comply with all applicable regulations for sources of air pollutants, the Proposed Project would have a **less-than-significant impact** and would not obstruct or conflict with applicable air quality plans.

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

As shown in **Table 3.3-1**, the project site is in a region that is designated in non-attainment for ozone, $PM_{10}$, and $PM_{2.5}$. It is assumed that projects that conform to the General Plan and do not have mass emissions exceeding the screening level significance thresholds would not create a cumulatively considerable net increase in emissions. During project operations there would be some worker trips and other vehicle trips for waste removal and product delivery. Other operation emissions would be for maintaining the landscaping and fugitive dust from driving on unpaved surfaces. These emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.29 using information from the Project Description along with default assumptions for the project site acreage being developed. The Proposed Project's criteria air pollutant emissions during operation are shown in **Table 3.3-3**. CalEEMod modeling results for the Proposed Project are provided in **Appendix A**. Implementation of BMPs to control fugitive dust will be implemented.

**Table 3.3-3.** Criteria Pollutant Emissions during Construction

| Year | Operation Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $SO_2$ | $PM_{10}$ | $PM_{2.5}$ |
| Annual | 0.16 | .01 | 0.18 | <0.005 | <0.005 | <0.005 |
| Threshold | 10 | 10 | 100 | 27 | 15 | 15 |
| Above Threshold? | No | No | No | No | No | No |

**Notes:**

ROG = reactive organic gases
CO = carbon monoxide
$PM_{10}$ = particulate matter 10 microns or less in diameter

| | |
|---|---|
| $NO_X$ = oxides of nitrogen | $PM_{2.5}$ = fine particulate matter 2.5 microns or less in diameter |
| $SO_2$ = sulfur dioxide | |

*Source: CalEEMod modeling results are provided in Appendix A.*

Operational criteria air pollutant emissions would be generated by fossil-fueled equipment and motor vehicles. These will be minimal trips by workers to conduct routine operation and maintenance activities. It is anticipated that these worker and operation trips would result in an insignificant amount of criteria air pollutants and would be substantially below the threshold of significance.

Mass emissions from operations are lower than the mass emission level significance thresholds. Therefore, the impact of emissions during construction and operations would be considered **less than significant** and the proposed project would not contribute substantially to an air quality violation.

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

During project construction, diesel particulate matter (DPM) and gasoline fuel combustion emissions that are classified as TACs could be emitted from construction equipment. Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Because project construction activities have been completed, there would be **no impact**.

Similarly, during project operation there will be only a few vehicle trips and use of equipment that combusts fossil fuel. The primary operations of the cannabis operations are enclosed and would not release any substantial amounts of criteria or toxic air pollutants into the ambient air. Chronic and cancer-related health effects estimated over short periods are uncertain. Cancer potency factors are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from exposure that would last only a small fraction of a lifetime. Some studies indicate that the dose rate may change the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (California Office of Environmental Health Hazard Assessment [OEHHA] 2015). Furthermore, construction impacts are most severe adjacent to the construction area and decrease rapidly with increasing distance. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005).

Given the short duration of construction and minimal use of fossil fueled equipment during operations, the fact that TAC concentrations would quickly be reduced away from the active construction and operation site, the relatively large distances to sensitive receptors, and the uncertainties in modeling such emissions, the Proposed Project's effect on nearby sensitive receptors due to construction-related air pollutant emissions would be **less than significant**.

The potential for Valley Fever cases associated with Proposed Project construction is high given that Stanislaus County has some of the highest incidence rates in the state. The Proposed Project's exposure to Coccidioidomycosis spores could potentially expose sensitive receptors to substantial pollutant concentrations. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, such as the

previous removal of almond orchards for the construction of the greenhouses, if they cannot be mitigated. The Proposed Project would have no further construction or ground disturbance. Therefore, the Proposed Project would have **no impact** related to Valley Fever.

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

Operational activities would generate odors associated with vehicle exhaust. These odors would be short-lived and would occur intermittently. Vehicle idling at the site would be minimized to the extent feasible and so would not be likely to cause odor issues for nearby sensitive receptors.

Odor control devices are required for all commercial cannabis operations which will ensure that there are no significant impacts of odors from the cannabis activities. Impacts related to potential generation of objectionable odors are thus expected to 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

### *3.4.1.1 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.

### 3.4.1.2 State Laws, Regulations, and Policies

*California Fish and Game Code*

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

CESA (Fish & G. Code, §§ 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the Fish & G. 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 & G. 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 & G. 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 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.

### 3.4.1.3 Local Laws, Regulations, and Policies

*Stanislaus County Zoning Ordinance*

6.78.080 Commercial Cannabis Cultivation

B. Documentation of all pesticides used by the permittee shall be presented to the Stanislaus County Agricultural Commissioner, and all pesticides and fertilizers shall be properly labeled and

stored to avoid contamination through erosion, leakage, or inadvertent damage from rodents, pests, or wildlife.

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

E. Enclosure. All commercial cannabis cultivation operations shall occur within a greenhouse or fully enclosed building. If conducted within a greenhouse, supplemental lighting shall not exceed twenty-five watts per square foot to be used up to one hour before sunrise or after sunset, unless the greenhouse or facility is equipped with light-blocking measures to ensure that no light escapes.

## 3.4.2 Environmental Setting

The project site is located on approximately 20 acres; however, the Project site portion of the parcel is 7.1 acres in the Patterson area of unincorporated Stanislaus County, California. The 7.1-acre parcel includes existing facilities of 15 greenhouses to be utilized for cultivation, five greenhouses to be utilized for nursery production, and an existing agricultural storage building and two accessory storage buildings to be utilized for office, storage, distribution, and processing activities. The portion of the parcel that would not be used for the Proposed Project contains an existing almond orchard and would continue to be used for that purpose. The project site is in a rural area surrounded by agricultural land uses such as orchards, row crops, and scattered single-family dwellings in all directions.

### *3.4.2.1 Special-status Species*

*Definitions and Methods of Assessment*

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

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

A Special-Status Species Desktop Review Memo (Desktop Review) (Mesa Biological 2024) prepared for the Proposed Project generated a list of 20 special-status plant species and 50 special-status wildlife species as known or having the potential to occur within the vicinity of the Proposed Project. **(Appendix B.)** Each of these species

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

- USFWS list of federally listed endangered and threatened species that occur within the vicinity of the Proposed Project (USFWS 2024);
- 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: Colusa, Moulton Weir, Sanborn Slough, Pennington, Meridian, Sutter Buttes, Arbuckle, Grimes, and Tisdale Weir (CDFW 2024); and
- California Native Plant Society's (CNPS's) *Inventory of Rare and Endangered Plants of California* (CNPS 2024) and CRPR listing.

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

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

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

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

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

### *Threatened, Endangered, and Special-status Species*

Based on the review and site characteristics of the project site, no special-status plant species are anticipated to occur within the Proposed Project's site as it has been previously had significant historical alteration of the natural landscape, and the Proposed Project would take place on land which has been used for agricultural and residential purposes since at least 1998. Similarly, no special-status reptiles, amphibians, or mammals are anticipated to occur at the Project site.

**Table 3.4.1** lists the special-status wildlife species known to occur in or near the project area. 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** shows the CNDDB occurrences of special-status wildlife species within a 5-mile radius of the project site. No critical habitat is present within the footprint of the Proposed Project. (Mesa Biological 2024.)

**Table 3.4-1. Special-status 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 |
|---|---|---|---|
| ***Birds*** | | | |
| *Athene cunicularia* burrowing owl | - / SC, SSC | The burrowing owl inhabits open areas with sparse vegetation, such as grasslands, deserts, agricultural fields, and urban landscapes. It relies on burrows, often abandoned by mammals, for nesting and shelter, and it can adapt to disturbed environments like golf courses, airports, and road embankments if suitable prey and burrow availability exist. | **Possible.** The burrowing owl may occur in previously disturbed lands if suitable conditions, such as open areas with sparse vegetation, abandoned mammal burrows for nesting, and sufficient prey availability, are present. However, extensive disturbances that remove burrows or significantly alter the landscape reduce the likelihood of their presence. CNDDB records occur within 5 miles of the site. |
| *Buteo swainsoni* Swainson's hawk | - / ST | Swainson's hawk inhabits open grasslands, agricultural fields, and desert scrublands, often near riparian corridors or scattered trees for nesting. It relies on open landscapes for foraging, primarily preying on small mammals, birds, and insects, and prefers areas with minimal human disturbance during the breeding season. | **Possible.** Swainson's hawks may occur in previously disturbed lands surrounded by agricultural fields if suitable nesting trees, tall structures and open areas for foraging on small mammals and insects are present. However, significant disturbances that eliminate nesting sites or reduce prey availability can limit their presence. Multiple CNDDB observations of Swainson's hawk have been recorded within 5 miles. |
| *Lanius ludovicianus* loggerhead shrike | - / SSC | The loggerhead shrike inhabits open habitats such as grasslands, shrublands, agricultural fields, and deserts with scattered trees, shrubs, or fence lines for perching. It prefers areas with a mix of open ground for hunting and dense vegetation or structures for impaling prey and nesting. | **Possible.** The loggerhead shrike may occur in previously disturbed lands if scattered trees, shrubs, or perching structures remain for nesting and hunting. CNDDB records within five miles of the project site have been observed. |

* Abbreviations for federal and state species listing status:

DL = Federal delisted
FE = Federal endangered
FT = Federal threatened
SE = State endangered (California)
ST = State threatened (California)
SC = State Candidate (California)
SSC = Species of Special Concern (California)

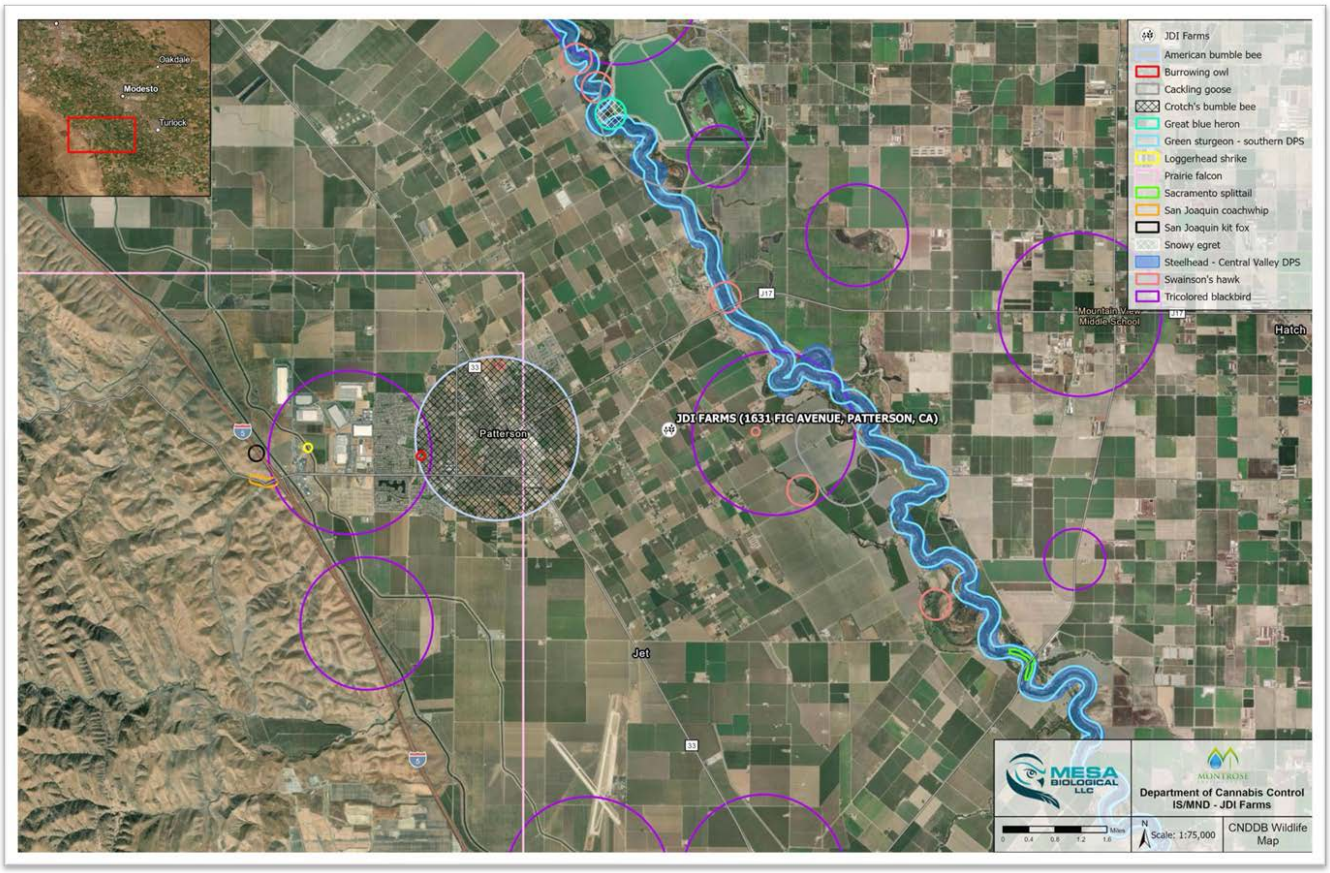



**Figure 3.4-1. CNDDB Occurrences of Special-Status Wildlife Species within a 5-Mile Radius of the Project Site**

#### *3.4.2.2 Wetlands and Other Waters*

The project site does not contain any streams, rivers, or other water features.

### 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 (Less-than-Significant Impact)*

Construction and ground-disturbing activities have the potential to result in direct removal of special-status plant species if present within the proposed area of disturbance during construction. In addition, construction activities have the potential to result in direct (i.e., take) or indirect (i.e., noise, dust, light pollution) disturbance to special-status wildlife species if present within the project area during project construction.

Operational activities have the potential to impact special-status species, due to increased lighting and noise.

Based on the results of the Desktop Review that was completed for the Proposed Project, no special-status plants are anticipated to occur within the project site. The Desktop Review also found that no special status mammals, amphibians, reptiles, or insects are anticipated to occur at the site. The Desktop Review determined that three special-status bird species had the potential to occur at the project site. (Mesa Biological 2024.)

#### Western Burrowing Owl

Western burrowing owl has the potential to den, nest and forage at the project site and vicinity. Open areas with sparse vegetation, abandoned mammal burrows for nesting, and sufficient prey availability are present. CNDDB records for the Western burrowing owl have been observed within five miles of the project site. However, the Western burrowing owl is unlikely to occur at the project site due to the significant habitat modifications from removal of burrows and altering of the native landscape from agricultural activities that would reduce the likelihood of their presence.

#### Swainson's Hawk

Swainson's hawk has the potential to nest within the vicinity of the project site as it is surrounded by agricultural fields. Suitable nesting trees, tall structures and open areas for foraging on small mammals and insects are present. Multiple CNDDB records for the Swainson's hawk have been observed within five miles of the project site. However, anthropogenic disturbance within the project site can impact potential nesting sites or minimize prey availability and reduce the likelihood of their presence.

#### Loggerhead Shrike

Loggerhead shrike has the potential to nest within the vicinity of the project site as it is surrounded by agricultural fields with suitable nesting trees, perching structures and open areas for foraging on small mammals and insects. CNDDB records for the loggerhead shrike show that the species have been observed within five miles of the Project site.

#### Analysis and Conclusion

According to the Desktop Review that was completed for the Proposed Project, no special-status plants, amphibians, reptiles, or mammals are anticipated to occur within the Proposed Project site (Mesa Biological 2024).

This is primarily because the project site has been on land that has been used for agricultural and residential purposes since at least 1998.

While special-wildlife species such as the Western burrowing owl, Swainson's hawk and loggerhead shrike have the potential to occur on the project site as it is surrounded by suitable nesting and foraging habitat within agricultural parcels, specifically orchards and row crops. However, all construction activities have been completed on the 7.1-acre parcel. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred if they cannot be mitigated. The Proposed Project would have no further construction or ground disturbance because of the Proposed Project's actions. Therefore, the Proposed Project would have **no impact** on special-status species as a result of construction activities.

Project operations could have impacts to special status birds as a result of increased noise or lighting. The Proposed Project operations would not result in a substantial increase in noise impacts, as project operations would occur primarily within greenhouses. Additionally, the baseline condition of the Proposed Project included operation of almond orchards, so any incremental changes in noise levels would be minor.

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)). Because there would be no substantial increase in noise levels, and because the Proposed Project would comply with DCC regulations related to lighting, the Proposed Project would have a **less-than-significant** impact on special-status species as a result of operational activities.

### *b. Have a Substantial Adverse Effect on any Riparian Habitat or Other Sensitive Natural Community (No Impact)*

The Desktop Review completed for the Proposed Project (Mesa Biological 2024) indicates that the project site is in a rural area surrounded by agriculturally zoned parcels. The Proposed Project would take place on land which has been used for agricultural and residential purposes since at least 1998. The habitat onsite is limited to developed agricultural areas and adjacent surrounding areas are of walnut orchards and row crops, which is not considered a sensitive natural community, and no riparian habitat is present. Additionally, no designated critical habitat occurs within the project site. (Mesa Biological 2024.) As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, such as the previous removal of almond orchards for the construction of the greenhouses, if they cannot be mitigated. The Proposed Project would have no further construction or ground disturbance. Therefore, the Proposed Project would have **no impact** on riparian habitat or other sensitive natural communities.

### *c. Have a Substantial Adverse Effect on State or Federally Protected Wetlands (No Impact)*

No state or federally protected wetlands are present on the project site; therefore, the Proposed Project would have **no impact** on these resources.

### *d. Interfere Substantially with Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites (No Impact)*

A review of the CDFW Areas of Conservation Emphasis (ACE) Terrestrial Connectivity dataset shows the project site is mapped with a Connectivity Rank of 1, or limited connectivity opportunity (CDFW 2025). 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 the Patterson area of unincorporated Stanislaus County. Adjacent land uses include orchards, row crops, and scattered single-family dwellings in all directions.

Due to its developed nature, the project site limits native habitat with ecological features and lacks aquatic habitat that would typically support special-status wildlife and plant species known to occur in the vicinity of the project site. All construction activities of the green houses have been completed within the 7.1-acre parcel. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred if they cannot be mitigated. The Proposed Project would have no further construction or ground disturbance to occur because of the Proposed Project's actions. 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 would take place on land which has been used for agricultural and residential purposes since at least 1998. All construction activities of the green houses have been completed within the 7.1-acre parcel. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred if they cannot be mitigated. The Proposed Project would have no further construction or ground disturbance. The Proposed Project does not conflict with the County's local policies and ordinances pertaining to biological resources. Therefore, the Proposed Project would have **no impact** as a result of conflicts with local policies or ordinances protecting biological resources.

### *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 habitat conservation plan (HCP) or natural community conservation plan (NCCP). Therefore, the Proposed Project would have **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

### *3.5.1.1 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.

### *3.5.1.2 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:

a. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

b. Are associated with the lives of persons important in our past;

c. 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

d. 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.

### 3.5.1.3 Local Laws, Regulations, and Policies

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

## 3.5.2 Environmental Setting

The following sections describe the environmental setting that pertains to impacts on cultural resources.

### *3.5.2.1 Pre-Contact*

Like many parts of California, archaeologists are still in the process of building a basic archaeological record for the Central Valley. Much of the record is unknown, and evidence of the early occupations dating more than 3,000 years ago is especially lacking. However, broad outlines of California prehistory are best captured by an integrative scheme that proposes three basic prehistoric periods: Paleoindian, Archaic, and Emergent. The Archaic is further subdivided into the Lower, Middle, and Upper periods, and the Emergent into Lower and Upper (sometimes referred to as Phase 1 and Phase 2) divisions. Each period is characterized by a generally prevailing economic, cultural, and environmental condition. However, each geographical region is expected to have a different pattern of prehistoric culture and culture change. The dating of these various periods continues to be refined; those presented below are largely derived from *The Central Valley: A View from the Catbird's Seat* (Rosenthal, et al. 2010). The pre-contact Native American archaeological periods are listed in **Table 3.5-1**.

**Table 3.5-1. Pre-Contact Native American Archaeological Periods of the Central Valley**

| Archaeological Period | Age<br>Years Before Present | Characteristics |
|---|---|---|
| Paleoindian Period: Western Clovis Tradition | > 10,550 years | Opportunistic hunters and foragers; possibly hunted Pleistocene megafauna. Low population. Fluted projectile points (darts), flaked stone crescents. |
| Lower Archaic Period: Borax Lake Pattern | 10,550 – 7550 years | Hunters and foragers. Low population. Wide-stemmed projectile points; hand stones and milling stones; use of obsidian. |
| Middle Archaic Period: Windmiller | 7550 – 2550 years | Introduction of dietary specializations focused on acorns, deer, and freshwater and anadromous fisheries. Establishment of villages with cemeteries. Expanded material culture, including basketry, use of marine shell for beads and ornaments; continued use of hand stones and milling stones; a variety of dart forms such as notched, stemmed, thick leaf or lozenge, and narrow concave. |
| Upper Archaic Period: Berkeley Pattern | 2550 – 1000 years | Increased cultural diversity represented by distinct regional specializations; increased populations; more complex social structure. Introduction of mortars and pestles for |

| Archaeological Period | Age<br>Years Before Present | Characteristics |
|---|---|---|
| | | acorn processing; expanded bone tool industry; diamond-shaped and stemmed projectile points. |
| Emergent Period: Augustine Pattern – Phase 1 | 1000 – 600 years | Increased sedentism and populations. Coalescence of long-distance, integrative trade spheres, and the introduction of the bow and arrow that replaced the dart as the favored hunting implement. Increased use of fishing and acorns. |
| Emergent Period: Augustine Pattern – Phase 2 | 600 – 200 years | Continuation and intensification of Phase 1 traits; considered representative of Native American cultures encountered by the first non-native colonists. Small corner-notched and triangular points, clam disc beads, magnesite cylinders, bedrock mortars, |

The Paleo-Indian Period was a time when the Central Valley was sparsely populated by groups who were highly mobile, hunted large game, and frequented the shores of late Pleistocene lakes and sloughs. By the Lower Archaic Period, seasonal plants had become more important for subsistence, and populations tended to settle in places for longer periods of time and in larger groups. As time progressed, populations grew denser and more sedentary, tools became more diverse and complex, and social structure became more stratified. The people living in the Project area during the Emergent Period represent the tribes encountered by the first colonists who arrived in the early to mid-1800s.

#### *3.5.2.2 Ethnography*

"Yokuts" is a term applied to a large and diverse number of people inhabiting the San Joaquin Valley and Sierra Nevada foothills of central California. The Northern Valley Yokuts inhabited a 40- to 60-mile-wide area straddling the San Joaquin River, south of the Mokelumne River, east of the Diablo Range, and north of the sharp bend that the San Joaquin River takes to the northeast; the Project area is within the territory of the Northern Valley Yokuts. The Southern Valley Yokuts inhabited the San Joaquin Valley south of the bend in the river. Although they were divided geographically and ecologically, they have a common linguistic heritage (Wallace 1978).

The Northern Valley tribes closely resembled the Yokuts groups to the south, although there were some cultural differences. The northerners had greater access to salmon and acorns, two important dietary resources, than the Southern Yokuts, and some of their religious practices reflected the influences of groups to their north, such as the Miwok. While inhumation was the usual practice in the southern valley, the Northern Valley Yokuts either cremated their dead or buried them in a flexed position (Wallace 1978:464, 468). A chief headed the tribal villages, which averaged around 300 people. Family houses were round or oval, sunken, with a conically shaped pole frame,

and covered with tule mats. Each village also had a lodge for dances and other community functions, as well as a sweathouse (Wallace 1978).

The Northern Valley Yokuts built their riverside villages on mounds along the water's edge to avoid the spring floods, which were a result of heavy Sierra Nevada snow melts. Living beside rivers and streams provided plentiful river perch, Sacramento pike, salmon, and sturgeon. Hunting provided waterfowl such as geese and ducks as well as terrestrial animals such as antelope, elk, and brown bear, although by all indications, fish constituted a majority of the diet. The surrounding woodland, grasslands, and marshes provided acorns, tule root, and seeds.

Tools used by the Northern Valley Yokuts included bone harpoon tips for fishing, stone sinkers for nets, chert projectile points for hunting, mortars and pestles, scrapers, knives, and bone awl tools to procure and process food. Marine shells, procured from coastal tribes, were manufactured into necklaces and other adornments, and marine shell beads sometimes accompanied the deceased. Tule reed rafts were used to navigate the waterways for fishing and fowling. The Yokuts also constructed a range of intricate baskets for a variety of purposes, including storing, cooking, eating, winnowing, hopper mortars, the transport of food materials, and ritual. Very little is known of the Northern Valley Yokuts' clothing, but drawings of their tattoos show that they served not only as a decoration but also as a form of identity (Wallace 1978:464).

The Diablo Range served as a natural barrier against heavy recruitment by the Spanish missions during the first decades of their arrival. However, by the early 19th century, Spanish, and later, Mexican missionaries began to explore the inner valleys in search of potential neophytes. The Yokuts initially resisted recruitment and California Indians from a variety of tribes sought refuge among the Yokuts after fleeing the missions. Still, their presence is documented at Mission Santa Clara, with entries of Northern Valley Yokuts beginning in 1811 and lasting until 1834 and the secularization of the missions. Although Mission Santa Clara housed the largest number of Northern Yokuts, missions San Juan Baptista and San Jose also had significant populations (Milliken et al. 2009).

In 1828, a Northern Yokuts man from Mission San Jose, Estanislao Cucunuchi, led a revolt with other mission Indians after failing to return back to the mission after a winter visit to their home on the lower Stanislaus River. According to Milliken et al. (2009:149-150), the group included "Christian Indian people from a number of other Stanislaus, Tuolumne, and San Joaquin River Delta Yokuts groups, fugitives from both Mission San Jose and Mission Santa Clara. Quickly branded rebels, they repulsed initial attempts of the Mexican military to force them back to the missions. The revolt ended in June of 1829 with a significant Mexican military victory on the Stanislaus River by Mariano Guadalupe Vallejo." Significantly, Estanislao Cucunuchi has been memorialized by having a river and county named after him.

In addition to missionization, introduced diseases, genocide, destruction of traditional resources from cattle grazing and forced relocation took a heavy toll on the Northern Yokuts. Despite decades of hardship, many individuals who can trace their ancestry to the Northern Valley Yokuts continue to live and thrive in the Central Valley and throughout California and the United States.

#### *3.5.2.3 History*

The first Spanish expedition entered the San Joaquin Valley in 1806 under the leadership of Gabriel Moraga, to identify new prospective locations for establishing missions. Traveling north through the region, Moraga's party toiled through a treeless plain. Coming suddenly upon a clear stream, they named the area El Río de Nuestra Senora Guadalupe. Moraga explored the region again in the fall of 1808 (Kyle et al. 2002). He made a third

excursion into area in 1810, this time to capture Native Americans who had been conscripted to work in the Spanish missions and who had run away.

After Mexico gained its independence from Spain in 1822, two additional expedition forces entered the area; however, the purposes of their campaigns were no longer exploratory. Soldiers were sent into the Central Valley to recover stolen animals and capture Indians who had escaped the missions.

American explorers also began to enter the region during the Mexican period. In both 1827 and 1828, Jedediah Smith entered the San Joaquin Valley via the Tejon Pass and trapped beavers along the San Joaquin, Kings, and other rivers and streams that flowed from the Sierra. Smith was followed by fellow trappers such as Peter Ogden, Ewing Young, Kit Carson, and Joseph Walker.

The first permanent European settlement in Stanislaus County occurred when five land grants were issued by the Mexican government in 1843-44. Ranchers grazed cattle in the rich grasslands of the San Joaquin valley and engaged in the hide and tallow trade. Three of the land grants, Rancho Orestimba y Las Garzas, Rancho Pescadero and Rancho Del Puerto were located on the west side of the San Joaquin River, and Rancho Del Rio Estanislao and Rancho Thompson on the north side of the Stanislaus River (Ereferencedesk 2024). The Project area is located within the Rancho Del Puerto land grant, which was granted to Mariano and Pedro Hernandez in 1844 by Governor Manuel Micheltoreno. Samuel G. Reed and Ruben S. Wade made claim to the Rancho Del Puerto land and received the title for 13,340 acres in 1864 (City of Patterson 2024).

The first Anglo-Americans to settle in territory that would become Stanislaus County was a small group of Mormons who established a small colony on the banks of the Stanislaus River near its confluence with the San Joaquin River in 1846. Called Stanislaus City, or New Hope, the group fenced about 80 acres to define their community and commenced to grow wheat and other vegetables. The community apparently dissolved shortly thereafter (ereferencedesk 2024; Tinkham 1921).

Americans started to arrive in large numbers during the Gold Rush, both as miners seeking gold and as agricultural entrepreneurs who recognized the opportunity to raise livestock or grow food for the gold seekers. As early as 1849, the town of Adamsville was founded on the south bank of the Tuolumne River just east of present-day Modesto. It became the first county seat of Stanislaus County in 1854, after the county was created out of a portion of Tuolumne County, but was replaced by Empire, a short distance upriver, soon thereafter. Later, the county seat changed to La Grange, then to Knight's Ferry, finally settling on Modesto in 1871 (Kyle et al. 2002:517).

Although gold was mined in Stanislaus County (Western Mining History 2022), the project region has always been primarily a ranching and farming region. Early on cattle and sheep were a major focus, but farmers began growing grain. The Rancho del Puerto lands were famous for their fertile soils and the grain they produced. The Rancho del Puerto title was eventually sold to John D. Patterson in 1866. He continued to purchase land, and willed a total of 18,462 acres to his heirs, Thomas W. Patterson and Willliam W. Patterson, upon his death in 1902. His heirs formed the Patterson Ranch Company in 1908 to develop the land with irrigation and form a colony. Thomas W. Patterson began subdividing the land holdings in 1910 into ranches of various sizes (City of Patterson 2024).

Thomas W. Patterson also began to plot the design of the town of Patterson. Patterson was determined to make his town different from other towns along the Southern Pacific Railroad track. He modeled Patterson after Washington D.C. and Paris by using a series of circles with radiating streets. Parks were laid out along the railroad,

and major avenues were planted with trees and bushes. Patterson was incorporated in 1919 (City of Patterson 2024).

Today, the town of Patterson is a small, rural town surrounded by agricultural land. Over the years, Patterson has continued to rely on agriculture as its economic base, including orchards and row crops (City of Patterson 2024). The Patterson Chamber of Commerce decreed Patterson the Apricot Capital of the World in 1971, and the town welcomes visitors for the Apricot Fiesta every June (Swift 2022).

## Cultural Resource Impact Analysis

### *Archival Search*

A record search was requested at the Central California Information Center (CCIC) 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 November 25, 2024 (CCIC File No. 13123N).

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 Stanislaus County (OHP 2022).

No resources have been previously recorded within the project area, according to the CCIC results. One historic-era resource is located within the search radius and has been previously recommended as not eligible for listing in the NRHP or CRHR. The Patterson Lift Irrigation System (P-50-002179) consists of a 3.25-mile long Main Canal and ten lateral distribution canals that total approximately 35 linear miles. A portion of Lateral G (2-South) is located within the search radius, about 950 feet to the west of the project area. This resource will not be affected by the project's actions.

According to the record search results, no previous studies have boundaries that intersect the project area. Two previous studies (ST-00656 and ST-01733) intersect the search radius. Both studies were linear surveys of the proposed route of the San Luis Drain. The San Luis Drain does not appear to have been constructed within the search radius, likely as result of drain construction being suspended in 1985 due to environmental concerns. (U.S. Department of the Interior 2006.)

### *Historic Map and Aerial Imagery Review*

Archival research also included a review of Historic General Land Office maps from 1860 and 1869 and a 1906 map of Stanislaus County. Both the 1860 and 1869 maps show the project area as part of Rancho de la Puerta (Rancho del Puerto) land grant. No development is depicted in the vicinity of the project area on either map. The 1906 map of Stanislaus County shows the project area as part of J.D. Patterson's land holdings.

Research also included a review of historic USGS maps associated with the Proposed Project area (USGS 2024). Maps examined included the 1916, 1952, 2012, 2015, 2018, and 2021 maps of the Crows Landing quadrangle; 1919 and 1941 maps of Orestimba; and the 1978 map of San Jose. Both the main canal and lateral are depicted in their current configurations from 1916 onwards. A building is depicted adjacent to Fig Avenue in the project area on the 1916 map of Crows Landing and the 1919 map of Orestimba, and a second building is shown in the 1941 Orestimba map. While the second building is absent on the original 1952 map of Crows Landing, it is depicted on

1973 and 1981 editions of the 1952 map. The buildings appear to represent currently existing structures in the project area, with the first being a single-family residence and the second an agricultural storage building. No orchards are shown in the project area on any of the available maps.

A review of historic aerial photographs (NETRonline 2024, Google Earth 2024) revealed similar levels of development as the USGS maps. The oldest available imagery (1957) shows the single-family residence and agricultural storage building, as well as a few accessory buildings, in the southern portion of the project area, with the rest consisting of agricultural land. The single-family residence and agricultural storage building appear unchanged from 1957 on. An accessory building directly north of the residence is first observed on imagery from 1982. The agricultural land is replaced by orchards in imagery from 2016. No other buildings are constructed on the property until at least 2018, when ten greenhouses are observed behind the house in the southwest corner. A section of orchard is removed adjacent to the greenhouses in imagery from 2023. Additional greenhouses are observed the recently cleared area in the most recent imagery from September 2024 for a total of 20 greenhouses.

While not identified in the record search results or OHP BERD for Stanislaus County, the single-family residence located within the project area was reportedly built in 1915 (CountyOffice.org 2024). The CRHR and NRHP evaluation statuses of the residence are unknown.

#### *Native American Outreach*

An email request was made to the Native American Heritage Commission (NAHC) on November 14, 2024, to review its files for the presence of recorded sacred sites on the Project area. The NAHC responded on November 19, 2024. The results of the Sacred Lands database review were negative for any sacred sites within the project area.

On January 9, 2025, letters were sent to the eight 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. To date, no responses have been received. As planning proceeds, DCC will continue to communicate with interested tribal representatives regarding the 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.”

### 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, 21082, and 21083.2. As stated above, resources were identified within the project area. One historic-era resource (P-50-002179) has been identified within the search radius. However, the resource has been previously recommended as ineligible for listing in the NRHP and CRHR. All construction activities are complete and were performed in accordance with local approval by Stanislaus County and issuance of a provisional license by DCC. As such, no historical resources that are archaeological in nature wouldbe discovered. As described in Section 1.5, this IS/ND 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)*

As discussed above, no archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, have been identified within the project areas. 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 Stanislaus County and issuance of a provisional license by DCC. Therefore, no archaeological resources would be discovered. As described in Section 1.5, this IS/ND 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 Stanislaus County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/ND 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

### *3.6.1.1 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.

### 3.6.1.2 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*

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

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

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

### *Renewables Portfolio Standard*

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

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

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

### *Assembly Bill 1007: State Alternative Fuels Plan*

AB 1007 (Chapter 371, 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 California Energy Efficiency Action Plan has three primary goals for the state: double energy efficiency savings by 2030 relative to a 2015 base year (per SB 350, Chapter 547, Statutes of 2015), expand energy efficiency in low-income and disadvantaged communities, and reduce GHG emissions from buildings. This plan provides guiding principles and recommendations related to how the state would achieve those goals. These recommendations include:

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

The 2021 Energy Efficiency Action Plan, the most recent version, was covered in two documents, 1) The 2021 California Building Decarbonization Assessment, and 2) The final 2021 Integrated Energy Policy Report Volume I Building Decarbonization (CEC 2021a, CEC 2021b).

### *DCC Commercial Cannabis Business Regulations*

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

### Section 16305: Renewable Energy Requirements

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

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

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

### Section 16306: Generator Requirements

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

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

(1) For portable engines, a Portable Equipment Registration Certificate provided by the California Air Resources Board; or

(2) For portable or stationary engines, a Permit to Operate or other proof of engine registration, obtained from the Local Air District with jurisdiction over the licensed premises.

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

(1) Either subsection (1)(A) or (1)(B):

(A) Meet the “emergency” definition for portable engines in title 17, California Code of Regulations, Section 93116.2(a)(12), or the “emergency use” definition for stationary engines in title 17, California Code of Regulations, Section 93115.4(a)(30); or

(B) Operate eighty (80) hours or less in a calendar year; and

(2) Either subsection (2)(A) or (2)(B):

(A) Meet Tier 3 with Level 3 diesel particulate filter requirements in title 13, California Code of Regulations, Sections 2700-2711; or

(B) Meet Tier 4 requirements, or current engine requirements if more stringent, in title 40, Code of Federal Regulations, chapter I, subchapter U, part 1039, subpart B, Section 1039.101.

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

### *3.6.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Zoning Ordinance*

6.78.080 Commercial Cannabis Cultivation

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

[…]

2. Energy Conservation Measures. Commercial cannabis cultivation operations shall include adequate measures to address the projected energy demand for cannabis cultivation at the site.

E. Enclosure. All commercial cannabis cultivation operations shall occur within a greenhouse or fully enclosed building. If conducted within a greenhouse, supplemental lighting shall not exceed twenty-five watts per square foot to be used up to one hour before sunrise or after sunset, unless the greenhouse or facility is equipped with light-blocking measures to ensure that no light escapes.

16.65.010 California Energy Code and appendices adopted

The California Energy Code, as published by the International Code Council, 2022 Edition, and Appendices 1-A and 1-B is adopted by reference and incorporated in this chapter as if fully set forth herein and shall be referred to as the energy code of the county. A copy of said code shall be kept and maintained by the building official for use and examination by the public.

16.80.010 California Green Building Standards Code as adopted

Except as hereafter changed or modified, the 2022 California Green Building Standards Code is adopted by reference and incorporated in this chapter as if fully set forth herein and shall be referred to as the California Green Building Standards Code of the county. A copy of said code shall be kept and maintained by the building official for use and examination by the public.

## 3.6.2 Environmental Setting

The Proposed Project is connected to the existing electrical grid. The project site recevies power from the Turlock Irrigation District (TID). TID is fully compliant with state renewable energy regulations. (CEC 2024.) TID receives 32.4 percent of its power from renewables and 28.9 percent from hydroelectric power. (TID 2025.)

## 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)*

Project construction would require the use of fossil fuels, electricity, and natural gas for construction vehicles and equipment. Project construction has been completed, and all construction activities were performed in

accordance with local approval by Stanislaus County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, if they cannot be mitigated.

During operations, the Proposed Project would use electricity provided by TID. Operational energy use would include lighting for commercial cannabis cultivation, lighting for the processing and office area, irrigation, carbon scrubbers, heating and cooling, and security equipment. The greenhouse structures would provide natural sunlight for cultivation operations, and would contain light fixtures to add supplemental light in order to maximize the number of harvests per growing season. (Stanislaus County 2019.) The supplemental lighting for the Proposed Project would consist of a series of string lights mounted on the greenhouse structure. Each greenhouse would have four strings of lights, with each string containing 24 15-watt bulbs, for a total maximum of 1,440 watts per greenhouse. (JDI Farms 2018.)

Stanislaus County requires that for cultivation conducted within a greenhouse, supplemental lighting may not exceed twenty-five watts per square foot. The Proposed Project uses approximately 0.5 watt per square foot.

DCC regulations require cultivation operations that use indoor or tier 2 mixed-light techniques 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. A tier 2 operation uses more than six watts per square foot of canopy. In addition, the electrical power used for the Proposed Project must meet the average electricity greenhouse gas emissions intensity required by TID pursuant to the California Renewables Portfolio Standard Program. (TID 2023.)

Compliance with local and state requirements would ensure that the Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with applicable energy policies. Therefore, the impact 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 receives energy from the TID, which is fully compliant with local and state energy efficiency regulations. (TID 2023.) In addition, the Proposed Project would comply with local and state energy efficiency regulations for commercial cannabis cultivation. 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

### *3.7.1.1 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:

- USGS;
- National Science Foundation (NSF);
- Federal Emergency Management Agency (FEMA); and
- 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):

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation;
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems;
- Improve earthquake hazards identification and risk assessment methods, and their use; and
- 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.

### *3.7.1.2 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; CEQA Guidelines, Appendix G.) 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.

#### *3.7.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County General Plan*

Stanislaus County Zoning Ordinance

The county has adopted the California Building Code (CBC) and appendices adopted, as published by the International Code Council. The CBC is updated every three years in compliance with state law. The 2022 edition of the California Building Standards Code became effective on January 1, 2023.

Stanislaus County updates its building code every three years, when the CBC is updated. It may also update the code at other times when building code updates occur.

6.78.080 Commercial Cannabis Cultivation

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

### 3.7.2 Environmental Setting

#### *3.7.2.1 Geology*

The project site is located in the Patterson area of unincorporated Stanislaus County. The county spans three geomorphic provinces: the Great Valley, the Coast Ranges, and the Sierra Nevada. The largest area of the county is in the San Joaquin Valley portion of the Great Valley geomorphic province, which is in the flat, lowland center of the county; a narrow band on the eastern edge of the county is the Sierra Nevada foothills of the Sierra Nevada

geomorphic province; and a broad band on the west side of the county is the steeper Coast Ranges geomorphic province (Stanislaus County 2016a).

The project area is located in the San Joaquin Valley portion of the Great Valley geomorphic province. The San Joaquin Valley is made up largely of alluvial fans sourced from the Sierra Nevada Range to the east, the Coastal Range to the west, and to some degree the Tehachapi Mountains to the south. Weathering of these mountain ranges combined with surface water flows and flooding have resulted in accumulation of alluvial (river), lacustrine (lake), and marine (ocean) deposits throughout the San Joaquin Valley at extreme depths.

#### *3.7.2.2 Soils*

The San Joaquin Valley is made up largely of alluvial fans. Geologic units in the San Joaquin River basin include the Tulare Formation, terrace deposits, alluvium, and flood-basin deposits. The Tulare Formation consists of soil beds, lenses, and tongues of clay, sand, and gravel. Terrace deposits are composed of yellow, tan, and light-to-dark brown silt, sand.

#### *3.7.2.3 Seismicity*

According to the County's General Plan Safety Element, several known faults exist within Stanislaus County. They are located in the western portion of the County and in the Diablo Range located west of I-5. These faults could cause ground shaking of an intensity approaching "X" (ten) on the Modified Mercalli Scale, which could result in damage to most structures. The existence of unreinforced masonry buildings could cause severe loss of life and economic dislocation in an earthquake. However, with exception of the Diablo Grande community, most development in the unincorporated county is not located near the areas of greatest shaking potential (Stanislaus County 2016b).

The area west of I-5 (Diablo Range) is noted for unstable geologic formations that are susceptible to landslide. A portion of the southern part of this area includes the Ortigalita Fault, part of which is designated as an Alquist-Priolo Earthquake Fault Zone. This prohibits most construction without a geologic study (Stanislaus County 2016b).

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. (Stanislaus County 2016a).

##### Ground Shaking

Unlike surface rupture, ground shaking is not confined to the trace of a fault, but rather propagates into the surrounding areas during an earthquake. The intensity of ground shaking typically diminishes with distance from the fault, but ground shaking may be locally amplified and/or prolonged by some types of substrate materials.

The ground-shaking hazard in the County ranges from moderate to low. The ground-shaking hazard is highest in the western portion of the County in the Diablo Range of the Coast Ranges and becomes progressively less eastward across the County (Stanislaus County 2016a).

##### Liquefaction and Differential Settlement

According to the County's General Plan EIR, there is potential for liquefaction in the County. The portion of the County most susceptible to liquefaction is the western margin of the valley because of the combination of young geologic units (Quaternary fan deposits and Dos Palos Alluvium) and potential for strong ground shaking. In

addition, where groundwater is shallow liquefaction has the potential to occur. Other parts of the valley also have young geologic units and shallow groundwater conditions, but the ground-shaking hazard is lower.

Liquefaction is most likely to occur in deposits of weak saturated alluvium or similar deposits of artificial fill. Liquefaction potential within Patterson exists in low-lying areas composed of unconsolidated, saturated, clay-free sands and silts.

The project area is theoretically subject to liquefaction resulting from earthquakes on several faults. The expected degree of earthquake-caused shaking however is relatively low to moderate, and it is unlikely that significant liquefaction would occur.

#### Landslide, Slope Failure, and Lateral Spreading

The potential for landslides in the County varies greatly. The greatest risk of landslides is in the western portion of the County in the steep Diablo Range. While the California Geological Survey has not designated any part of the county as a Zone of Required Investigation for landslide hazard, two factors make slope instability (both seismically and non-seismically induced) a concern in this area: 1) the steep topography and 2) the potential for moderate ground shaking (Stanislaus County 2016a).

Lateral spread is a pervasive type of liquefaction-induced ground failure that occurs on gentle slopes or near free-faces, such as river channels. Resulting horizontal displacements can reach up to several meters, and can be considerably damaging to foundations, bridges, roadways, pipelines, etc. (Stanislaus County 2016a).

The project site is situated mostly on dry, treeless alluvial fans. The project area is not located in the Diablo Range or near riverbanks, and is relatively level. Therefore, the project site is not subject to landslides, slope failure, or lateral spreading.

#### *3.7.2.4 Paleontological Resources*

Many of the geologic units in the county are highly sensitive for paleontological resources. If fossils are present, they could be damaged by ground-disturbing activities during construction, such as excavation for foundations, placement of fills, trenching for utility systems, and grading for roads and staging areas. The more extensive and deeper the earth-disturbing activity, the greater the potential for damage to paleontological resources (Stanislaus County 2016).

The Proposed Project is the construction and operation of a mixed-light commercial cannabis cultivation and nursery operation; however, all construction activities are complete. As described in Section 1.5, this IS/ND 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 (Less-than-Significant 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 and there are no known active faults underlying the Project site, nor are there any known active faults located

adjacent to the Project site. The area west of I-5 (Diablo Range) is noted for unstable geologic formations, this area includes the Ortigalita Fault, part of which is designated as an Alquist-Priolo Earthquake Fault Zone. The project site is located approximately 10 miles east of the Ortigalita Fault and is not anticipated to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death from the rupture of a know earthquake fault. According to Section 1613 of the 2019 CBC, all structures and portions of structures are required to be designed to resist the effects of seismic loadings caused by earthquake ground motions. Adherence to Section 1613 of the CBC and other engineering standards and practices would reduce risk of loss, injury, or death associated with development near designated faults. Therefore, impacts related to fault rupture would be **less than significant**.

### ii. Strong Seismic Ground Shaking (Less-than-Significant Impact)

As with most of California, the project site is in a seismically active region. The Tesla-Ortigalita fault is the only active fault in Stanislaus County, located approximately 10 miles west of the project site. The project site, like much of California, could be subject to moderate to strong ground shaking in the event of a major earthquake.

The Proposed Project involves the operation of a development of a mixed-light commercial cannabis cultivation and nursery business, including 15 greenhouses to be utilized for cultivation, five greenhouses to be utilized for nursery production, and an existing agricultural storage building and two accessory storage buildings to be utilized for office, storage, distribution, and processing activities. Surrounding land uses are zoned A-2 (General Agriculture). The Proposed Project would not exacerbate conditions related to strong seismic ground shaking at the site. The potential for seismic ground shaking would not represent a significant new hazard to people.

The Proposed Project would be designed and constructed to meet current requirements of Stanislaus County Building codes and would comply with seismic safety provisions of the most recent the California Building Code (CBC). The CBC contains provisions for earthquake safety based on factors of occupancy type, the types of soil and rock on-site, and the strength of ground shaking with specified probability occurring at a site. Because the CBC ensures that projects are designed and constructed based on site-specific parameters and current engineering practices, impacts related to ground shaking would be reduced. With adherence to regulatory requirements and standard engineering practices, the impact resulting from seismic ground shaking would be **less than significant**.

### iii. Seismic-Related Ground Failure, Including Liquefaction (Less-than-Significant Impact)

Liquefaction is the process in which soils and sediments lose shear strength and fail during seismic ground shaking. The vibration caused by an earthquake can increase pore pressure in saturated materials. If the pore pressure is raised to be equivalent to the load pressure, this causes a temporary loss of shear strength, allowing the material to flow as a fluid. This temporary condition can result in severe settlement of foundations and slope failure. The susceptibility of an area to liquefaction is determined largely by the depth to groundwater and the properties (e.g., texture and density) of the soil and sediment within and above the groundwater. The sediments most susceptible to liquefaction are saturated, unconsolidated sand and silt soils (particularly Quaternary age units) with low plasticity within 50 feet of the ground surface (Stanislaus County 2016a).

According to the General Plan EIR, there is potential for liquefaction in the county. The portion of the county most susceptible to liquefaction is located the western boundary of the valley due to the combination of young geologic units (Quaternary fan deposits and Dos Palos Alluvium) and potential for strong ground shaking; combined with areas where groundwater is shallow. Other parts of the valley also have young geologic units and shallow

groundwater conditions, but the ground-shaking hazard is lower. The geologic units in the Coast Ranges and Sierra Nevada foothills are likely not susceptible to liquefaction because they are older and more consolidated or because they are igneous. In addition, shallow groundwater is not likely to be present in the steeper terrain. (Stanislaus County 2016a).

Since the project area may be subject to moderate to strong seismic ground shaking during seismic events, there is a risk of seismically related ground failure, including liquefaction. However, according to the California Department of Conservation, Seismic Hazards Program: Liquefaction Zones, the Project site and area are not mapped as being within a liquefaction zone (DOC 2025); therefore, the potential for liquefaction is relatively low.

The Proposed Project would be designed and constructed to meet current requirements of Stanislaus County Building codes and would comply with seismic safety provisions of the most recent the CBC. The CBC contains provisions for earthquake safety based on factors of occupancy type, the types of soil and rock on-site, and the strength of ground shaking with specified probability occurring at a site. Because the CBC ensures that projects are designed and constructed based on site-specific parameters and current engineering practices, impacts related to ground shaking would be reduced. With adherence to regulatory requirements and standard engineering practices, the impact resulting from seismic related ground failure, including liquefaction, would be **less than significant**.

### iv. Landslides (No Impact)

The Project site and surrounding areas are relatively flat and do not contain any steep slopes or other features that could result in landslide or mudflow hazards. As such, the Project site is considered unlikely to be susceptible to landslides and would not expose people or structures to substantial adverse effects involving landslides. Therefore, the Project Project would have **no impact** related to landslides.

## *b. Result in Substantial Soil Erosion or the Loss of Topsoil (No Impact)*

All construction activities are complete. Approximately 500 cubic feet of earth was moved across the entire site for ground leveling. Concrete footings are included on five of the 20 greenhouses; there are no other concrete foundations for the greenhouses. Compacted natural earth, with compacted class 2 aggregate road base gravel was added to construct roadways. Minimal trenching was required for water drainage, and installation of 1' water lines to each greenhouse. No trenching was required for wastewater pipelines. As described in Section 1.5, this IS/ND 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 impact** related to soil erosion or 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 Proposed Project and Potentially Result in an On-Site or Off-Site Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse (No Impact)*

As discussed in Checklist Responses 3.7.3 (a) above, the project site is not located in an area subject to on- or off-site landslides or liquefaction. The DOC has not mapped the project site as susceptible to liquefaction or lateral spreading. Additionally, the site is located on relatively level ground and not located in the Diablo Range or near

riverbanks. Therefore, the project site is not subject to landslides, slope failure, or lateral spreading. As such, risks asociated with slope instability is considered negligible.

Because the Proposed Project does not include construction-related or operational features that have the potential to result in unstable soil conditions, the Proposed Project would have **no impact** related to unstable soils or geologic units.

### *d. Be Located on Expansive Soil, Creating Substantial Direct or Indirect Risks to Life or Property (Less-than-Significant Impact)*

Expansive soils are usually associated with a high clay content and are prone to large volume changes, they expand when there is a high-water content and shrink when the water evaporates or is dried out (swelling and shrinking). Expansive soil is generally a concern when designing building foundations and the installation of underground infrastructure. Expansive soils occur in the county; according to NRCS,soils in the project area may contain Capay clay and Zacharis clay loam. These soils could present a potential for expansion (NRCS 2025). Because the site is not located the areas of the County subject to significant geologic hazards (Diablo Range, west of I-5) and due to nature of the agricultural uses on-site, the Proposed Project would have a **less-than-significant impact** related to expansive soils.

### *e. Have Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems in Areas where Sewers are not Available for the Disposal of Wastewater (No Impact)*

Existing restrooms are connected to an existing septic system. No changes or modifications to the existing septic system would be required for the Proposed Project. Therefore, the Proposed Project would have **no impact** related to soil adequacy for sewage disposal.

### *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/ND does not analyze impacts that may have already occurred, if they cannot be mitigated. The Proposed Project is the operation of a mixed-light commercial cannabis cultivation, and nursery 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

### *3.8.1.1 Federal Laws, Regulations, and Policies*

In 1975, Congress enacted the Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the USEPA and National Highway Traffic Safety Administration (NHTSA) are responsible for establishing additional vehicle standards. The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturer 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 USEPA 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, the Department of Transportation (DOT) is authorized to assess penalties for noncompliance.

In June 2024, the NHTSA announced the final rule for model years 2027 through 2031. The final rule established standards that require an industry-wide fleet wide average of approximately 50.4 miles per gallon (mpg) in 2031 for all passenger cars and light trucks, and an industry fleet-wide average of roughly 2.851 gallons per 100 miles in 2035 for heavy-duty pickup trucks and vans. The CAFE standards will increase at a rate of 2 percent per year for passenger cars in years 2027 through 2031 and 2 percent per year for light trucks in model years 2029 through 2031. The final heavy duty pickup trucks and vans fuel efficiency standards increase at a rate of 10 percent per year in years 2030-2032 and 8 percent per year in years 2033-2035 (NHTSA 2024).

### *3.8.1.2 State Laws, Regulations, and Policies*

#### Assembly Bill 32 and Senate Bill 32 – California Global Warming Solutions Act

In September 2006, then-Governor Schwarzenegger signed the California Global Warming Solutions Act (Assembly Bill [AB] 32). AB 32 (Health & Saf. Code, Division 25.5) regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This re-duction was intended to be accomplished by

enforcing a statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

In 2016, Senate Bill (SB) 32 and its companion bill AB 197 amended California Health and Safety Code, section 38500 et seq. and established a new GHG reduction target of 40 percent below 1990 levels by 2030, and 85 percent below 1990 levels for anthropogenic emission by 2045, with an aspirational goal of carbon neutrality by 2045. The bills also include provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

### 2022 Scoping Plan for Achieving Carbon Neutrality

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial Scoping Plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives (CARB 2009).

Most recently, CARB approved the 2022 *Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) in December 2022. The 2022 Scoping Plan outlines the proposed framework of action for achieving the 2045 GHG target of an 85 percent reduction in anthropogenic GHG emissions relative to 1990 levels; the update also adds carbon neutrality as a science-based guide for California's climate work (CARB 2022). The 2022 Scoping Plan outlines how carbon neutrality can be achieved to reduce GHGs to meet the emission targets by reducing anthropogenic (human-caused) emissions and expanding actions to capture and store carbon. New to the 2022 Scoping Plan is a commitment to incorporate and quantify natural and working lands as a key component to GHG reductions and actions around capture and storage of carbon. The 2022 Scoping Plan strategy for meeting the state's 2030 GHG target incorporates the full range of legislative actions and state-developed plans that have relevance to the year 2030. The 2022 Scoping Plan is heading toward the 2045 anthropogenic target of 85 percent below 1990 levels and an aspirational goal of carbon neutrality, including the following reductions in key sectors:

- The transportation sector targets reductions based on the technology of vehicles and associated refueling infrastructure for those vehicles; the fuel used as the energy source to power vehicles and the facilities that produce them; and vehicle miles traveled (VMT), which relates to development patterns and available transportation options.
- The electricity grid sector has a target of 38 million metric tons of carbon dioxide equivalents (MMTCO2e) in 2030 and 30 MMTCO2e in 2035, which includes a goal of generating 20 gigawatts of offshore wind by 2045 and specifies that the increased demand for electrification occurs without new fossil gas–fired resources.
- Natural and working lands sectors include targets to conserve natural working lands and coastal waters, and to implement actions to accelerate natural removal of carbon and improve resilience to climate change.

In the 2022 Scoping Plan, CARB recommends statewide targets of no more than 226 $MMTCO_2e$ from AB 32 GHG inventory sector emissions. For the 2045 scenario in the 2022 Scoping Plan, maximum GHG emissions from AB 32 inventory sector emissions are 65 $MMTCO_2e$.

Appendix D of the 2022 Scoping Plan provides guidance for GHG analyses in local agency CEQA documents. The guidance is focused on land use plans and projects, but some of it can also apply to water and infrastructure projects. In particular, Section 3.2.2 generally endorses a net-zero threshold of significance, while noting that it may not be feasible or appropriate for every project. Also, Section 4.1 recommends a "mitigation hierarchy" not found in the CEQA Guidelines. CARB recommends prioritizing CEQA GHG mitigation according to a geographic hierarchy and includes carbon offsets as an option.

### Renewables Portfolio Standard

The state of California adopted standards to increase the percentage of energy from renewable resources that retail sellers of electricity, including investor-owned utilities and community choice aggregators, and it must be provided in their portfolio. The Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2. The standards are referred to as the RPS. Qualifying renewables under the RPS include bioenergy such as biogas and biomass, small hydroelectric facilities (30 megawatts [MW] or less), wind, solar, and geothermal energy. The California Public Utilities Commission (CPUC) and CEC jointly implement the RPS program.

In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expanded the State's RPS to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the RPS by signing Executive Order S-21-09, which directed the California Air Resources Board (CARB) to enact regulations to help the state meet its RPS goal of 33 percent renewable energy by 2020.

### Senate Bill 350 Clean Energy and Pollution Reduction Act (SB 350)

SB 350, also known as the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015, and provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

- To increase the procurement of California's electricity from renewable sources from 33 percent to 50 percent by December 31, 2030.
- To double the energy efficiency savings in electricity and natural gas final end uses (e.g., to heat and cool spaces, power appliances, power lights, and heat water) of retail customers through energy efficiency and conservation.

### 100 Percent Clean Energy Act (SB 100)

On September 10, 2018, then-Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also creates new standards for the RPS goals that were established by SB 350 in 2015. Specifically, SB 100 increases required energy from renewable sources for both Investor-Owned Utilities and Publicly Owned Utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers are also required to have a renewable

energy supply 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

### Clean Energy, Jobs, and Affordability Act (SB 1020)

SB 1020, also known as the Clean Energy, Jobs, and Affordability Act of 2022, establishes the requirement that eligible renewable 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 of all retail sales of electricity to California end-use customers by December 31, 2040; 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045; and 100 percent of electricity procured to serve all state agencies by December 31, 2035. It also contains provisions for cooperation between CPUC and Independent System Operators (ISOs) providing electricity for the purpose of transmission planning by allowing the exchange of confidential business information without risk of public disclosure requirements.

### Low Carbon Fuel Standard (Executive Order S-1-07)

The Low Carbon Fuel Standard (LCFS), established in 2007 through Executive Order S-1-07 and administered by CARB, requires producers of petroleum-based fuels to reduce the carbon intensity of their products that started with a 0.25 percent reduction in 2011 and culminated in a 10 percent total reduction in 2020. In September 2018, CARB extended the LCFS program to 2030, making significant changes to the design and implementation of the program, including a doubling of the carbon intensity reduction to 20 percent by 2030.

Petroleum importers, refiners, and wholesalers can either develop their own low carbon fuel products or buy LCFS credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas, and hydrogen.

#### *DCC Commercial Cannabis Business Regulations*

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 16306: Generator Requirements

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

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

(1) For portable engines, a Portable Equipment Registration Certificate provided by the California Air Resources Board; or

(2) For portable or stationary engines, a Permit to Operate or other proof of engine registration, obtained from the Local Air District with jurisdiction over the licensed premises.

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

(1) Either subsection (1)(A) or (1)(B):

(A) Meet the "emergency" definition for portable engines in title 17, California Code of Regulations, Section 93116.2(a)(12), or the "emergency use" definition for stationary engines in title 17, California Code of Regulations, Section 93115.4(a)(30); or

(B) Operate eighty (80) hours or less in a calendar year; and

(2) Either subsection (2)(A) or (2)(B):

(A) Meet Tier 3 with Level 3 diesel particulate filter requirements in title 13, California Code of Regulations, Sections 2700-2711; or

(B) Meet Tier 4 requirements, or current engine requirements if more stringent, in title 40, Code of Federal Regulations, chapter I, subchapter U, part 1039, subpart B, Section 1039.101.

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

### *3.8.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Zoning Ordinance*

6.78.080 Commercial Cannabis Cultivation

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

1. Water Conservation Measures. Commercial cannabis cultivation operations shall include adequate measures that minimize use of water for cannabis cultivation at the site. Water

conservation measures, water capture systems, or grey water systems shall be incorporated into commercial cannabis cultivation operations in order to minimize use of water where feasible.

2. Energy Conservation Measures. Commercial cannabis cultivation operations shall include adequate measures to address the projected energy demand for cannabis cultivation at the site.

E. Enclosure. All commercial cannabis cultivation operations shall occur within a greenhouse or fully enclosed building. If conducted within a greenhouse, supplemental lighting shall not exceed twenty-five watts per square foot to be used up to one hour before sunrise or after sunset, unless the greenhouse or facility is equipped with light-blocking measures to ensure that no light escapes.

### 3.8.2 Environmental Setting

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide [$CO_2$], methane, and nitrous oxide) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. GHG emissions are typically reported in terms of carbon dioxide equivalents ($CO_2e$) which converts all GHGs to an equivalent basis taking into account their global warming potential compared to $CO_2$.

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

CARB compiles with GHG inventories for the State of California. Based on CARB's 2022 GHG inventory data, California emitted 371.1 $MMTCO_2e$, including emissions resulting from imported electrical power. (CARB 2024). Despite California's population and economic growth, CARB's 2022 statewide inventory indicates that California's net GHG emissions in 2022 were below 1990 levels of 431 $MMTCO_2e$ which was the 2020 GHG reduction target codified in California under AB 32 and heading toward the 2030 goal level of 260 $MMTCO_2e$.

### 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)*

The Proposed Project would generate GHG emissions during construction and operation. During construction of the Proposed Project, the combustion of fossil fuels for operation of fossil fueled construction equipment, material hauling, and worker trips would result in construction-related criteria air pollutant emissions. During project operations there would be some worker trips and other vehicle trips for waste removal and product delivery. Other operation emissions would be for maintaining the landscaping and fugitive dust from driving on unpaved surfaces. These emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.29 using information from the Project Description along with default assumptions for the project site acreage being developed, which is the area that would be impacted during construction. The Proposed Project's construction-related GHG emissions are estimated at 29.4 metric tons of carbon dioxide equivalents ($MTCO_2e$).

Operational GHG emissions would result from fossil-fueled equipment and motor vehicles. The Proposed Project's operational emissions would be 219 $MTCO_2e$.

The proposed project removed several rows of almond trees (160 trees) in order to clear space for the cannabis greenhouses and other cannabis processing buildings. These trees would result in a one time change in carbon sequestration capacity from the trees which has not been quantified. The almond trees required 8,640,000 gallons of water compared to the estimated 300,000 gallons of water annually from the cannabis operations. The GHG emissions associated with the water use for the almond trees was 2 $MMTCO_2e$ per year. Information on the number of worker trips and equipment use for the almond trees was not available.

The net project emissions when amortized construction emissions are included would be less than 220 $MTCO_2e$/yr, which would not be anticipated to result in a significant impact to global climate change or impede the goals of AB 32 or SB 32 since the primary source of emissions is for the electricity use which given the renewable portfolio standards will be decreasing in intensity overtime. The project is consistent with the lighting restrictions for commercial cannabis cultivation and will be obtaining power from the TID. Since the Proposed Project's emissions would be low and would decrease in the future given the RPS regulations, the impact 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)*

The State of California has implemented AB 32, SB 32, and multiple Executive Orders to reduce GHG emissions. The Proposed Project does not pose any conflict with the most recent list of CARB's early action strategies, nor is it one of the sectors at which measures are targeted. The 2022 Scoping Plan (CARB 2022) did not mention that for agriculture energy use to have 25% of its energy demand electrified by 2030 and 75% by 2045 as a specific target there were no other applicable additional strategies, but emission reductions at the project site would be influenced by decisions relating to target sectors such as water, waste, natural resources, clean energy, transportation, and land use. The Proposed Project is using electricity in their cannabis operations and not relying on any large amounts of fossil fuel equipment for energy generation on-site. Thus, the Proposed Project is consistent with this strategy. The Proposed Project would not be required to report emissions to CARB. Therefore,

emissions generated by the Proposed Project would not be expected to have a substantial contribution to the ongoing impact on global climate change. The Proposed Project would not conflict or impede implementation of local General Plans. For these reasons, the Proposed Project would not conflict with AB 32 or SB 32, or the local general plans. Therefore, this impact would be **less than significant**.

## 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

### *3.9.1.1 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.

### 3.9.1.2 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., title 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 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 federal

pesticide laws in California. CDPR also oversees the activities of the county agricultural commissioners (CACs) 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[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 2023).

### *Hazardous Waste Control Law*

The Hazardous Waste Control Law (Health & Saf. Code, § 25100 et seq.) authorizes the California Environmental Protection Agency (CalEPA) and the Department of Toxic Substances Control (DTSC) to regulate the generation, transport, treatment, storage, and disposal of hazardous wastes. DTSC can also delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazard Waste Control Law.

### *Porter-Cologne Water Quality Control Act*

As discussed in more detail in Section 3.10, “Hydrology and Water Quality,” the Porter-Cologne Act (Wat. Code, Division 7) is the provision of the California Water Code that regulates water quality in California and authorizes the SWRCB and RWQCBs to implement and enforce the regulations.

RWQCBs regulate discharges under the Porter-Cologne Act primarily through the issuance of WDRs. Anyone discharging or proposing to discharge materials that could affect water quality must file a report of waste

discharge. The SWRCB and applicable RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Proposed Project site is under the jurisdiction of the Central Valley RWQCB.

### *California Code of Regulations, Division 4.5 – Environmental Health Standards for the Management of Hazardous Waste*

California Code of Regulations (CCR), title 22, division 4.5 outlines the state's hazardous waste management rules, aligning with and expanding upon federal Resource Conservation and Recovery Act (RCRA) regulations. It is administered by the California Department of Toxic Substances Control (DTSC) and covers the generation, transportation, treatment, storage, and disposal of hazardous waste. The regulations establish strict waste classification criteria, permitting requirements for facilities, and enforcement provisions to ensure public health and environmental protection.

### *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*

DCC regulations require all cannabis products to be tested by a licensed cannabis testing laboratory prior to sale. These regulations ensure that the cannabis product consistently meets the established specifications for cannabinoids, moisture content and water reactivity, residual pesticides, residual solvents and processing chemicals, microbial impurities, mycotoxins, foreign material, and heavy metals. 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 26039.6.

Section 16307 contains requirements for pesticide use. Cultivators must comply with all applicable pesticide statutes and regulations enforced by the Department of Pesticide Regulation. Cultivators are required to comply with several pesticide application and storage protocols, including: storing chemicals in a secure building or shed

to prevent access by wildlife; containing any chemical leaks and immediately cleaning up any spills; applying the minimum amount of product necessary to control the target pest; preventing offsite drift; not applying pesticides when pollinators are present; and not applying pesticides when they may reach surface water or groundwater.

Section 16310 requires cultivators to develop a pest management plan. The plan must include the product name and active ingredient(s) of all pesticides to be applied to cannabis; and any integrated pest management protocols, including chemical, biological, and cultural methods, that will be used to prevent and control pests on the cultivation site.

### *3.9.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Certified Unified Program Agency*

The Stanislaus County Hazardous Material Division of the Environmental Resources Department is the Certified Unified Program Agency (CUPA). The Hazardous Materials Division is responsible for many programs, including:

- Hazardous Materials Response Team: Assists police and fire departments during chemical spills and industrial accidents.
- Underground Storage Tank Program: Oversees the permitting, inspection, and monitoring of underground storage tanks (USTs).
- Aboveground Petroleum Storage Tank Program: Regulates facilities that store petroleum in aboveground tanks.
- Hazardous Waste Management Plan: Oversees the county's plan for managing hazardous waste.
- Household Hazardous Waste Collection Program: Collects hazardous waste from Stanislaus County residents for free.
- Medical Waste Program: Enforces laws and regulations related to medical waste.
- Hazardous Materials Disclosure Program: Inspects businesses to ensure compliance with laws and regulations, and to identify safety hazards.
- Hazardous Materials Business Plan (HMBP): Part of the Hazardous Materials Disclosure Program. Prepares for and mitigates emergencies like chemical releases.
- California Accidental Release Prevention (CalARP) Program: Hazardous Materials Division administers the CalARP program.

*Stanislaus County Zoning Ordinance*

6.78.080 Commercial Cannabis Cultivation

B. Documentation of all pesticides used by the permittee shall be presented to the Stanislaus County Agricultural Commissioner, and all pesticides and fertilizers shall be properly labeled and stored to avoid contamination through erosion, leakage, or inadvertent damage from rodents, pests, or wildlife.

## 3.9.2 Environmental Setting

### *3.9.2.1 Existing Hazards and Hazardous Materials*

There are no active hazardous materials cleanup sites listed on EnviroStor or Geotracker (DTSC 2024; SWRCB 2024) within 5000 feet of the Project site. 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 2024).

### *3.9.2.2 Airports*

The nearest airport to the project site is the NASA Crows Landing Airport and Test Facility, which is located approximately 4.2 miles to the south. The Valley Crop Dusters airport is located approximately 9.5 miles northwest of the Project site and the Modesto City–County Airport is approximately 20 miles northeast of the site.

### *3.9.2.3 Wildfire Hazards*

The Project site is in an agricultural area within unincorporated Stanislaus County. Existing on-site vegetation consists of agricultural crops, and vegetation within the existing on-site greenhouses. Vegetation in the wider area largely consists of agricultural trees and crops, with some open grassy spaces, and residential back yards.

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 Proposed Project is not classified as being located within a FHSZ. The closest FHSZ is approximately 4.7 miles to the west (CAL FIRE 2024b).

### *3.9.2.4 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 Project site is zoned A-2-20 (General Agriculture), and the nearest such facilities to the site are residential homes on either side, 1613 Fig Avenue approximately 280 feet west and 1847 Fig Avenue approximately 528 feet east. The nearest hospital is Sutter Gould Medical Foundation, located 3 miles to the west and the nearest school is West Valley Learning Center, located three miles northwest of the site.

## 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.

Commercial cannabis cultivation operations may involve the use of hazardous materials, such as fuel for power equipment and backup generators, and pesticides. The DCC only allows certain low-risk pesticides for commercial cannabis cultivation. These must be exempt from federal registration or from residue tolerance and used according to their labeling. Additionally, indoor and mixed-light commercial cultivation operations may use high-powered lights, which could contain hazardous components that could enter the environment during disposal. Routine transport, handling, use, and disposal of these types of materials could expose people to hazards if

adequate precautions are not taken. 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 of hazards and hazardous materials from cultivation operations that are enforced by DCC include Sections 15011(10), 15714-15724, 16307, and 16310.

The Proposed Project includes the storage and use of fertilizers and pesticides, including the storage of some fertilizers and agricultural nutrients that are deemed by Stanislaus County Environmental Resources to be above reportable quantities. Hazardous materials are stored within an existing pesticide and fertilizer storage shed with impermeable floor and lockable doors on site. Hazardous materials that are used on site include Calcium Sulfate (1,815 pounds maximum); Mission Fertilizer Grow 3-1-2 (55 gallons maximum); Mission Fertilizer Root (55 gallons maximum); PH-Up (55 gallons maximum); and Silver Bullet Terpene Enhancer (55 pounds maximum). These materials are managed and disposed in accordance with the facility's Consolidated Emergency Response/Contingency Plan on file with the State of California and local Department of Health as registered through the California Environmental Reporting System (CERS) on April 3, 2024.

Operation of the Proposed Project requires regular deliveries of cultivation and maintenance equipment and materials (e.g., soil and soil amendments, equipment, fertilizers, chemicals, and), fuel, deliveries of office supplies and other equipment, and disposal of hazardous materials generated on-site. The facility dispatches regular deliveries of products from the facility. Delivery vehicles would be loaded and unloaded in the parking area near the southwest portion of the facility. Deliveries average one per day and the average time frame is 8:00 a.m. to 5:00 p.m. Delivery trips are required to be transported according to regulatory requirements and existing procedures to significantly reduce the risk for upset.

Waste disposal services would be conducted by Bertolotti Disposal. Waste would also be self-transported to a manned fully permitted solid-waste landfill or transformation facility. Cannabis waste materials are self-hauled to the local waste collection facility. The Proposed Project would not increase the quantity or type of solid waste, as defined by Public Resources Code section 40191, or hazardous waste, as defined by Health and Safety Code section 25117, that is generated or stored onsite The site contains a 6-foot by 10-foot waste area is a staging area for cannabis waste. Based on required compliance with existing state and County requirements, the Proposed Project would not result in significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; thus, the impact would be **less than significant**.

### *b. Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment (Less-than-Significant Impact)*

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

The Proposed Project includes processing, which involves trimming and drying of cannabis product; however, no extraction or manufacturing of cannabis products would take place on-site. The Applicant has prepared a Hazardous Materials Business Plan (HMBP) and a Consolidated Emergency Response/Contingency Plan that would be enacted in the unlikely event of a hazardous materials upset. In addition, the Employee Training Plan includes training for chemical handlers and emergency response. Compliance with existing regulations and proposed safety

measures would reduce the potential for reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

The Applicant would also be required to use, store, and dispose of any hazardous materials in accordance with all applicable federal, state, and local regulations. The Proposed Project would include the storage and use of fertilizers and pesticides, including the storage of some fertilizers and agricultural nutrients that are deemed by the local code enforcement agency to be above reportable quantities, which are detailed in their HMBP. Hazardous materials are stored within an existing pesticide and fertilizer storage shed with impermeable floor and lockable doors on site. However, state regulations limit the types of chemicals that could be allowed to be applied onto cannabis products. In addition, all cultivation activities would occur indoors with direct application of water, pesticides, and fertilizers to eliminate drift of chemicals to areas outside the project area. The Proposed Project would be required to comply with existing environmental safety and workplace regulations for cannabis waste disposal, storage, and transport to reduce the risk for upset. Compliance with existing regulations and proposed safety measures would reduce the potential for reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

The Proposed Project includes the use of trucks and vans for deliveries and distribution activities. Delivery trips are required to be transported according to regulatory requirements and existing procedures to significantly reduce the risk for upset. Distribution activities would not include any distribution, use, or transport of hazardous materials.

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, 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 the impact 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 West Valley Learning Center, located approximately 3 miles northwest of the project site. Therefore, the Proposed Project would have **no impact** with respect to existing or proposed schools.

### *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. Therefore, the Proposed Project would not create a significant hazard to the public or the environment. Therefore, the Proposed Project would have **no impact** with respect to a significant hazard from location on this list.

### *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 two miles of the project site. The NASA Crows Landing Airport and Test Facility is the closest airport, located approximately 4.2 miles to the south of the project site. 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. Therefore, the Proposed Project would have **no impact** with respect to airports.

### *f. Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan (No Impact)*

The project site is accessed via Fig Avenue, a rural road with one lane in each direction. 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, the limited amount of increased traffic generated by the Proposed Project would not significantly impact emergency access. Therefore, the impact would be **less than significant**.

### *g. Expose People or Structures, Either Directly or Indirectly, to a Significant Risk of Loss, Injury or Death Involving Wildland Fires (Less-than-Significant Impact)*

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

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 Project would be in an area in the jurisdiction of West Stanislaus Fire Protection District, approximately two miles from the closest fire station. Electrical components would be within the greenhouse structures, within areas which have been cleared of other vegetation. Therefore, the Proposed Project is not expected to significantly exacerbate existing risks of wildfire.

The project site is in an agricultural area within unincorporated Stanislaus County. Existing on-site vegetation consists of agricultural crops, and vegetation within the existing on-site greenhouses. Vegetation in the wider area largely consists of agricultural trees and crops, with some open grassy spaces, and residential back yards.

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 site is not classified as being located within a FHSZ. The closest FHSZ is approximately 4.7 miles to the west (CAL FIRE 2024b).

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, the 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

### *3.10.1.1 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 NPDES permits that may apply to the Proposed Program are discussed below.

### General Construction Stormwater Permit

Most construction projects that disturb one acre or more of land are required to obtain coverage under the SWRCB's *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ), in accordance with CWA Section 402. The general permit requires the applicant to file a public notice of intent to discharge stormwater and prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP must include a site map and a description of the proposed construction activities; demonstrate compliance with relevant local ordinances and regulations and present a list of best management practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to conduct monitoring and reporting to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

## Municipal Stormwater Permitting Program

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

### *Section 404*

Clean Water Act (CWA) Section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to such 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.

### 3.10.1.2 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 Cannabis Cultivation Policy and Cannabis General Order WQ 2023-0102-DWQ*

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.

Under this order, indoor commercial cultivation activities are conditionally exempt. If a proposed project would rely solely on cultivation activities within greenhouses that would have permanent roofs and floors, and that would discharge industrial wastewater to a community sewer system, the Proposed Project would likely not be subject to the SWRCB General Order. (SWRCB 2023.)

### *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 ection 16307, subdivision (a) requires all cultivators to comply with all CDPR laws and regulations.
- California Code of Regulations, title 4, section 16307, subd. (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 ection 15011, subd. (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.

### *3.10.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County General Plan*

Agriculture Element

**Goal 3: Protect the natural resources that sustain agricultural industry [in the county].**

**Objective 3.2:** Water Resources

**Policy 3.4:** The County shall encourage the conservation of water for both agricultural, rural domestic, and urban uses.

**Implementation Measure 1:** The County shall encourage water conservation by farmers by providing information on irrigation methods and best management practices and coordinating with conservation efforts of the Farm Bureau, Resource Conservation Districts, Natural Resource Conservation Service, and irrigation districts.

**Implementation Measure 2:** The County shall encourage urban water conservation and coordinate with conservation efforts of cities, local water districts and irrigation districts that deliver domestic water.

**Implementation Measure 3:** The County shall continue to implement adopted landscape and irrigation standards designed to reduce water consumption in the landscape environment.

**Implementation Measure 4:** The County shall work with local irrigation districts to preserve water rights and ensure that water saved through conservation may be stored and used locally, rather than "appropriated" and moved to metropolitan areas outside of Stanislaus County.

**Implementation Measure 5:** The County shall encourage the development and use of appropriately treated water (reclaimed wastewater and stormwater) for both agricultural and urban irrigation.

**Policy 3.5:** The County will continue to protect the quality of water necessary for crop production and marketing.

**Implementation Measure 1:** The County shall continue to require analysis of groundwater impacts in Environmental Impact Reports for proposed developments.

**Implementation Measure 2:** The County shall investigate and adopt appropriate regulations to protect water quality.

**Policy 3.6:** The County will continue to protect local groundwater for agricultural, rural domestic, and urban use in Stanislaus County.

**Implementation Measure 1:** The County shall implement the existing groundwater ordinance to ensure the sustainable supply and quality of local groundwater.

### Land Use Element

**Goal 1:** Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic and social concerns of the residents of Stanislaus County.

**Policy 4:** Urban development shall be discouraged in areas with growth-limiting factors such as high water table or poor soil percolation, and prohibited in geological fault and hazard areas, flood plains, riparian areas, and airport hazard areas unless measures to mitigate the problems are included as part of the application.

**Implementation Measure 1:** All requests for development which require discretionary approval and include lands adjacent to or within riparian habitat shall include measures for protecting that habitat.

**Implementation Measure 2:** Applications for development in areas with growth-limiting factors such as high water table, poor soil percolation, geological fault areas, flood plains, and airport hazard areas shall include measures to mitigate the problems.

**Implementation Measure 3:** Development within the 100-year flood boundary shall meet the requirements of Chapter 16.50 (Flood Damage Prevention) of the County Code, and within the designated floodway shall obtain Central Valley Flood Protection Board approval.

### Conservation/Open Space Element

**Goal 2:** Conserve water resources and protect water quality in the County.

**Policy 5:** Protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

**Implementation Measure 1:** Proposals for urbanization in groundwater recharge areas shall be reviewed to ensure that (1) as much water as possible is returned to the recharge area, (2) the development will not cause discharge of materials detrimental to the quality of the water, and (3) the development will not result in significant groundwater over drafting or deterioration in quality. The Department of Environmental Resources shall require:

- In those areas where groundwaters are susceptible to over drafting, the project proponent shall perform a hydrogeological analysis and include appropriate mitigation measures in the proposal.
- In those areas where groundwater quality is susceptible to deterioration or is already of reduced quality, the level of wastewater treatment shall be such that it will not cause further quality deterioration.

**Implementation Measure 2:** The Department of Environmental Resources shall identify and require control of point sources for pollutants stored, handled, or disposed of on the surface of the soil or in the vadose zone that is located in the zone or aeration immediately above the groundwater level. Potential sources of pollutants to the groundwater may also include high densities of individual on-site sewage treatment units and/or the use of community package treatment plants. The Department of Environmental Resources shall require the adoption of groundwater monitoring programs for projects where hydrogeological assessments indicate the potential for groundwater deterioration is likely.

**Implementation Measure 3:** Stanislaus County shall discourage the use of dry wells as a means of street drainage in urban areas. Dry wells collect and discharge toxic, hazardous and designated contaminants into aquifers having

beneficial uses. New projects shall have storm water disposal systems that: (1) are designed not to pollute receiving surface or groundwaters, and (2) which could be integrated into an area-wide groundwater recharge program whenever feasible.

**Implementation Measure 4:** Encourage new development to incorporate water conservation measures to minimize adverse impacts on water supplies.

**Implementation Measure 5:** Continue to implement the landscape provisions of the Zoning Ordinance, which encourage drought-tolerant landscaping and water-conserving irrigation methods.

**Implementation Measure 6:** During the project and environmental review process, encourage new urban development to be served by community wastewater treatment facilities and water systems rather than by package treatment plants or private septic tanks and wells.

**Policy 6:** Preserve vegetation to protect waterways from bank erosion and siltation.

**Implementation Measure 1:** Development proposals and mining activities including, or in the vicinity of, waterways and/or wetlands shall be closely reviewed to ensure that destruction of riparian habitat and vegetation is minimized. This shall include referral to the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, State Department of Fish and Wildlife, and the State Department of Conservation.

**Implementation Measure 2:** Continue to encourage best management practices for agriculture and coordinate with soil and water conservation efforts of Stanislaus County Farm Bureau, Resource Conservation Districts, the U.S. Soil Conservation Service, and local irrigation districts.

**Policy 7:** New development that does not derive domestic water from pre-existing domestic and public water supply systems shall be required to have a documented water supply that does not adversely impact Stanislaus County water resources.

**Implementation Measure 1:** Proposals for development to be served by new water supply systems shall be referred to appropriate water districts, irrigation districts, community services districts, the State Water Resources Board and any other appropriate agencies for review and comment.

**Implementation Measure 2:** Review all development requests to ensure that sufficient evidence has been provided to document the existence of a water supply sufficient to meet the short and long term water needs of the project without adversely impacting the quality and quantity of existing local water resources.

### Safety Element

**Goal 1: Prevent loss of life and reduce property damage as a result of natural disasters.**

**Policy 2:** Development should not be allowed in areas that are within the designated floodway.

**Implementation Measure 1:** Development within the 100-year flood boundary shall meet the requirements of Chapter 16.50 (Flood Damage Prevention) of the County Code and within the designated floodway shall obtain Central Valley Flood Protection Board approval.

**Implementation Measure 2:** The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to flooding. Most discretionary

projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated.

**Implementation Measure 3:** The County shall amend its Zoning Ordinance, as needed, for compliance with the Central Valley Flood Protection Act of 2008 (and any subsequent amendments).

*Stanislaus County Zoning Ordinance*

6.78.080 Commercial Cannabis Cultivation

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

1. Water Conservation Measures. Commercial cannabis cultivation operations shall include adequate measures that minimize use of water for cannabis cultivation at the site. Water conservation measures, water capture systems, or grey water systems shall be incorporated into commercial cannabis cultivation operations in order to minimize use of water where feasible.

9.73 Groundwater

9.37.040 Prohibition

Except as otherwise provided in this chapter, the following actions are prohibited:

A. The unsustainable extraction of groundwater within the unincorporated areas of the county.

B. The export of water.

9.37.45 Application

B. Effective upon adoption of an applicable groundwater sustainability plan, the prohibition set forth in subsection A of Section 9.37.040 shall be applicable to the extraction from any groundwater well for which the county reasonably concludes that the extraction of groundwater constitutes unsustainable extraction of groundwater. In the event of such determination by the county, the affected holder or holders of a well construction permit issued pursuant to Chapter 9.36 for such well shall be notified and shall be required to demonstrate, based on substantial evidence, that continued extraction of groundwater will not result in an unsustainable extraction of groundwater as defined in subsection 6 of Section 9.37.030.

C. This section does not limit the application of subsection B of Section 9.37.040.

D. The regulations and prohibitions set forth in this chapter apply only to the unincorporated areas of Stanislaus County.

*Delta-Mendota Subbasin Groundwater Sustainability Plan*

To comply with SGMA, the Basin Groundwater Sustainability Agencies (GSAs) submitted six coordinated but separate GSPs to DWR in 2020 and 2022. The DWR deemed the GSP both submittals as inadequate and placed the subbasin under the oversight of the State Water Resources Control Board (SWRCB). In order to bring the GSP in compliance with DWR requirements, Delta-Mendota Subbasin is collaborating with all 23 GSAs within the basin to prepare one GSP. The Final GSP for the Delta-Mendota subbasin aims to prevent negative impacts to the basin by managing groundwater levels through strategies like monitoring, overdraft mitigation, and water quality thresholds, thereby aiming to achieve sustainable groundwater management and prevent issues like land

subsidence and declining water quality and will be evaluated by the SWRCB in 2025 (EKI Environment & Water 2024).

## 3.10.2 Environmental Setting

### *3.10.2.1 Topography and Climate*

Topography of the Project site and surrounding area is relatively level. The climate of the region is Mediterranean with hot, dry summers and cool, wet winters. Average annual precipitation in the county is 13 inches (Stanislaus County 2016a).

### *3.10.2.2 Surface Water Hydrology and Quality*

The project area is located within the San Joaquin River Hydrologic Region. The San Joaquin River Hydrologic Region covers approximately 9.7million acres (15,200 square miles) and includes all of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus counties; most of Merced and Amador counties; and parts of Alpine, Fresno, Alameda, Contra Costa, Sacramento, El Dorado, and San Benito counties. The basin includes all watersheds tributary to the San Joaquin River and the Delta south of the Sacramento River and south of the American River watershed (Stanislaus County 2016a).

The San Joaquin River is the principal river of the region, and all other streams are tributary to it. Its larger tributaries include the Cosumnes, Mokelumne, Calaveras, Stanislaus, Tuolumne, Merced, Chowchilla, and Fresno rivers. Of these surface water features, major features that cross Stanislaus County include the San Joaquin, Stanislaus, and Tuolumne rivers, all of which originate in the Sierra Nevada Mountains. The Stanislaus and Tuolumne rivers eventually discharge into the San Joaquin River, which extends to the San Francisco Bay-Delta estuary (Stanislaus County 2016a).

Surface water quality for the three major Stanislaus County rivers (San Joaquin, Stanislaus, and Tuolumne) is good at their sources in the Sierra Nevada Mountains. However, as each river flows through the San Joaquin Valley water quality declines by each successive use. Agricultural and domestic use contribute to water quality degradation. Water quality in the Stanislaus and Tuolumne rivers declines significantly by the time they discharge into the San Joaquin River. Comparatively, water quality declines more in the Tuolumne River than the Stanislaus River from agricultural wastewater returns and gas well wastes (Stanislaus County 2016a).

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 RWQCB Region 5 Central Valley Region, within the San Joaquin River Basin.

### *3.10.2.3 Stormwater*

Irrigation runoff from the existing almond orchard is conveyed via a tile drain system to a drainage ditch on the western side of the site. The site has limited impervious cover, so stormwater percolates into the ground. The Proposed Project would include minimal changes to impervious surfaces.

#### 3.10.2.4 Groundwater Levels, Flows, and Quality

The Project is located within the San Joaquin Valley groundwater basin and the San Joaquin Valley Delta-Mendota subbasin. The Delta-Mendota subbasin encompasses approximately 747,000 acres at the northwestern end of the San Joaquin Valley groundwater basin within portions of San Joaquin, Stanislaus, Merced, Fresno, and San Benito Counties. It is bordered on the west by the Coast Ranges, with its northern boundary near Tracy in San Joaquin County and its eastern boundary generally following the San Joaquin River and Fresno Slough. This subbasin is considered a high priority area due to its critical overdraft status (DWR 2006), meaning groundwater extraction significantly exceeds recharge, and is managed under the SGMA.

According to data from DWR, the total storage capacity of the Delta-Mendota groundwater subbasin is estimated to be around 30,400,000 acre-feet to a depth of 300 feet, with the potential to reach 81,800,000 acre-feet if considering the base of fresh groundwater (DWR 2006)

Groundwater flow was historically northwestward parallel to the San Joaquin River. However, recent data show flow to the north and eastward, toward the San Joaquin River. Based on current and historical groundwater elevation maps, groundwater barriers do not appear to exist in the subbasin (DWR 2006).

The groundwater quality in the Delta-Mendota subbasin is generally considered poor, characterized by high salinity levels, particularly in the southern portion. The groundwater in this subbasin is characterized by mixed sulfate to bicarbonate types in the northern and central portion while of sodium chloride and sodium sulfate are prevalent in the central and southern portion, resulting in high Total dissolved solids (TDS) values. TDS vary significantly across the subbasin, with higher concentrations in the south compared to the north. There are also localized areas of high iron, fluoride, nitrate, and boron in the subbasin (DWR 2006).

#### 3.10.2.5 Floodplains and Tsunamis

The project site is in a Federal Emergency Management Agency (FEMA) Flood Zone X (FEMA 2025). FEMA's Flood Zone X is a designation on a flood map that indicates an area with moderate-to-low risk for flood.

According to the County's Safety Element, large portions of the county could be under 10 feet of water or more within a few hours of in the event of dam or levee failure. Seven dams present an inundation risk for Stanislaus County, including: Don Pedro, Exchequer, La Grange, New Melones, Pine Flat, San Luis, and Tulloch Reservoirs. The risks of inundation resulting from failure of a dam pose a threat to the entire valley floor and, in particular, from New Melones and Don Pedro dams within the area of greatest population density (Stanislaus County 2016b).

However, the project site is not located within a designated inundation area on the County's Dam Inundation Hazards map (Stanislaus County 2016b). The project site is not located near the ocean and not located within a tsunami hazard zone.

### 3.10.3 Discussion of Checklist Responses

#### *a. Violate any Water Quality Standards, Waste Discharge Requirements or Otherwise Substantially Degrade Water Quality (Less-than-Significant Impact)*

All construction activities are complete. Approximately 500 cubic feet of earth was moved across the entire site for ground leveling. Concrete footings are included on five of the 20 greenhouses; there are no other concrete foundations for the greenhouses. Compacted natural earth, with compacted class 2 aggregate road base gravel

was added to construct roadways. Minimal trenching was required for water drainage, and installation of 1' water lines to each greenhouse. No trenching was required for wastewater pipelines. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, if they cannot be mitigated. Because no further ground disturbing construction activities would be required, construction of the Proposed Project would have **no impact** on water quality.

The project site includes stormwater management features to control stormwater during operations including the use of gravel roadways throughout the facility to maintain soil compaction and prevent erosion; erosion control blankets on exposed earth adjacent to greenhouses; and catch basins running to ABS sewer pipes for surface water collection. As such, no substantial pollutants would be introduced into storm water runoff during operations, including sediment,

Further, the Proposed Project would be compliant with the applicable regulations set forth by the Central Valley Regional Water Quality Control Board (CVRWQCB) and 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* (CVRWQCB 2018). 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. 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 (Less-than-Significant Impact)*

Groundwater supplies would come from the San Joaquin Valley Delta-Mendota subbasin, DWR has classified this subbasin as critically over drafted. Due to its critical overdraft status, the subbasin is required to develop and implement a Groundwater Sustainability Plan (GSP) under the SGMA. This this designation resulted in an accelerated timeline for SGMA compliance, including GSP development and achievement of sustainability by 2040. To comply with SGMA, the Basin Groundwater Sustainability Agencies (GSAs) submitted six coordinated but separate GSPs to DWR in 2020 and 2022. The DWR deemed the GSP both submittals as inadequate and placed the subbasin under the oversight of the State Water Resources Control Board (SWRCB). In order to bring the GSP in compliance with DWR requirements, Delta-Mendota Subbasin is collaborating with all 23 GSAs within the basin to prepare one GSP. The Final GSP for the Delta-Mendota subbasin aims to prevent negative impacts to the basin by managing groundwater levels through strategies like monitoring, overdraft mitigation, and water quality thresholds, thereby aiming to achieve sustainable groundwater management and prevent issues like land subsidence and declining water quality and will be evaluated by the SWRCB in 2025 (EKI Environment & Water 2024).

Stanislaus County has several plans and policies related to hydrology and water resources in the Agricultural Element, Goal 3, Objective 3.2, Policy 3.4 (the county shall encourage the conservation of water for both agricultural, rural domestic, and urban uses), Policy 3.5 (the county will continue to protect the quality of water necessary for crop production and marketing), and Policy 3.6 (the county will continue to protect local groundwater for agricultural, rural domestic, and urban use in Stanislaus County) and in the Conservation/Open Space Element, Goal 2, Policy 5 (protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers).

Stanislaus County adopted a Groundwater Ordinance in November 2014 (Chapter 9.37 of the County Code, that codifies requirements, prohibitions, and exemptions intended to help promote sustainable groundwater extraction in unincorporated areas of the County. The Ordinance prohibits the unsustainable extraction of groundwater and makes issuing permits for new wells, which are not exempt from this prohibition, discretionary. For unincorporated areas covered in an adopted GSP pursuant to SGMA, the County can require holders of permits for wells it reasonably concludes are withdrawing groundwater unsustainably to provide substantial evidence that continued operation of such wells does not constitute unsustainable extraction and has the authority to regulate future groundwater extraction.

As discussed in Section 2.5.2, the historic volume of water used for the almond orchard annually is 8,640,000 gallons. The existing agricultural well on the site would provide both domestic and irrigation water to the site. The estimated water use for the facility is 300,000 gallons, or 0.92 acre feet of water annually. (JDI Farms 2024.) The capacity of the Delta-Mendota Subbasin is estimated to be 30,400,000 acre-feet; therefore, the project demand is less than of the 0.0001 percent of the groundwater basin's capacity.

Approximately 160 almond trees were removed from the existing almond orchard to accommodate the Proposed Project. Water use to support these trees would no longer occur. The replacement of almond trees with cannabis would result in an overall decrease in water use at the project site. Almonds are estimated to require on average approximately 4.49-acre feet of water per acre in one growing season; cannabis is estimated to require between 0.002 to 2.8 acre-feet per year acre-feet of water per acre of canopy per year. (Pera 2021; CDFA 2017.)

The Proposed Project would rely on the site's existing private agricultural well and water rights to the well for water supply to serve commercial cannabis cultivation and other onsite water uses. There are no additional wells proposed as part of this project. The Proposed Project would not require relocation or construction of new or expanded water supply infrastructure.

The Proposed Project would not result in a substantial new demand for water as a result of conversion from other agricultural uses to cannabis. In addition, the project's total demand represents a very small portion of the available groundwater. Finally, compliance with County ordinances and the newly adopted GSP would ensure that the impact related to groundwater to would be **less than significant.**

### *c. Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River or through the Addition of Impervious Surfaces, in a Manner Which Would:*

#### i. Result in Substantial Erosion or Siltation On- or Off-site (No Impact)

There are no streams or other water bodies within the commercial cannabis cultivation area. The site is relatively flat, with minimal elevation change across the site. All construction activities are complete; no additional grading or trenching would occur. Because no further ground disturbing construction activities would be required, the Proposed Project would have **no impact** with respect to erosion and siltation.

#### ii. Substantially Increase the Rate or Amount of Surface Runoff in a Manner Which Would Result in Flooding On- or Off-site (Less than Significant Impact)

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

#### iii. Create or Contribute Runoff Water Which Would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems or Provide Substantial Additional Sources of Polluted Runoff (Less than Significant Impact)

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

#### iv. Impede or Redirect Flood Flows (Less than Significant Impact)

All construction activities are complete. With respect to existing drainage patterns and the potential for the Proposed Project to generate stormwater pollutants, the site is relatively flat, with minimal elevation change across the site. The project site does not contain and streams, rivers, or other water features. The project site includes stormwater management features to control stormwater during operations including the use of gravel roadways throughout the facility to maintain soil compaction and prevent erosion; erosion control blankets on exposed earth adjacent to greenhouses; and catch basins running to Acrylonitrile Butadiene Styrene (ABS) sewer pipes for surface water collection. The existing drainage is adequate and therefore runoff would not exceed the capacity of the existing storm drain system. The Proposed Project would not substantially alter stormwater runoff drainage patterns on-site or in the surrounding area nor would it result in an increase in the rate or amount of surface runoff in a manner which would result in flood on- or off-site or impede or redirect flood flows. and runoff would continue to be conveyed to the existing storm drain system. The impact on flood flows would be **less than significant.**

### *d. In Flood Hazard, Tsunami, or Seiche Zones, Risk Release of Pollutants due to Project Inundation (No Impact)*

The project site is designated Zone X on the recent FEMA Flood Insurance Rate Map, indicating an area of minimal flood hazard (FEMA 2025). In addition, according to the Stanislaus County Dam Inundation Hazards map, the project site is not located in a dam inundation area. The site is located in land and not near the Pacific Ocean or inland bodies of water. Therefore**,** the Proposed Project would have **no impact** related to a release of pollutants due to inundation by flood, tsunami, or seiche.

### *e. Conflict With or Obstruct Implementation of a Water Quality Control Plan or Sustainable Groundwater Management Plan (No Impact)*

The project site is located within the San Joaquin River Delta-Mendota Subbasin. The Water Quality Control Plan (Basin Plan) for the Central Valley Regional Water Quality Control Board, Region 5 is applicable to the San Joaquin River 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. 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

### *3.11.1.1 Federal Laws, Regulations, and Policies*

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

### *3.11.1.2 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).) According 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.

### *3.11.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Zoning Ordinance*

6.78.080 Commercial Cannabis Cultivation

F. Outdoor Cultivation. No outdoor commercial cannabis cultivation is allowed within the unincorporated areas of the county of Stanislaus.

G. Commercial cannabis cultivation activities in the A-2 zoning district shall be limited to cultivation, nursery, or distribution (limited to permitted commercial cannabis product grown on-site) within the following type of structure:

1. Greenhouse.

2. Accessory storage buildings may be utilized provided the following criteria is met:

   a. The building must meet the requirements of Section 6.78.120(B).

   b. No more than ten thousand square feet of cultivation or nursery canopy shall be allowed.

H. The cumulative total canopy size of cannabis cultivated at the cultivation site shall not exceed the canopy size authorized under the county's CCA permit or state permit, whichever is least.

I. Commercial cannabis cultivation activities shall not be considered agriculture for the purpose of the county's right-to-farm policy or sphere of influence policy.

### 3.11.2 Environmental Setting

The project site is located at 1631 Fig Avenue, between Sycamore and Elm Avenues, in the Patterson area of unincorporated Stanislaus County. The site is in a rural area surrounded by agriculturally zoned parcels. Adjacent land uses include orchards, row crops, and scattered single-family dwellings in all directions. The City of Patterson is located approximately 1¼ mile to the west of the Project site. The larger parcel is approximately 20 acres; however, cultivation activities would only occur within 7.1 acres of the parcel.

The project site and area are zoned as A-2-20 (General Agriculture). Ingress and egress for the Project site is via Fig Avenue. All vehicles and pedestrians would enter through a controlled gate in the chain link fence that surrounds the project site.

### 3.11.3 Discussion of Checklist Responses

#### *a. Physically Divide an Established Community (No Impact)*

All Proposed Project improvements would be located entirely within the 7.1-acre project site which is zoned for agricultural uses. Land uses surrounding the site consist of properties zoned for general agricultural uses. The Proposed Project would not alter or diminish access to adjacent properties. Construction and 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 Stanislaus County General Plan Land Use and Zoning Map, the project site is designated as A-2-20 (General Agriculture). The proposed development of a mixed-light commercial cannabis cultivation and nursery business is consistent with the General Plan land use and zoning designation of General Agricultural. Commercial cannabis cultivation, nursery, and distribution activities may be allowed in the A-2 zoning district upon approval of a Use Permit when conducted within a greenhouse or accessory agricultural building.

The County's Commercial Cannabis Ordinance includes a local setback requirement of 200 feet from the proposed use to a residence located on an adjacent property under different ownership. There is one residence located within the 200-foot setback, approximately 150 feet from the project site area at the southwestern corner. Accordingly, the Applicant has requested, and the Stanislaus County Board of Supervisors has approved, a reduction to the local residential setback (Stanislaus County 2019).

The Proposed Project would not conflict with any land use plan, policy, or regulation. Based on analysis contained in this Initial Study/ND, the Proposed Project would not create a significant adverse effect either directly or indirectly to the physical environment. Therefore**,** the Proposed Project would have **no impact** as a result of conflicts with land use plans, policies, or regulations**.**

# 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

### *3.12.1.1 Federal Laws, Regulations, and Policies*

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

### *3.12.1.2 State Laws, Regulations, and Policies*

*Surface Mining and Reclamation Act of 1975*

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

### *3.12.1.3 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.

The predominant mineral resources in the Stanislaus County are sand and gravel ), 12 mines are in operation in the County. Current mining activities occur primarily within fluvial deposits along river and stream drainages (Stanislaus County 2016a).

Three mineral classification maps have been prepared for the county. In 1993, the California Division of Mines and Geology published the mineral land classification for the entire county. The report designated 22 areas as MRZ-2 resource zones, primarily for aggregate resources (Stanislaus County 2016a). The areas along the Stanislaus and Tuolumne Rivers were considered to be of the highest grade. The Proposed Project site has not been identified in the Stanislaus County General Plan as an area with mineral resources. In addition, the project site is not located along waterways.

### 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)*

There are no known mineral resources on the project site or in the immediate vicinity (Stanislaus County 2016). The Proposed Project does not involve any use that would result in impacts to mineral resources. The project site is located in the A-2-20 (General Agriculture) zoning district and currently developed with 20 greenhouses and several accessory buildings. Therefore, the Proposed Project would have **no impact** on mineral resources known to be of value to the region and 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 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

### *3.13.1.1 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*

### *3.13.1.2 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

### *3.13.2.1 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.

### *3.13.2.2 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**.

**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 (OPR 2017)*

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).

### *3.13.2.3 Local Laws, Regulations, and Policies*

*Stanislaus County General Plan*

Noise Element

**Goal 2:** Protect the citizens of Stanislaus County from the harmful effects of exposure to excessive noise.

**Policy 2:** It is the policy of Stanislaus County to develop and implement effective measures to abate and avoid excessive noise exposure in the unincorporated areas of the County by requiring that effective noise mitigation measures be incorporated into the design of new noise generating and new noise sensitive land uses.

**Implementation Measure 1:** New development of noise-sensitive land uses will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels to the following levels:

A. For transportation noise sources, such as traffic on public roadways, railroads, and airports, 60 Ldn (or CNEL) or less in outdoor activity areas of single-family residences, 65 Ldn (or CNEL) or less in community outdoor spaces for multi-family residences, and 45 Ldn (or CNEL) or less within noise sensitive interior spaces. Where it is not possible to reduce exterior noise due to these sources to the prescribed level using a practical application of the best available noise-reduction technology, an exterior noise level of up to 65 Ldn (or CNEL) will be allowed. Under no circumstances will interior noise levels be allowed to exceed 45 Ldn (or CNEL) with the windows and doors closed in residential uses.

B. For other noise sources such as local industries or other stationary noise sources, noise levels shall not exceed the performance standards contained within [**Table 3.13-3**].

**Implementation Measure 2:** New development of industrial, commercial or other noise generating land uses will not be permitted if the resulting noise levels will exceed 60 Ldn (or CNEL) in noise-sensitive areas. Additionally, the development of new noise-generating land uses which are not pre-empted from local noise regulation will not be permitted if the resulting noise levels will exceed the performance standards contained in [Table 3.13-3] in areas containing residential or other noise sensitive land uses.

**Table 3.13-3. Maximum Allowable Noise Exposure – Stationary Noise Sources[4]**

| | **Daytime**<br>**7:00 a.m. to 10:00 p.m.** | **Nighttime**<br>**10:00 p.m. to 7:00 a.m.** |
|---|---|---|
| | Daytime<br>7:00 a.m. to 10:00 p.m. | Nighttime<br>10:00 p.m. to 2:00 a.m. |
| Hourly Leq dBA | 55 | 45 |
| Maximum level, dBA | 75 | 65 |

Source: Stanislaus County 2016a.

[4] As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

Each of the noise level standards specified in Table 3.13-3 shall be reduced by five (5) dBA for pure tone noises, noise consisting primarily of speech or music, or for recurring impulsive noises. The standards in Table 4 should be applied at a residential or other noise-sensitive land use and not on the property of a noise-generating land use. Where measured ambient noise levels exceed the standards, the standards shall be increased to the ambient levels.

*Stanislaus County Ordinance***s**

Title 6.78 Commercial Cannabis Activities

6.78.120 General Operational Standards

D. Odor Control. Odor Control devices and techniques shall be incorporated into all commercial cannabis activities to ensure that odors from cannabis are not detectable off-site. Commercial cannabis activities shall provide a sufficient odor absorbing ventilation and exhaust system so that cannabis odors are not detected outside of the facility, anywhere on adjacent property or public rights-of-way, on or about the exterior or interior common area walkways, hallways, breezeways, foyers, lobby areas, or any other areas available for use by common tenants or the visiting public, or within any other unit located inside the same building as a commercial cannabis activity. As such, the permittees shall install and maintain an exhaust air filtration system or other similar equipment with odor control that prevents internal odors from being emitted externally.

Chapter 10.46-Noise Control Ordinance

Stanislaus County's noise control ordinance, Chapter 10.46 of the Stanislaus County Code, was established in 2010 with Ordinance CS 1070. 10.46.050 states that it is unlawful for any person at any location within the unincorporated area of the county to create any noise or to allow the creation of any noise which causes the exterior noise level when measured at any property situated in either the incorporated or unincorporated area of the county to exceed the noise level standards as set forth below:

1. Unless otherwise provided herein, the following exterior noise level standards presented in [**Table 3.13-4]** shall apply to all properties within the designated noise zone:

**Table 3.13-4. Exterior Noise Level Standards**

| **Designated Noise Zone** | **7:00 a.m. to 9:59 p.m.** | **10:00 p.m. to 6:59 a.m.** |
|---|---|---|
| Noise Sensitive | 45 | 45 |
| Residential | 50 | 45 |
| Commercial | 60 | 55 |
| Industrial | 75 | 75 |

Note: Maximum A-weighted sound level as measured on a sound level meter (Lmax).

Source: Stanislaus County 2010.

2. Exterior noise levels shall not exceed the following cumulative duration allowance standards presented in [**Table 3.13-5**]:

**Table 3.13-5. Cumulative Duration Allowance Standards**

| **Cumulative Duration** | **Cumulative Duration** |
|---|---|
| Equal to or greater than 30 minutes per hour | Table 3.13 4 plus 0 dB |
| Equal to or greater than 15 minutes per hour | Table 3.13 4 plus 5 dB |
| Equal to or greater than 5 minutes per hour | Table 3.13 4 plus 10 dB |

| Cumulative Duration | Cumulative Duration |
|---|---|
| Equal to or greater than 1 minute per hour | Table 3.13 4 plus 15 dB |
| Less than 1 minute per hour | Table 3.13 4 plus 20 dB |

Source: Stanislaus County 2010.

The Noise Control Ordinance limits construction noise to 75 dBA at any receiving property line between the hours of 7:00 p.m. and 7:00 a.m. With regard to vibration, ordinance 10.46.070 states that activity that creates vibration that is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at one hundred fifty feet from the source if on a public space or public right-of-way is prohibited. The ordinance defines "vibration perception threshold" as the minimum ground-borne or structure-borne vibration motion necessary to cause a reasonable person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects, or a measured motion velocity of 0.01 inch per second over the range of one to one hundred Hertz.

*Stanislaus County Airport Land Use Compatibility Plan*

The Stanislaus County ALUCP identifies noise compatibility standards for a wide variety of land uses. In summary, the plan states that all new residential development and children's schools are deemed incompatible within the projected CNEL 60 dB contour of each airport. New non-residential development is deemed incompatible in locations where the airport-related noise exposure would be highly disruptive to the specific land use. The plan provides specific applicable criteria for various land use types (Stanislaus County 2016b).

### 3.13.3 Environmental Setting

The project is in a rural area surrounded by agriculturally zoned parcels. Adjacent land uses include orchards, row crops, and scattered single-family dwellings in all directions. The City of Patterson is approximately 1.25 mile to the west. The parcel is approximately 20 acres; however, cultivation activities would only occur within 7.1 acres of the parcel.

There is a residence approximately 150 feet from the project site at the southwestern corner. This residence is the nearest senstivie receptor. Besides this residence, and a few further from the project, there are no other sensitive receptors nearby. Accordingly, the Applicant has requested, and the Stanislaus County Board of Supervisors has approved, a reduction to the local residential setback. (Stanislaus County 2019.)

### 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)*

The project proposes commercial cannabis cultivation and ancillary activities on land designated for agricultural uses. The nearest sensitive receptor is a residence approximately 150 feet from the Proposed Project.

#### *Construction*

Project construction has been completed, and all construction activities were performed in accordance with local approval by Stanislaus County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/ND

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.

### *Operation*

The cultivation greenhouses would be approximately 150 feet from the nearest sensitive receptor. The Proposed Project would operate between the hours of 6:00 a.m. and 6:00 p.m. seven days a week. Operational components include indoor mixed-light commercial cannabis cultivation, nursery cultivation, and ancillary processing and ancillary transport of cannabis products off-site. Cultivation would require irrigation, and new development would be equipped with odor-reduction technology that has the potential to increase the ambient noise levels in the area. Circulation fans and ventilation sidewall fans, as required by Stanislaus Code section 6.78.120 General Operational Standards (D.) Odor Control, would generate a maximum of 70 dBA at a distance of 5 feet from the source. Noise attenuates (diminishes) at a rate of 6 dB per doubling of distance. Therefore, assuming a distance of 150 feet to the nearest sensitive receptor, maximum noise levels generated from the odor control system during harvest periods would be percieved at approximately 41 dB.This would be below the maximum exterior noise level set forth by the Stanislaus County General Plan Noise Element and Noise Control Ordinance.

The Proposed Project would also genererate noise during operating hours as a result of added prioject-related employee and delivery vehicle traffic.

The Proposed Project is located in an existing agricultural area where the types of noises generated would be consistent with existing uses; which includes maintenance and harvesting activities in the almond orchards surrounding the project site. Noise generated by Proposed Project operations would be generated primarily inside greenhouses. Compared to the baseline outdoor activities related to tending and harvesting almonds, there would not be a significant increase in noise outside of the project area.

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

## *b. Generate Excessive Groundborne Vibration or Groundborne Noise Levels (No Impact)*

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

Project operations are not expeceted to generate any significant groundborne vibtation 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. As detailed in Section 3.9.2.2, the NASA Crows Landing Airport and Test Facility is the closest airport, approximately 4.2 miles to the south of the project site. The Proposed Project is not in the vicinity of a private airstrip or airport land use plan area. It would not expose people

at the project site to excessive noise as it does not fall within a designated Noise Impact Zone according to the Stanislaus County Airport Land Use Compatibility Plan (Stanislaus County 2016b). 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.

### *3.14.1.1 Local Laws, Regulations, and Policies*

*Stanislaus County Housing Element*

The Housing Element incorporated into the General Plan was adopted on April 5, 2016. The county has prepared a Draft 2023-2031 Housing Element, which includes a strategy for the County to meet its share of the Regional Housing Needs Allocation (RHNA) (Stanislaus County 2025). The RHNP will cover the period from 2023 to 2031. The Housing Element is one of seven mandated elements of the General Plan. State requirements for the content of the Housing Element are more specific than other parts of the General Plan, and all parts of the General Plan must be internally consistent. County actions involving zoning and subdivision approval must be consistent with the Housing Element. The Housing Element provides goals, policies, and programs address the County's current and projected housing needs as well as state housing law.

## 3.14.2 Environmental Setting

The Proposed Project site is located within unincorporated Stanislaus County. Stanislaus County's population is currently estimated at 551,430 as of July 1. 2023, a 0.3 percent decrease from the April 1, 2020 population of 552,878 (U.S. Census Bureau 2023). According to the General Plan Housing Element, in 2020 there were estimated to be approximately 38,098 households and a population of 117,807 in unincorporated Stanislaus County (Stanislaus County 2016). In contrast, the population was 110,236 in 2010, and most of the growth in the county was anticipated to take place within the incorporated cities (Stanislaus County 2016).

### 3.14.3 Discussion of Checklist Responses

#### *a. Induce Substantial Unplanned Population Growth (Less-than-Significant Impact)*

The Proposed Project would not involve any further construction, and has approximately 20 employees at full build out. While it is likely that most employees would already reside locally, it is possible that employment at the project would draw people from outside the county to live in the area. However, the small business size and associated number of employes would not result in substantial unplanned population growth in the area. The impact would be **less than significant**.

#### *b. Displace Substantial Numbers of Existing People or Housing, Necessitating the Construction of Replacement Housing Elsewhere (No Impact)*

The Proposed Project does not involve demolition or relocation of existing facilities. Therefore, the project would not displace a substantial number of people or housing, necessitating the construction of replacement housing elsewhere. Therefore, the Proposed Project would have **no impact** as a result of displacing people or housing.

# 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

### *3.15.1.1 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 US Forest Service (USFS), whose Law Enforcement and Investigations division conducts law enforcement operations on federal lands, including eradication of unlicensed commercial cannabis cultivation on national forest lands. Both the US Bureau of Land Management and the National Park Service law enforcement programs target commercial 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.

### 3.15.1.2 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 Cal. Code Regs. title 8, sections 1270 (Fire Prevention) and 6773 (Fire Protection and Fire Equipment), the California Division of Occupational Safety and Health (referred to as 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., title 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.

Chapter 1, Article 5 of the DCC regulations details a range of security measures applicable to licensed cannabis distributors. The regulations require employees to display identification badges at all times when engaged in commercial cannabis activities. (Cal. Code Regs., tit. 4, § 15043.) Cannabis distributors are subject to detailed rules regarding video surveillance. All areas where cannabis is being handled or sold, all entrances and exits, all security areas, and all storage areas must be recorded 24 hours per day. (Cal. Code Regs., tit. 4, § 15044.) Cannabis business license applicants must submit a detailed premises diagram, including a diagram of where all cameras are located. The diagram must assign a number to each camera for identification purposes. (Cal. Code Regs., tit. 4, § 15006.)

Cannabis distributors are required to install commercial-grade locks on all doors to all points of entry as and limited-access areas within the facility. (Cal. Code Regs. tit. 4, § 15046.) Licensed distributors must also install an alarm system that is monitored by a licensed alarm company operator. (Cal. Code Regs., tit. 4, § 15047.) All applicants for cannabis businesses must be prepared to submit a description of security procedures to the DCC upon request. (Cal. Code Regs., tit. 4, § 150011, subd. (b)(9).)

### *3.15.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Ordinance*

6.78.080 Commercial Cannabis Cultivation

A. All permittees conducting cultivation activities under this chapter shall comply with the state of California and Stanislaus County Agricultural Commissioner's requirements for unique identifiers and Track and Trace programs.

D. Visibility. In no case, shall cannabis plants be visible from off site, including transfer. No visual markers indicating that cannabis is cultivated on the site shall be visible from off site. All greenhouse cultivation activities shall be fully enclosed by an opaque fence, made of uniform material, at least seven feet in height. The fence must be adequately secured by a locked gate to prevent unauthorized entry. The fence design and construction material shall be approved by the county.

Stanislaus County Code, Title 23

In order to implement the goals and objectives of the county general plan and to mitigate impacts caused by new development within the county, public facilities fees are necessary. The fees are needed to finance public facilities and to assure that new development pays its fair share for these improvements. The public facility fees enacted pursuant to this title are to be collected before the issuance of building permits or at the earliest time permitted by law as determined by the chief building official.

Stanislaus County Code, Title 24

In order to protect and safeguard the public from the peril of fire, to implement the goals and objectives of the county general plan and to mitigate impacts caused by new development within the county, the county collects fire protection facilities impact fees. These fees are needed to finance fire protection facilities and to assure that new development pays its fair share for these improvements. Fire protection facility fees enacted pursuant to this

title are to be paid to the fire protection district before the issuance of building permits. Proof of payment of the applicable fee shall be submitted prior to the issuance of a building permit.

*Stanislaus County Public Facilities Fee Program*

In 1987 California adopted the Mitigation Fee Act which allowed local governments to collect impact fees related to construction and provided the requirements for establishing, collecting, and reporting of impact fees California Government Code sections 66000 through 66008). The County Public Facilities Fees (PFF) were first approved in late 1989, becoming operative in March 1990. The use of this fee is limited to capital improvements or facilities, it does not replace, repair or maintain the existing level-of-service provided by the County.

This program was designed to ensure that the need for expanded County facilities directly attributable to increased population be paid for by those creating the need. Fees collected under this program pay for capital improvements related to emergency services, libraries, and police protection (county sheriff), among other things. The fees are adjusted on a regular basis to account for changes in cost or in development forecasts (Stanislaus County 2024).

*Stanislaus County Parks Master Plan*

The 2018 County Parks Master Plan (Master Plan) was written as an update to the 1999 Stanislaus County Parks Master Plan (Stanislaus County 2018). The Master Plan provides a comprehensive review of Stanislaus County's parks and recreation resources and provides inventory, assessment, and recommendations as to the County's current and future parks and recreation needs. The Master Plan also strives to grow the County's efforts toward increasing economic viability of its park facilities. Where appropriate, actionable timelines and budgets have been assigned to future planning efforts which focus on specific associated elements of this plan.

## 3.15.2 Environmental Setting

### *3.15.2.1 Fire Protection*

The Proposed Project would be served by the West Stanislaus County Fire Protection District. The nearest fire station is approximately 2.9 miles away. It is Fire Station 51 at 344 West Las Palmas Avenue, Patterson.

### *3.15.2.2 Police Protection*

The Proposed Project would be served by the Stanislaus County Sheriff's Department (SCSD). The SCSD is charged with law enforcement duties in Stanislaus County. Its Operations Division has principal jurisdiction in all unincorporated areas, covering an area of approximately 1,521 square miles with a population of more than 200,000. Of the nine cities in the county, SCSD provides law enforcement services to four contract cities: Patterson, Riverbank, Hughson, and Waterford. The cities of Ceres, Modesto, Newman, Oakdale, and Turlock maintain their own police departments. The Operations Division is divided into two units, Patrol and Investigations. Patrol Services is responsible for investigating crime, making arrests, providing preventative patrols, and rendering assistance or aid where necessary. The Investigations Unit follows up on cases that warrant further investigation (Stanislaus County 2016).

### *3.15.2.3 Schools*

The schools nearest to the Proposed Project are in the city of Patterson. All are a minimum of approximately 2.5 miles away and to the west of the Proposed Project.

#### *3.15.2.4 Parks*

As described in Section 3.16, "Recreation," the closest parks to the Proposed Project are all approximately two miles to the northwest and in the city of Patterson. They are North Park, South Park, Felipe Garza Park and Wilding Park. The Proposed Project would not be adjacent to, nor physically impact any parks.

#### *3.15.2.5 Other Public Facilities*

There are no other public facilities of any type (e.g., libraries, social services) identified within 1 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)

Electrical equipment used in mixed-light commercial cannabis cultivation could create a fire risk. Mixed-light commercial cannabis cultivation involves use of grow lights, water pumps, humidity control and temperature control equipment), which could create a relatively large electrical load. If the load exceeds the system capacity (e.g., as may occur in a building without appropriate or updated wiring for use in commercial cannabis cultivation), it could result in an electrical fire.

The Proposed Project would include land development that would add structures and other facilities that could generate the possible need for fire protection services. It would consist of construction and operation of greenhouses and other buildings that would contain commercial cannabis cultivation and processing. These buildings 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 required. Considering the small size of the Proposed Project there would not be the need for the West Stanislaus County Fire Protection District 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**.

#### i. Police Protection (Less-than-Significant Impact)

The Proposed Project would include land development that would add people, structures and other activities that could generate the possible need for police protection services. The facility would be constructed 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 CDFA Cannabis Cultivation Licensing Program PEIR[5] 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 cannabis operations were correlated with an increase in crime, or any evidence that licensed 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.)

Distribution activities would be required to comply with DCC regulations, including compliance with track-and-trace requirements, transporting products within locked vehicles or compartments, and maintaining alarm systems on distribution vehicles. The Bureau of Cannabis Control Commercial Cannabis Business Licensing Program Initial Study/Negative Declaration found that there would be no significant increase in requirements for police protection services as a result of distribution activities (BCC 2017).

Considering the small size of the Proposed Project there would not be the need for the Stanislaus County Sheriff's Department 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**.

### ii. 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. The Proposed Project would have **no impact** on schools.

### iii. 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 have **no impact** on parks.

### iv. Other Public Facilities (No Impact)

The Proposed Project would not involve the introduction of a temporary or permanent population into this area. Accordingly, the Project would not result in impacts to other public facilities. The Proposed Project would have **no impact** on other public facilities.

[5] 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.

# 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

### *3.16.1.1 Federal Laws, Regulations, and Policies*

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

### *3.16.1.2 State Laws, Regulations, and Policies*

No state laws, regulations or policies are applicable to recreation in relation to the Proposed Project.

### *3.16.1.3 Local Laws, Regulations, and Policies*

*Stanislaus County Public Facilities Fee Program*

In 1987 California adopted the Mitigation Fee Act which allowed local governments to collect impact fees related to construction and provided the requirements for establishing, collecting, and reporting of impact fees Government Code sections 66000 through 66008). The County Public Facilities Fees (PFF) were first approved in late 1989, becoming operative in March 1990. The use of this fee is limited to capital improvements or facilities, it does not replace, repair or maintain the existing level-of-service provided by the County.

This program was designed to ensure that the need for expanded County facilities directly attributable to increased population be paid for by those creating the need. Fees collected under this program pay for capital improvements related to emergency services, libraries, and police protection (county sheriff), among other things. The fees are adjusted on a regular basis to account for changes in cost or in development forecasts (Stanislaus County 2024).

*Stanislaus County Parks Master Plan*

The 2018 County Parks Master Plan (Master Plan) was written as an update to the 1999 Stanislaus County Parks Master Plan (Stanislaus County 2018). The Master Plan provides a comprehensive review of Stanislaus County's parks and recreation resources and provides inventory, assessment, and recommendations as to the County's current and future parks and recreation needs. The Master Plan also strives to grow the County's efforts toward

increasing economic viability of its park facilities. Where appropriate, actionable timelines and budgets have been assigned to future planning efforts which focus on specific associated elements of this plan.

### 3.16.2 Environmental Setting

Stanislaus County Department of Parks and Recreation maintains five regional parks, 12 neighborhood parks, ten community parks, two off-highway vehicle parks, four cemeteries, two bridges, La Grange historical areas, five fishing access points along rivers and lakes, one swimming pool, one organized youth camp, and numerous acres of open space and river bottom (Stanislaus County 2025). The closest recreational areas to the Proposed Project are all approximately two miles to the northwest and in the city of Patterson. They are North Park, South Park, Felipe Garza Park and Wilding Park. The Proposed Project would not be adjacent to, nor physically impact any recreational facility.

### 3.16.3 Discussion of Checklist Responses

#### *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 (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** related to increased use of parks or recreational facilities leading to substantial physical deterioration.

#### *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** through the inclusion of new or altered recreational facilities**.**

# 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

### *3.17.1.1 Federal Laws, Regulations, and Policies*

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

### *3.17.1.2 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 for the Proposed 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 three years by the California Building Standards Commission.

#### *Senate Bill 743*

Senate Bill (SB) 743 (Chapter 386, Statutes of 2023) requires the California Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the State CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. These updates indicated that VMT would be the primary metric used to identify transportation impacts. In December of 2018, OPR and the State Natural Resources Agency submitted the updated State CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved the updated State CEQA Guidelines and, as of July 1, 2020, implementation of updated State CEQA Guidelines, Section 15064.3.

In December 2018, OPR published the most recent version of the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018), which provides guidance for VMT analysis. The Office of Administrative Law approved the updated State CEQA Guidelines and lead agencies had an opt-in period until July 1, 2020, to implement the updated guidelines regarding VMT. 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.

### *3.17.1.3 Local Laws, Regulations, and Policies*

#### *Stanislaus County Public Facilities Fees*

The county collects Public Facilities Fees (PFFs) from new development to pay for a variety of capital facilities needed to serve the demands of new development. These include facilities for animal services, jails, libraries, and parks.

## 3.17.2 Environmental Setting

The 7.1 acre portion of the rural, agricultural parcel that would be used for the Proposed Project contains 20 greenhouses, a 660 square-foot accessory building (Building B) used for storage, an employee break room, and a 144 square-foot accessory building (Building C) that would be used as an office.

### *3.17.2.1 Existing Transportation Access*

The entrance and exit for all employees and deliveries is on Fig Avenue. All vehicles and pedestrians would enter through a controlled gate in the chain link fence that surrounds the project site. The site is not served by mass transit, sidewalks, bicycle lanes, or similar non-automobile mode facilities.

### *3.17.2.2 Existing Commute Trips*

Under the baseline conditions, the site generates employee travel trips to support the 10 existing greenhouses, a 660 square-foot accessory building (Building B) used for storage, an employee break room, and a 144 square-foot accessory building (Building C) used as an office. In addition, the baseline includes travel trips to support the existing almond orchards on the property.

## 3.17.3 Discussion of Checklist Responses

### *a. Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle and Pedestrian Facilities (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 approximately 23 parking spaces, which is sufficient to accommodate the 20 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 or operation. Therefore, the Proposed Project would have **no impact**.

### *b. Conflict or Be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) (Less-than-Significant Impact)*

At full project build out, the Proposed Project would have up to 20 employees. Vehicle trips generated by the Project operations would increase by approximately 40 one-way employee trips per day during operations over the baseline. Thus, there would be a nominal increase in vehicle miles traveled (VMT) over the baseline condition.

According to the Governor's Office of Planning Research's Technical Advisory on Evaluating Transportation Impacts in CEQA, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact (OPR 2018). The volume of trips generated by the Proposed Project would be less than 110 trips per day. Therefore, the impact would be **less than significant**.

### *c. Substantially Increase Hazards due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., Farm Equipment) (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. The Proposed Project would have **no impact** resulting from geometric design features.

### *d. Result in Inadequate Emergency Access (Less-than-Significant Impact)*

The project site would be accessed via a controlled gate, with an entrance on Fig Avenue, a county-maintained public road.

During construction there could be the potential for slow moving trucks on adjacent public roadways. However, construction activities have been completed and any analysis of impacts is mooted, in accordance with the discussion in Section 1.5.

During operations, there would be no physical changes to roadways and only a small increase in the volume of employee and delivery vehicles accessing the site that could impact emergency access. The increase in traffic would be so small that it would be very unlikely to create any delays or access issues. The impact would be **less than significant**.

See also the analysis in Section 3.9, “Hazards and Hazardous Materials,” item 3.9.3(f).

# 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

### *3.18.1.1 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.

### 3.18.1.2 State Laws, Regulations, and Policies

#### *CEQA and 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 so 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 sections 21080.3.2 or 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(a)(3).)

#### *3.18.1.3 Local Laws, Regulations, and Policies*

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

### 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) (No Impact)**

Tribal cultural resources (TRCs) are defined in PRC 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 or mitigation area have been identified that are either listed or eligible for listing on the CRHR or on any other local register of historical resources as defined by Public Resources Code section 21074. Therefore, the Proposed Project would have no impact on known TCRs.

**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 Resource Code Section 5024.1, the Lead Agency Shall Consider the Significance of the Resource to a California Native American Tribe (No Impact)**

Montrose submitted a sacred lands file request to the Native American Heritage Commission (NAHC) on November 14, 2024. A response was received from the NAHC on November 19, 2024, which indicated the results of the sacred lands search were negative for this location. The NAHC also provided a list of eight tribes and tribal contacts with a traditional and cultural affiliation with the project area for notification pursuant to Public Resources Code section 21080.3.1 (Assembly Bill 52). Letters were sent to each contact on January 9, 2025, by DCC to elicit any concerns or information regarding any known tribal cultural resources within the Proposed Project area. To date, no responses have been received. As planning proceeds, DCC will continue to consult with interested tribal representatives regarding the Project and incorporate their concerns into project planning and mitigation as warranted. Table **3.18-1** lists the Tribes and contacts to whom DCC reached out in accordance with Assembly Bill 52 requirements.

**Table 3.18-1. Native American Outreach**

| Organization/Tribe | Name of Contact | Letter Date | Tribal Response | Follow Up |
|---|---|---|---|---|
| Amah Mutsun Tribal Band | Ed Ketchum, Vice-Chairperson | 1/09/2025 | No response received to date. | 1/29/2025 |
| Amah Mutsun Tribal Band | Valentin Lopez, Chairperson | 1/09/2025 | No response received to date. | 1/29/2025 |
| Northern Valley Yokut / Ohlone Tribe | Katherine Perez, Chairperson | 1/09/2025 | No response received to date. | 1/29/2025 |
| Northern Valley Yokut / Ohlone Tribe | Timothy Perez, Tribal Compliance Officer | 1/09/2025 | No response received to date. | 1/29/2025 |
| Southern Sierra Miwuk Nation | Sandra Chapman, Chairperson | 1/09/2025 | No response received to date. | 1/29/2025 |
| Southern Sierra Miwuk Nation | Jazzmyn Gegere, Director of Cultural Resource Preservation | 1/09/2025 | No response received to date. | 1/29/2025 |
| Tule River Indian Tribe | Neil Peyron, Chairperson | 1/09/2025 | No response received to date. | 1/29/2025 |
| Wuksachi Indian Tribe/Eshom Valley Band | Kenneth Woodrow, Chairperson | 1/09/2025 | No response received to date. | 1/29/2025 |

At present, DCC has not received requests for formal consultation under Public Resources Code section 21080.3.1, subdivision (b)(2) from any of those individuals contacted.

As mentioned above, although DCC notified tribes with a traditional and cultural affiliation with the Project area about the Proposed Project; none of the tribes contacted identified TCRs to date. Given that no further ground disturbance or other construction is expected to occur as a result of the Project's actions, the discovery of Tribal Cultural Resources is not anticipated during the implementation of the Proposed Project. All construction activities were performed in accordance with local approval by Stanislaus County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, if they cannot be mitigated. The Proposed Project would have **no impact** on known TCRs.

# 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

### *3.19.1.1 Federal Laws, Regulations, and Policies*

No federal regulations are applicable to utilities and service systems in relation to the Proposed Project.

### *3.19.1.2 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. On February 5, 2019, the State Water Resources Control Board adopted the proposed updates to the Cannabis Policy – Principles and Guidelines for Cannabis Cultivation under Resolution No. 2019-0007. Updates were focused on requirements related to tribal buffers, indoor cultivation sites, onstream reservoirs, and winterization requirements. (SWRCB 2019).

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. The order 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. (SWRCB 2023.)

*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.

#### 3.19.1.3 Local Laws, Regulations, and Policies

*Stanislaus County Ordinance*

6.78.080 Commercial Cannabis Cultivation

C. Commercial cannabis cultivation operations shall be conducted in accordance with state and local laws related to land conversion, grading, electricity, water usage, water quality, woodland and riparian habitat protection, agricultural discharges, and similar matters.

1. Water Conservation Measures. Commercial cannabis cultivation operations shall include adequate measures that minimize use of water for cannabis cultivation at the site. Water conservation measures, water capture systems, or grey water systems shall be incorporated into commercial cannabis cultivation operations in order to minimize use of water where feasible.

2. Energy Conservation Measures. Commercial cannabis cultivation operations shall include adequate measures to address the projected energy demand for cannabis cultivation at the site.

*Delta-Mendota Subbasin Groundwater Sustainability Plan*

To comply with SGMA, the Basin Groundwater Sustainability Agencies (GSAs) submitted six coordinated but separate GSPs to DWR in 2020 and 2022. The DWR deemed the GSP both submittals as inadequate and placed the subbasin under the oversight of the State Water Resources Control Board (SWRCB). In order to bring the GSP in compliance with DWR requirements, Delta-Mendota Subbasin is collaborating with all 23 GSAs within the basin to prepare one GSP. The Final GSP for the Delta-Mendota subbasin aims to prevent negative impacts to the basin by managing groundwater levels through strategies like monitoring, overdraft mitigation, and water quality thresholds, thereby aiming to achieve sustainable groundwater management and prevent issues like land subsidence and declining water quality and will be evaluated by the SWRCB in 2025 (EKI Environment & Water 2024).

### 3.19.2 Environmental Setting

#### 3.19.2.1 Water

The Proposed Project would rely on the site's existing agricultural well for agricultural water supply. The well has a capacity of 750 gallons per minute. The historic volume of water used for orchard annually is 8,640,000 gallons. The existing agricultural well on the site would provide both domestic and irrigation water to the site.

#### 3.19.2.2 Sewer

Existing restrooms are connected to an existing septic system. Irrigation runoff from the existing almond orchard is conveyed via a tile drain system to a drainage ditch on the western side of the site. (JDI Farms 2024.)

#### 3.19.2.3 Stormwater

Irrigation runoff from the existing almond orchard is conveyed via a tile drain system to a drainage ditch on the western side of the site. (JDI Farms 2024.) The site has limited impervious cover, so stormwater percolates into the ground.

#### 3.19.2.4 Solid Waste

Under the baseline condition, the project site produced solid waste generated by almond orchard cultivation, greenhouse agriculture, and residential use.

The site contains a 6 foot by 10 foot waste area as a staging area for cannabis waste. Cannabis waste materials are self-hauled to the local waste collection facility. Solid waste disposal services would be conducted by Bertolotti Disposal. Waste would be transported to a manned fully permitted solid-waste landfill or transformation facility.

#### *3.19.2.5 Electricity and Natural Gas*

The project site has existing access to electricity infrastructure. The Proposed Project facilities are connected to overhead electricity lines on the site, which are connected to the existing power grid and would be used to supply power to the site.

#### *3.19.2.6 Telecommunications*

The project site includes existing communications 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 (Less-than-Significant Impact)***

#### Water

The Proposed Project would utilize an existing onsite well; therefore, no municipal or retail source of water would be needed. The Proposed Project would rely on the site's existing private agricultural well for water supply to serve commercial cannabis cultivation and all on-site water uses. The existing well has sufficient capacity to serve the Proposed Project. The Proposed Project would not require relocation or construction of new or expanded water supply infrastructure. Therefore, the Proposed Project would have **no impact** on water supply facilities.

#### Sewer

The project site has an existing septic sewer system that is adequate to serve the Proposed Project. There would be no relocation or construction of new or expanded or expansion of existing wastewater sewer facilities. Therefore, the Proposed Project would have **no impact** on sewer facilities.

#### Stormwater

The Proposed Project would include minimal changes to impervious surfaces. The new greenhouses would not be placed on concrete pads, so would not include new permanent impervious surfaces. The only new impervious surface would be the paved parking area, measuring 600 square feet. The remaining areas of the 20-acre property would remain unchanged and mostly pervious, including landscaping and the existing almond orchard.

Stormwater management features for the Proposed Project include the use of gravel roadways throughout the facility to maintain soil compaction and prevent erosion; erosion control blankets on exposed earth adjacent to greenhouses; and catch basins running to Acrylonitrile Butadiene Styrene (ABS) sewer pipes for surface water collection. All construction activities related to the catch basins are complete. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, if they cannot be mitigated. The impact related to the relocation or construction of stormwater equipment would be **less than significant**.

### Electricity and Natural Gas

The on-site electrical infrastructure existed in the baseline condition. The construction was performed in accordance with local approval by Stanislaus County and issuance of a provisional license by DCC. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred, if they cannot be mitigated. As a result, the analysis of impacts from the construction of the electrical infrastructure is mooted. Therefore, the Proposed Project would have **no impact** on electrical facilities.

New or relocated natural gas lines would not be part of the Proposed Project. Therefore, the Proposed Project would have **no impact** on natural gas facilities.

### Telecommunications

The project site includes existing telecommunications infrastructure. New telecommunication lines (e.g., for telephone, cable, and internet) would not need to be installed. The Proposed Project would not require relocation or construction of new or expanded communications infrastructure. Therefore, the Proposed Project would have **no impact** on telecommunications facilities.

## *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 rely on the site's existing well for both domestic and irrigation agricultural water supply. No municipal, public, or retail source of water would be used. The well has a capacity of 750 gallons per minute. Historically, the volume of water used for the almond orchard was 8,640,000 gallons annually. The agricultural well has historically provided water for the almond orchard.

Approximately 160 trees were removed from the existing almond orchard to accommodate the Proposed Project. Water use to support these trees would no longer occur. The replacement of almond trees with cannabis would result in an overall decrease in water use at the project site. Almonds are estimated to require on average approximately 4.49 acre feet of water per acre in one growing season; cannabis is estimated to require approximately 1.4 acre feet. (Pera 2021.) The estimated water use of the Proposed Project is 300,000 gallons annually. (JDI Farms 2024.)

The site is located within the Delta-Mendota Groundwater basin. The groundwater storage in this basin is considered to be in critical overdraft. The Patterson Irrigation District, as part of the Delta-Mendota sustainability plan, the goal for reduction overall is to reduce pumping by 9,000 acre-feet per year by 2030. The plan exempts wells that produce less than 2 acre-feet per year, and wells constructed before November 25, 2014, that pump less than 10 acre-feet annually. (EKI Environment & Water 2024). Operators of non-exempt wells must pay a registration fee, install pumping meters, and submit monthly pumping reports to DWR.

According to the Stanislaus County Planning Division website, there are no reasonably foreseeable development projects in the immediate vicinity of the Proposed Project. (Stanislaus County 2025.) The land adjacent to the project site is zoned and currently used for commercial agricultural purposes. There is no available evidence of reasonably foreseeable development in the area would significantly change groundwater use. Other known planned cannabis projects in the county are situated no closer than nine miles away from the Proposed Project and therefore would not have direct impacts on water use as related to the Proposed Project. In addition,

implementation of the Delta-Mendota sustainability plan would help ensure the sustainability of groundwater uses in the project area in normal, dry, and multiple dry years.

Based on estimates of water use, the existing well would meet the needs of the Proposed Project. As a result of the project site's conversion from almond orchards to cannabis, there would be an overall reduction in demand for water supplies. 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)*

The project site has an existing septic system that is adequate to meet the needs of the Proposed Project, which would primarily be wastewater generated from the restrooms. The Proposed Project would not require reliance on a wastewater treatment provider. Therefore, the Proposed Project would have **no impact** related to wastewater treatment capacity.

### *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 cultivation activities (e.g., plant matter, soils, containers) and be processed and stored on site, in accordance with state law. Cannabis waste would be self hauled to a fully permitted facility, and non-cannabis solid waste disposal services would be conducted by Bertolotti Disposal. Waste would be transported to a manned fully permitted solid-waste landfill or transformation facility. 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 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 of and compliance with their 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. (Cal. Code Regs., tit. 4, § 17223.)

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.) Therefore, the Proposed Project would have **no impact** with respect to solid waste management and reduction statutes and regulations.

# 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

### *3.20.1.1 Federal Laws, Regulations, and Policies*

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

### *3.20.1.2 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 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, to serve as the programmatic environmental document for future prescribed burns in the Sierra-Cascade, central coast, and north coast regions of the state.

### *Senate Bill 901*

SB 901 (Chapter 626, Statutes of 2018) boosted the budget for government fire protection efforts. CAL FIRE will oversee those funds, generally divided into two categories: $165 million per year for fire prevention grants to landowners and for community prevention efforts, and $35 million to continue CAL FIRE's prescribed burning, research, and monitoring. In addition, under SB 901, landowners can help reduce overgrowth by cutting down small and mid-sized trees.

### *Assembly Bill 301*

Assembly Bill (AB) 301 (Chapter 104, Statutes of 2015) was enacted to amend Section 4213.1 and add Section 4213.2, which are related to fire prevention, to the Public Resources Code.section 4213.1 requires CAL FIRE to notify an owner of property, through the Fire Prevention Fee billing process, that if selling the habitable structure or structures, a division of the fee may be negotiated as one of the terms of sale. Section 4213.2 of the Public Resources Code allows the owner of a property with one or more habitable structures subject to the fee, if selling the property, to negotiate a division of the fee as one of the terms of the sale. However, payment of the total fee liability remains the responsibility of the person who owns the habitable structure on July 1 of the year the fee is due.

### *Assembly Bill X1 29*

AB X1 29 (Chapter 8, Statutes of 2011) was enacted to add Chapter 1.5 (commencing with Section 4210) to part 2 of Division 4 of the Public Resources Code. Existing law requires the state to have primary financial responsibility for preventing and suppressing fires within State Responsibility Areas (SRAs). An SRA is an area of the state where CAL FIRE has the primary financial responsibility for the prevention and suppression of wildland fires. AB X1 29 required the State Board of Forestry and Fire Protection to establish a regulatory program to impose a fire prevention fee for each structure on a parcel within a SRA.

### *Public Resources Code*

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. (Pub. Resources Code §§ 4201-4204; Government 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*

The California Building Code 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. (Cal. Code Regs., tit. 24, § 701A.3.) 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 and 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. (Government Code, §§ 51179 & 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. (Government 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, 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, pre-fire management strategies, and accountability within their unit's geographical boundaries. The unit fire plan identifies strategic areas for pre-fire 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 title 24 of the California Code of Regulations. 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).)

#### *3.20.1.3 Local Laws, Regulations, and Policies*

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

### 3.20.2 Environmental Setting

The Proposed Project is located in an agricultural area within unincorporated Stanislaus County. Existing on-site vegetation consists of agricultural crops, and vegetation within the existing on-site greenhouses. Vegetation in the wider area largely consists of agricultural trees and crops, with some open grassy spaces, and residential back yards.

Fire Hazard Severity Zones (FHSZ) are developed by the Office of the State Fire Marshal and determined based on risk factors such as slope, winds, and fuel loading, and are classified based on the severity of the risk (moderate, high, and very high). (CAL FIRE 2024b.)

The project site is not classified as being located within a FHSZ, the closest FHSZ is approximately 4.7 miles to the west. (CAL FIRE 2024c.)

### 3.20.3 Discussion of Checklist Responses

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

#### *a. Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan (Less-than-Significant Impact)*

The project site is accessed via Fig Avenue, a rural road with one lane in each direction. The Proposed Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Typically, construction impacts would be assessed. However, as discussed in Section 2.6, construction associated with the Proposed Project is now complete, and as discussed in Section 1.5, the analysis of construction impacts is mooted. As discussed in more detail in Section 3.17, “Transportation,” during operations the limited amount of increased traffic generated by the Proposed Project would not significantly impact emergency access. Therefore, the impact would be **less than significant**.

### *b. Due to Slope, Prevailing Winds, and Other Factors, Exacerbate Wildfire Risks, and thereby Expose Project Occupants to, Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire (Less-than-Significant Impact)*

The Proposed Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Typically, construction impacts would be assessed. However, as discussed in Section 2.6, construction associated with the Proposed Project 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 West Stanislaus Fire Protection District, approximately two miles from the closest fire station. Therefore, the 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. As described in Section 1.5, this IS/ND does not analyze impacts that may have already occurred if they cannot be mitigated. During operation, electrical components would be within the greenhouse structures, within areas that have been cleared of other vegetation. Therefore, the Proposed Project is not expected to significantly exacerbate existing risks of wildfire. Therefore, the 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)*

The topography of the site is relatively flat with minor elevation changes on site and in the nearby vicinity. It is not located within an area which is likely to be subject to deep seated landslides (DOC 2010), and as discussed above, is not within a state or locally designated FHSZ. During operation, on-site coverage and uses would be an extension of existing on-site uses and would not include features that would substantially increase the risk to people or structures of flooding, landslides, post-fire slope instability, or drainage changes. Therefore, the impact 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. 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 (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.**

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, subd. (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 Proposed Project alone. Furthermore, the discussion should remain practical and reasonable in considering other projects and related cumulatively considerable impacts.

Based on review of active planning projects listed on the Stanislaus County Planning Department website (Stanislaus County 2025) and a search of the CEQAnet database, as well as cannabis business applications submitted to DCC, the planned and approved commercial cannabis cultivation projects in the project area that could potentially combine with the Proposed Project to result in cumulative impacts include the following:

- All Season Organics, mixed-light commercial cannabis cultivation and nursery business, including 24 greenhouses and four existing accessory storage buildings for office, storage, distribution, and processing activities in the A-2-40 (General Agriculture) zoning district, 1054 Merriam Road. (20 miles from the project site)
- Bynate, Use Permit to allow operation of an existing commercial cannabis retail business, within an existing 625 square-foot building on a 3,750 square- foot parcel in the General Commercial (C-2) zoning district, 21931 State Highway 33. (17 miles from the project site)
- Central Valley Growers, commercial cannabis mixed light cultivation business, within 36 greenhouses and accessory storage buildings in the A-2-40 (General Agriculture) zoning district, 3501 Howard Road. (9.5 miles from the project site)
- Empire Health and Wellness, Use Permit to allow operation of an existing retail commercial cannabis business with delivery services, within an existing 3,720 square-foot building, in the General Commercial (C-2) zoning district, 4275 Yosemite Boulevard. (15 miles from the project site)
- Prem Gen, indoor commercial cannabis cultivation, nursery, and distribution operation within three existing 5,000 square-foot warehouses in the M (Industrial) zoning district, 536, 538, and 540 El Roya Avenue. (13.5 miles from the project site)
- Stanco Family Farms, commercial cannabis cultivation, nursery, and distribution operation on 3± acres in the northwest corner of a 35.8-acre parcel in the A-2-40 zoning district, Sullivan Road, abutting the California Aqueduct to the east and Merced County line to the south, in the Newman area. (15.5 miles from the project site)
- TruLeaf, indoor commercial cannabis cultivation, non-volatile manufacturing, and distribution operation within an existing 20,724 square-foot warehouse, 4622 Glass Court. (16.7 miles from the project site)

The potential exists for the projects listed above to result in adverse effects on the environment, and all of the identified projects are located in the same general geographic area as the Proposed Project. However, as noted in the above list, none of the projects is located within 9 miles of the Proposed Project. As a result, the impacts for most resources would not overlap between projects.

In addition to the commercial cannabis cultivation projects listed above, there are several other reasonably foreseeable development projects in the County that could impact resources. While none are in the immediate area of The Proposed Project, development and operation of these projects could impact resource areas such as water and hydrology, air quality, and energy. (Stanislaus County 2025.)

All of these projects would be required to comply with the same regional air quality and energy regulations as would the Proposed Project, and each would be required to reduce or mitigate significant impacts on those resources. Regulations and agreements regarding water use governing the groundwater basin, as well as less than substantial increase in water demand from previous uses would ensure that cumulative impacts on water use would be less than significant.

In conclusion, none of the identified projects have the potential to combine with the Proposed Project to result in a significant cumulative impact to which the Proposed Project might make a substantial contribution.

### *Aesthetics*

The project site is not located within view of a scenic vista and would not result in a substantial change to scenic resources in the area. Potential impacts to aesthetic resources would be less than significant, and no mitigation measures are necessary.

Surrounding proposed commercial cannabis cultivation operations would require discretionary permits and would be evaluated for their potential to result in potentially significant environmental effects, including potential impacts to visual resources. Based on the rural and agricultural visual character of the area, newly proposed structures visible from surrounding public roadways would undergo evaluation for consistency with the surrounding visual character and may be required to implement visual screening and/or other measures if County staff identify potential impacts to visual resources. Proposed commercial cannabis cultivation projects, including use of mixed-light growing techniques, would be subject to DCC regulations requiring that any lighting be shielded from sunset to sunrise.

Based on the less-than-significant aesthetic impacts of the Proposed Project and discretionary review of surrounding proposed cannabis projects, the impacts to aesthetic and visual resources of 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 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 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 the Proposed Project would not result in significatn impacts to air quality. Operational emissions would not exceed SJVAPCD thresholds, and the project would be consistent with State and federal air quality regulations. Further, based on the installation of odor control systems and mandatory quarterly monitoring, potential odors from proposed mixed-light commercial cannabis cultivation activities would not result in nuisance odors.

All proposed commercial cannabis cultivation operations, as well as other development projects, 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 SJVAPCD 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 SJVAPCD thresholds would be subject to standard SJVAPCD 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 use of locally-required odor control equipment. All proposed cannabis development projects in the project vicinity would be required to comply with County cannabis odor control requirements..

Therefore, based on the mitigation measures identified to reduce potential project impacts and County odor control requirements for the project and all surrounding proposed commercial cannabis cultivation projects, the contribution of the Proposed Project's potential impacts to air quality are considered **less than cumulatively considerable**.

### *Biological Resources*

The analysis provided in Section 3.4, "Biological Resources," concludes that implementation of the Proposed Project would not adversely affect biological resources.

The project site is located in an area that is fully developed for agricultural production. As a result, there is minimal undisturbed area surrounding the project site that would provide suitable habitat for special-status species. As compared to baseline conditions, implementation of the Proposed Project would have virutally no impacts to biological resources. All surrounding proposed cannabis development projects would undergo evaluation for potential to impact biological resources. Proposed cannabis projects that are determined to have the potential to impact sensitive species and/or their habitats, sensitive natural communities, federal or state wetlands, migratory corridors, native trees, or conflict with state or local policies or habitat conservation plans would be required to implement mitigation measures to reduce these impacts.

Based on the very limited impacts of the Proposed Project and discretionary review of surrounding projects, when considered with the potential impacts of other reasonably foreseeable development in the area, project impacts associated with biological resources would be **less than cumulatively considerable**.

### *Energy Use*

As discussed in Section 3.6, "Energy," the Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with applicable energy policies. Other reasonably foreseeable mixed-light cultivation, indoor cultivation, nursery, processing, and distribution projects would have the potential to result in significant consumption of energy resources and would be subject to discretionary review. Projects that are found to result in wasteful, inefficient, or unnecessary consumption of energy resources would be required to implement reduction and offset measures consistent with state and local policies. Therefore, when considered with the potential impacts of other reasonably foreseeable commercial cannabis cultivation projects in the unincorporated county, the contribution of the subject project to energy use impacts in the region 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 Stanislaus County 2016 General Plan EIR found that although planned development in the County would result in significant impacts to groundwater supply, impacts would be reduced to less than significant levels once groundwater sustainability plans were put into effect. (Stanislaus County 2016.)

The property is in the San Joaquin Valley Delta-Mendota subbasin, which lies below 747,000 acres (1,170 square miles) of surface area. (DWR 2006.) According to DWR, the capacity of the subbasin is the total storage capacity of this subbasin is estimated to be 30,400,000 acre feet to a depth of 300 feet and 81,800,000 acre feet to the base of fresh groundwater. (DWR 2006.) The Final GSP for the Delta-Mendota subbasin, which will be submitted for approval by DWR in 2025, aims to prevent negative impacts to the basin by managing groundwater levels through strategies like monitoring, overdraft mitigation, and water quality thresholds, thereby aiming to achieve sustainable groundwater management and prevent issues like land subsidence and declining water quality and will be evaluated by the SWRCB in 2025 (EKI Environment & Water 2024).

As discussed in Section 3.10, "Hydrology and Water Quality," the Proposed Project would not result in a significant impact on groundwater supply. The relatively small amount of water used by the Proposed Project, as well as compliance with the GSP would ensure that the Proposed Project would not make a considerable contribution to a significant cumulative impact.

Therefore, the project's individual impacts associated with 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.

There are no current or planned cannabis projects within 9 miles of the Proposed Project. 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. Therefore, with the implementation of noise reduction measures, project impacts associated with noise would be less than cumulatively considerable with mitigation.

The project-related operational contribution to traffic noise levels would be negligible as discussed in Section 3.13, "Noise." 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 project's potential impacts associated with these thresholds would be less than significant.

The total VMT for the county as measured by CalTrans for the Stanislaus County Council of Governments[6] is estimated at 11,921.87. (CalTrans 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 Proposed 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**:

[6] The Stanislaus Council of Governments (StanCOG) is a council of city and county governments comprised of the Cities of Ceres, Hughson, Modesto, Newman, Oakdale, Patterson, Riverbank, Turlock and Waterford, and the County of Stanislaus, that was established in 1971 by a Joint Powers Agreement (JPA) to address regional transportation issues. StanCOG is the Metropolitan Planning Organization (MPO) for the Stanislaus region as designated by the federal government, the Regional Transportation Planning Agency (RTPA) as designated by the State of California, and the Local Transportation Authority (LTA). An MPO/RTPA/LTA is a public organization that works with local governments and citizens in its region by dealing with issues and needs that cross city and county boundaries. (StanCOG 2025.)

- Cultural Resources
- 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

### *c. Have Environmental Effects Which will Cause Substantial Adverse Effects on Human Beings, Either Directly or Indirectly (Less-than-Significant Impact)*

Environmental impacts that may have an adverse effect on human beings, either directly or indirectly, are analyzed in each environmental resource section in this Initial Study. As described in this document, the Proposed Project would not have any environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Impacts would be **less than significant.**

# 4 REPORT PREPARATION

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# Appendix A – Air Quality and Greenhouse Gas Calculations

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# JDI Farms Custom Report

## Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

3.3. Grading (2024) - Unmitigated

3.5. Building Construction (2024) - Unmitigated

3.7. Paving (2024) - Unmitigated

3.9. Architectural Coating (2024) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | JDI Farms |
| Construction Start Date | 5/1/2024 |
| Operational Year | 2024 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.10 |
| Precipitation (days) | 29.2 |
| Location | 37.472395818667124, -121.093926570565 |
| County | Stanislaus |
| City | Unincorporated |
| Air District | San Joaquin Valley APCD |
| Air Basin | San Joaquin Valley |
| TAZ | 2207 |
| EDFZ | 14 |
| Electric Utility | Turlock Irrigation District |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.29 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| General Light Industry | 28.8 | 1000sqft | 0.66 | 28,800 | 0.00 | 0.00 | — | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| General Light Industry | 0.50 | 1000sqft | 0.01 | 500 | 0.00 | 0.00 | — | — |
| Other Asphalt Surfaces | 0.60 | 1000sqft | 0.01 | 0.00 | 0.00 | 0.00 | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 28.1 | 28.0 | 11.6 | 11.2 | 0.02 | 0.54 | 29.6 | 29.9 | 0.49 | 4.06 | 4.55 | — | 1,907 | 1,907 | 0.08 | 0.06 | 1.35 | 1,920 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.46 | 0.45 | 0.70 | 0.87 | < 0.005 | 0.03 | 1.68 | 1.72 | 0.03 | 0.18 | 0.21 | — | 176 | 176 | 0.01 | 0.01 | 0.05 | 178 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.08 | 0.08 | 0.13 | 0.16 | < 0.005 | 0.01 | 0.31 | 0.31 | 0.01 | 0.03 | 0.04 | — | 29.1 | 29.1 | < 0.005 | < 0.005 | 0.01 | 29.4 |

### 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 28.1 | 28.0 | 11.6 | 11.2 | 0.02 | 0.54 | 29.6 | 29.9 | 0.49 | 4.06 | 4.55 | — | 1,907 | 1,907 | 0.08 | 0.06 | 1.35 | 1,920 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.46 | 0.45 | 0.70 | 0.87 | < 0.005 | 0.03 | 1.68 | 1.72 | 0.03 | 0.18 | 0.21 | — | 176 | 176 | 0.01 | 0.01 | 0.05 | 178 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.08 | 0.08 | 0.13 | 0.16 | < 0.005 | 0.01 | 0.31 | 0.31 | 0.01 | 0.03 | 0.04 | — | 29.1 | 29.1 | < 0.005 | < 0.005 | 0.01 | 29.4 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.10 | 1.07 | 0.07 | 1.69 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | 0.01 | 19.6 | 1,308 | 1,328 | 2.87 | 0.72 | 7.70 | 1,621 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.84 | 0.84 | 0.07 | 0.55 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 19.6 | 1,302 | 1,321 | 2.88 | 0.72 | 7.63 | 1,614 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.92 | 0.90 | 0.05 | 1.00 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 19.6 | 1,053 | 1,072 | 2.78 | 0.58 | 7.66 | 1,321 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.17 | 0.16 | 0.01 | 0.18 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 3.24 | 174 | 178 | 0.46 | 0.10 | 1.27 | 219 |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.20 | 0.20 | 0.06 | 0.42 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 27.5 | 27.5 | 0.01 | < 0.005 | 0.08 | 29.2 |
| Area | 0.89 | 0.87 | 0.01 | 1.27 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 5.24 | 5.24 | < 0.005 | < 0.005 | — | 5.26 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 1,274 | 1,274 | 0.50 | 0.71 | — | 1,498 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Off-Road | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 1.10 | 1.07 | 0.07 | 1.69 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | 0.01 | 19.6 | 1,308 | 1,328 | 2.87 | 0.72 | 7.70 | 1,621 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.18 | 0.17 | 0.07 | 0.55 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 26.4 | 26.4 | 0.01 | 0.01 | < 0.005 | 28.2 |
| Area | 0.66 | 0.66 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 1,274 | 1,274 | 0.50 | 0.71 | — | 1,498 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Off-Road | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.84 | 0.84 | 0.07 | 0.55 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 19.6 | 1,302 | 1,321 | 2.88 | 0.72 | 7.63 | 1,614 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.14 | 0.14 | 0.05 | 0.38 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 24.3 | 24.3 | 0.01 | < 0.005 | 0.03 | 25.6 |
| Area | 0.78 | 0.77 | 0.01 | 0.63 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.58 | 2.58 | < 0.005 | < 0.005 | — | 2.59 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 1,024 | 1,024 | 0.40 | 0.57 | — | 1,204 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Off-Road | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.92 | 0.90 | 0.05 | 1.00 | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 19.6 | 1,053 | 1,072 | 2.78 | 0.58 | 7.66 | 1,321 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.03 | 0.02 | 0.01 | 0.07 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 4.02 | 4.02 | < 0.005 | < 0.005 | 0.01 | 4.25 |
| Area | 0.14 | 0.14 | < 0.005 | 0.11 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.43 | 0.43 | < 0.005 | < 0.005 | — | 0.43 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 170 | 170 | 0.07 | 0.09 | — | 199 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.24 | 0.24 | 0.07 | < 0.005 | — | 2.05 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 0.00 | 3.24 | 0.32 | 0.00 | — | 11.3 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Off-Road | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.17 | 0.16 | 0.01 | 0.18 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 3.24 | 174 | 178 | 0.46 | 0.10 | 1.27 | 219 |

# 3. Construction Emissions Details

## 3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.60 | 0.50 | 4.60 | 5.56 | 0.01 | 0.24 | — | 0.24 | 0.22 | — | 0.22 | — | 858 | 858 | 0.03 | 0.01 | — | 861 |
| Dust From Material Movement | — | — | — | — | — | — | 0.53 | 0.53 | — | 0.06 | 0.06 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 14.7 | 14.7 | < 0.005 | 1.47 | 1.47 | — | 36.6 | 36.6 | < 0.005 | 0.01 | 0.09 | 38.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.06 | 0.08 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 11.8 | 11.8 | < 0.005 | < 0.005 | — | 11.8 |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 0.50 | 0.50 | < 0.005 | < 0.005 | < 0.005 | 0.53 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.95 | 1.95 | < 0.005 | < 0.005 | — | 1.95 |
| Dust From Material Movement | — | — | — | — | — | — | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.08 | 0.08 | < 0.005 | < 0.005 | < 0.005 | 0.09 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.03 | 0.02 | 0.29 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 41.8 | 41.8 | < 0.005 | < 0.005 | 0.18 | 42.5 |
| Vendor | < 0.005 | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 23.0 | 23.0 | < 0.005 | < 0.005 | 0.06 | 24.1 |
| Hauling | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 71.3 | 71.3 | < 0.005 | 0.01 | 0.17 | 74.9 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.53 | 0.53 | < 0.005 | < 0.005 | < 0.005 | 0.54 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.33 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.98 | 0.98 | < 0.005 | < 0.005 | < 0.005 | 1.03 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.09 | 0.09 | < 0.005 | < 0.005 | < 0.005 | 0.09 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.05 | 0.05 | < 0.005 | < 0.005 | < 0.005 | 0.05 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.16 | 0.16 | < 0.005 | < 0.005 | < 0.005 | 0.17 |

## 3.3. Grading (2024) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.41 | 1.19 | 11.4 | 10.7 | 0.02 | 0.53 | — | 0.53 | 0.49 | — | 0.49 | — | 1,713 | 1,713 | 0.07 | 0.01 | — | 1,719 |
| Dust From Material Movement | — | — | — | — | — | — | 5.31 | 5.31 | — | 2.57 | 2.57 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 14.7 | 14.7 | < 0.005 | 1.47 | 1.47 | — | 36.6 | 36.6 | < 0.005 | 0.01 | 0.09 | 38.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.06 | 0.06 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 9.39 | 9.39 | < 0.005 | < 0.005 | — | 9.42 |
| Dust From Material Movement | — | — | — | — | — | — | 0.03 | 0.03 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.01 | 0.01 | — | 0.20 | 0.20 | < 0.005 | < 0.005 | < 0.005 | 0.21 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.55 | 1.55 | < 0.005 | < 0.005 | — | 1.56 |
| Dust From Material Movement | — | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | 0.03 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.02 | 0.44 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 62.7 | 62.7 | < 0.005 | < 0.005 | 0.27 | 63.8 |
| Vendor | < 0.005 | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 23.0 | 23.0 | < 0.005 | < 0.005 | 0.06 | 24.1 |
| Hauling | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 71.3 | 71.3 | < 0.005 | 0.01 | 0.17 | 74.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.32 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.13 | 0.13 | < 0.005 | < 0.005 | < 0.005 | 0.13 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.39 | 0.39 | < 0.005 | < 0.005 | < 0.005 | 0.41 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.05 | 0.05 | < 0.005 | < 0.005 | < 0.005 | 0.05 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | 0.02 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.06 | 0.06 | < 0.005 | < 0.005 | < 0.005 | 0.07 |

## 3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67 | 0.56 | 5.60 | 6.98 | 0.01 | 0.26 | — | 0.26 | 0.23 | — | 0.23 | — | 1,305 | 1,305 | 0.05 | 0.01 | — | 1,309 |
| Onsite truck | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 13.2 | 13.2 | < 0.005 | 1.32 | 1.32 | — | 33.1 | 33.1 | < 0.005 | 0.01 | 0.08 | 34.8 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.05 | 0.46 | 0.57 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 107 | 107 | < 0.005 | < 0.005 | — | 108 |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 1.00 | 1.00 | < 0.005 | 0.10 | 0.10 | — | 2.72 | 2.72 | < 0.005 | < 0.005 | < 0.005 | 2.85 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.01 | 0.01 | 0.08 | 0.10 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 17.8 | 17.8 | < 0.005 | < 0.005 | — | 17.8 |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.18 | 0.18 | < 0.005 | 0.02 | 0.02 | — | 0.45 | 0.45 | < 0.005 | < 0.005 | < 0.005 | 0.47 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.04 | 0.72 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 103 | 103 | 0.01 | < 0.005 | 0.44 | 105 |
| Vendor | 0.01 | < 0.005 | 0.15 | 0.06 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 111 | 111 | < 0.005 | 0.02 | 0.30 | 116 |
| Hauling | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 71.3 | 71.3 | < 0.005 | 0.01 | 0.17 | 74.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | < 0.005 | < 0.005 | 0.05 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 7.78 | 7.78 | < 0.005 | < 0.005 | 0.02 | 7.90 |
| Vendor | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 9.09 | 9.09 | < 0.005 | < 0.005 | 0.01 | 9.52 |
| Hauling | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 5.86 | 5.86 | < 0.005 | < 0.005 | 0.01 | 6.15 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.29 | 1.29 | < 0.005 | < 0.005 | < 0.005 | 1.31 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 1.51 | 1.51 | < 0.005 | < 0.005 | < 0.005 | 1.58 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.97 | 0.97 | < 0.005 | < 0.005 | < 0.005 | 1.02 |

## 3.7. Paving (2024) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Roa Equipment | 0.63 | 0.53 | 4.52 | 5.32 | 0.01 | 0.21 | — | 0.21 | 0.19 | — | 0.19 | — | 823 | 823 | 0.03 | 0.01 | — | 826 |
| Paving | 0.01 | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 14.7 | 14.7 | < 0.005 | 1.47 | 1.47 | — | 36.6 | 36.6 | < 0.005 | 0.01 | 0.09 | 38.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Roa d Equipm ent | 0.01 | 0.01 | 0.06 | 0.07 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 11.3 | 11.3 | < 0.005 | < 0.005 | — | 11.3 |
| Paving | < 0.005 | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 0.50 | 0.50 | < 0.005 | < 0.005 | < 0.005 | 0.53 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Roa d Equipm ent | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.87 | 1.87 | < 0.005 | < 0.005 | — | 1.87 |
| Paving | < 0.005 | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.08 | 0.08 | < 0.005 | < 0.005 | < 0.005 | 0.09 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.09 | 0.06 | 1.03 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 146 | 146 | 0.01 | 0.01 | 0.63 | 149 |
| Vendor | < 0.005 | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 23.0 | 23.0 | < 0.005 | < 0.005 | 0.06 | 24.1 |
| Hauling | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 71.3 | 71.3 | < 0.005 | 0.01 | 0.17 | 74.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.84 | 1.84 | < 0.005 | < 0.005 | < 0.005 | 1.87 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.33 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.98 | 0.98 | < 0.005 | < 0.005 | < 0.005 | 1.03 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.31 | 0.31 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.05 | 0.05 | < 0.005 | < 0.005 | < 0.005 | 0.05 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.16 | 0.16 | < 0.005 | < 0.005 | < 0.005 | 0.17 |

## 3.9. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.17 | 0.14 | 0.91 | 1.15 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | 27.2 | 27.2 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 14.7 | 14.7 | < 0.005 | 1.47 | 1.47 | — | 36.6 | 36.6 | < 0.005 | 0.01 | 0.09 | 38.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | < 0.005 | < 0.005 | 0.01 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.83 | 1.83 | < 0.005 | < 0.005 | — | 1.84 |
| Architectural Coatings | 0.37 | 0.37 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 0.50 | 0.50 | < 0.005 | < 0.005 | < 0.005 | 0.53 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.30 | 0.30 | < 0.005 | < 0.005 | — | 0.30 |
| Architectural Coatings | 0.07 | 0.07 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.08 | 0.08 | < 0.005 | < 0.005 | < 0.005 | 0.09 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.14 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | < 0.005 | < 0.005 | — | 20.6 | 20.6 | < 0.005 | < 0.005 | 0.09 | 20.9 |
| Vendor | < 0.005 | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 23.0 | 23.0 | < 0.005 | < 0.005 | 0.06 | 24.1 |
| Hauling | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | 0.01 | 0.01 | — | 71.3 | 71.3 | < 0.005 | 0.01 | 0.17 | 74.9 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.26 | 0.26 | < 0.005 | < 0.005 | < 0.005 | 0.26 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.33 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.98 | 0.98 | < 0.005 | < 0.005 | < 0.005 | 1.03 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.04 | 0.04 | < 0.005 | < 0.005 | < 0.005 | 0.04 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.05 | 0.05 | < 0.005 | < 0.005 | < 0.005 | 0.05 |
| Hauling | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 0.16 | 0.16 | < 0.005 | < 0.005 | < 0.005 | 0.17 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | — | 406 | 406 | 0.16 | 0.23 | — | 478 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| undefined | — | — | — | — | — | — | — | — | — | — | — | — | 868 | 868 | 0.34 | 0.48 | — | 1,020 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 1,274 | 1,274 | 0.50 | 0.71 | — | 1,498 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | — | 406 | 406 | 0.16 | 0.23 | — | 478 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| undefined | — | — | — | — | — | — | — | — | — | — | — | — | 868 | 868 | 0.34 | 0.48 | — | 1,020 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 1,274 | 1,274 | 0.50 | 0.71 | — | 1,498 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | — | 67.3 | 67.3 | 0.03 | 0.04 | — | 79.1 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| undefined | — | — | — | — | — | — | — | — | — | — | — | — | 102 | 102 | 0.04 | 0.06 | — | 120 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 170 | 170 | 0.07 | 0.09 | — | 199 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.63 | 0.63 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.04 | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landsca Equipment | 0.23 | 0.21 | 0.01 | 1.27 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 5.24 | 5.24 | < 0.005 | < 0.005 | — | 5.26 |
| Total | 0.89 | 0.87 | 0.01 | 1.27 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 5.24 | 5.24 | < 0.005 | < 0.005 | — | 5.26 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.63 | 0.63 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.04 | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 0.66 | 0.66 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.11 | 0.11 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.01 | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.02 | 0.02 | < 0.005 | 0.11 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.43 | 0.43 | < 0.005 | < 0.005 | — | 0.43 |
| Total | 0.14 | 0.14 | < 0.005 | 0.11 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 0.43 | 0.43 | < 0.005 | < 0.005 | — | 0.43 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 1.46 | 1.46 | 0.41 | < 0.005 | — | 12.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.24 | 0.24 | 0.07 | < 0.005 | — | 2.05 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.24 | 0.24 | 0.07 | < 0.005 | — | 2.05 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 0.00 | 19.6 | 1.96 | 0.00 | — | 68.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 0.00 | 3.24 | 0.32 | 0.00 | — | 11.3 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 0.00 | 3.24 | 0.32 | 0.00 | — | 11.3 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.63 | 7.63 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| General Light Industry | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pumps | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pumps | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Pumps | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipm Type | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Site Preparation | Site Preparation | 5/1/2024 | 5/7/2024 | 5.00 | 5.00 | — |
| Grading | Grading | 5/8/2024 | 5/9/2024 | 5.00 | 2.00 | — |
| Building Construction | Building Construction | 5/10/2024 | 6/20/2024 | 5.00 | 30.0 | — |
| Paving | Paving | 6/21/2024 | 6/27/2024 | 5.00 | 5.00 | — |
| Architectural Coating | Architectural Coating | 6/27/2024 | 7/3/2024 | 5.00 | 5.00 | — |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Site Preparation | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 8.00 | 84.0 | 0.37 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Grading | Graders | Diesel | Average | 1.00 | 6.00 | 148 | 0.41 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 6.00 | 367 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 4.00 | 367 | 0.29 |
| Building Construction | Forklifts | Diesel | Average | 2.00 | 6.00 | 82.0 | 0.20 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 8.00 | 84.0 | 0.37 |
| Paving | Cement and Mortar Mixers | Diesel | Average | 4.00 | 6.00 | 10.0 | 0.56 |
| Paving | Pavers | Diesel | Average | 1.00 | 7.00 | 81.0 | 0.42 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.00 | 36.0 | 0.38 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 1.00 | 7.00 | 84.0 | 0.37 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 5.00 | 10.8 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | 1.00 | 7.17 | HHDT,MHDT |
| Site Preparation | Hauling | 1.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | 1.00 | 10.0 | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 7.50 | 10.8 | LDA,LDT1,LDT2 |
| Grading | Vendor | 1.00 | 7.17 | HHDT,MHDT |
| Grading | Hauling | 1.00 | 20.0 | HHDT |
| Grading | Onsite truck | 1.00 | 10.0 | HHDT |

| | | | | |
|---|---|---|---|---|
| Building Construction | — | — | — | — |
| Building Construction | Worker | 12.3 | 10.8 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 4.80 | 7.17 | HHDT,MHDT |
| Building Construction | Hauling | 1.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | 1.00 | 9.00 | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 17.5 | 10.8 | LDA,LDT1,LDT2 |
| Paving | Vendor | 1.00 | 7.17 | HHDT,MHDT |
| Paving | Hauling | 1.00 | 20.0 | HHDT |
| Paving | Onsite truck | 1.00 | 10.0 | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 2.46 | 10.8 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | 1.00 | 7.17 | HHDT,MHDT |
| Architectural Coating | Hauling | 1.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | 1.00 | 10.0 | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 0.00 | 0.00 | 43,950 | 14,650 | 36.0 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Site Preparation | — | — | 2.50 | 0.00 | — |
| Grading | — | — | 1.50 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| General Light Industry | 0.00 | 0% |
| General Light Industry | 0.00 | 0% |
| Other Asphalt Surfaces | 0.01 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2024 | 0.00 | 609 | 0.24 | 0.34 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 50.0 | 10.0 | 9.00 | 14,026 | 20.0 | 20.0 | 20.0 | 7,300 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|
| 0 | 0.00 | 43,950 | 14,650 | 36.0 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| General Light Industry | 271,610 | 546 | 0.2127 | 0.3038 | 0.00 |
| General Light Industry | 0.00 | 546 | 0.2127 | 0.3038 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 546 | 0.2127 | 0.3038 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| General Light Industry | 300,000 | 0.00 |
| General Light Industry | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| General Light Industry | 35.7 | — |
| General Light Industry | 0.62 | — |
| Other Asphalt Surfaces | 0.00 | — |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| General Light Industry | Other commercial A/C and heat pumps | R-410A | 2,088 | 0.30 | 4.00 | 4.00 | 18.0 |
| General Light Industry | Other commercial A/C and heat pumps | R-410A | 2,088 | 0.30 | 4.00 | 4.00 | 18.0 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|
| Pumps | Electric | Average | 24.0 | 8.00 | 15.0 | 0.74 |

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

## 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Construction: Construction Phases | modified schedule to fit in about 2 month construction period from May to June. |

| | |
|---|---|
| Construction: Trips and VMT | Added at least 1 vendor, hauling and onsite truck to each phase per day for material deliveries, debris hauling, and water trucks. Onsite was assumed 10 miles per day. |
| Operations: Energy Use | From applicant 271,610 kwhr/yr. |
| Operations: Water and Waste Water | From applicant 300,000 gallons of water per year. Disposal of wastewater is septic. |
| Operations: Off-Road Equipment | water pump |

# Appendix B – Special-Status Species Desktop Review for JDI Farms Site

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December 18, 2024

Susan Pearce
Montrose Environmental
1 Kaiser Plaza, Suite 340
Oakland, CA 94612
Email: smpearce@montrose-env.com

**Subject: Special-Status Species Desktop Reviews for the JDI Farms Cannabis Site, Stanislaus County, California.**

Dear Susan,

The following attachments are provided to support the California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration (MND) for the approximate 20-acres JDI Farms site located at 1631 Fig Avenue, Patterson, Stanislaus County, California.

At the request of Montrose Environmental, MESA Biological LLC (MESA) conducted an evaluation of special-status species on the JDI Farms site by performing database queries and compiling the findings into detailed species tables. The standard nine-quadrangle search method, based on United States Geological Survey (USGS) 7.5-minute maps was used. Data sources included the California Natural Diversity Database (CNDDB) RareFind 5, the California Native Plant Society's (CNPS) Online Inventory, and the U.S. Fish and Wildlife Service's Information for Planning and Conservation (IPaC). These queries were designed to identify special-status species that may occur within or near the project site.

Special-status species include plants and wildlife that are proposed for listing, or candidates for listing, as threatened or endangered under the federal Endangered Species Act (FESA) by the U.S. Fish and Wildlife Service (USFWS) and under the California Endangered Species Act (CESA) by the California Department of Fish and Wildlife (CDFW). This category also encompasses plants with a California Rare Plant Rank (CRPR) of 1B, 2, 3, or 4, which are considered rare, threatened, or endangered in California and beyond.

MESA's database queries identified 20 special-status plants with a CRPR ranking of 1B or 2 that are known or have the potential to occur in the region. Additionally, the assessment included a total of 50 special-status wildlife species. These findings were evaluated and compiled into the special-status species table provided below. This table includes detailed descriptions of habitat requirements and a rationale for the likelihood of each species' presence on-site. Species were classified into one of four categories based on their potential to occur:

- **None**: Unlikely to occur due to the absence of suitable habitat and no documented occurrences nearby.
- **Not Expected**: Unlikely to occur because of marginal or limited habitat and few or no nearby occurrences.
- **Possible**: May occur, as suitable habitat is present and documented occurrences exist within a reasonable distance.
- **Occurs**: Known to occur, with optimal habitat on-site and confirmed records nearby.

This systematic classification ensures a clear, thorough, and transparent evaluation of the potential presence of special-status species, in compliance with CEQA's environmental analysis requirements.

To enhance the evaluation, MESA reviewed historical CNDDB observational data within a 5-mile radius of the JDI Farms site and included maps illustrating these historical observations near the project area. This analysis provides critical information for assessing special-status species, ensuring CEQA compliance, supporting informed decision-making, and addressing potential environmental concerns related to the project.

Regards,



Paul Rosebush
Project Manager/Senior Biologist
MESA Biological LLC.

*Attachment A* *Special Status Plants in the Regional Vicinity of the JDI Farms*
*Attachment B* *CNDDB Sensitive Plant Observations within 5-Miles of the JDI Farms Site*
*Attachment C* *Special Status Wildlife in the Regional Vicinity of the JDI Farms Site*
*Attachment D* *CNDDB Sensitive Wildlife Observations within 5-Miles of the JDI Farms Site*
*Attachment E* *CNDDB Nine USGS 7.5-Minute Quad Review Surrounding the JDI Farms Site*
*Attachment F* *CNPS Nine USGS 7.5-Minute Quad Review Surrounding the JDI Farms Site*
*Attachment G* *USFWS IPaC Resource List - Stanislaus County – JDI Farms Site*

**Attachment A** – Special Status Plants in the Regional Vicinity of the JDI Farms Site

## JDI Farms - Special-Status Plant Species in the Regional Vicinity (Nine Quad) of the Evaluation Site

| Scientific Name<br>Common Name | Status<br>(Fed/State)<br>(CRPR) | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| **Plants** | | | | |
| alkali milk vetch<br>(*Astragalus tener* var. *tener*) | None/None<br>1B.2 | Occurs in playas, valley and foothill grasslands (adobe clay), and vernal pools<br><br>Elevation: 5 – 195 feet<br>Blooms: Mar - Jun | **Not Expected** | Although CNDDB records indicate observations of alkali milk vetch within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |
| alkali-sink goldfields<br>(*Lasthenia chrysantha*) | None/None<br>1B.1 | Occurs in wet alkaline soil or vernal pool habitats associated with *Atriplex spinifera*.<br><br>Elevation: 0 - 655 feet<br>Blooms: Feb - Apr | **Not Expected** | Although CNDDB records indicate observations of alkali -sink goldfields within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |
| big tarplant<br>(*Blepharizonia plumosa*) | None/None<br>1B.1 | Occurs in valley and foothill grassland<br><br>Elevation: 100 – 1655 feet<br>Blooms: Jul - Oct | **Not Expected** | The site has been heavily disturbed, providing little to no potential for big tarplant to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| broadleaf pondweed<br>(*Stuckenia striata*) | None/None<br>2B.3 | Occurs in marshes and swamps. Associated with lakes, ponds, rivers, and drainage canals<br><br>Elevation: -230 – 7005 feet<br>Blooms: (Jun)Jul - Aug | **Not Expected** | The site has been heavily disturbed, providing little to no potential for broadleaf pondweed to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| California alkali grass<br>(*Puccinellia simplex*) | None/None<br>1B.2 | Found in alkaline or vernally mesic soils associated with sinks, flats and lake margins in chenopod scrub, meadow seep, Valley and foothill grassland and vernal pool habitats<br><br>Elevation: 5 - 3050 feet<br>Blooms: Mar - May | **Not Expected** | Although CNDDB records indicate observations of California alkali grass within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |
| Coulter's goldfields<br>(*Lasthenia glabrata* ssp. *coulteri*) | None/None<br>1B.1 | Often found on alkaline soil in playas, sinks, and grasslands associated with alkali playas, marshes and swamps, salt marshes and vernal pools<br><br>Elevation: 5 – 4005 feet<br>Blooms: Feb - Jun | **Not Expected** | The site has been heavily disturbed, providing little to no potential for Coulter's goldfields to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |

| Scientific Name<br>Common Name | Status<br>(Fed/State)<br>(CRPR) | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| delta button-celery<br>(*Eryngium racemosum*) | None/SE<br>1B.1 | Occurs in riparian scrub<br><br>Elevation: 10 – 100 feet<br>Blooms: (May)Jun-Oct | **Not Expected** | Although CNDDB records indicate observations of delta button-celery within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |
| diamond-petaled California poppy<br>(*Eschscholzia rhombipetala*) | None/None<br>1B.1 | Occurs in valley and foothill grasslands associated with alkaline, clay slopes, and flats<br><br>Elevation: 0 – 3200 feet<br>Blooms: Mar - Apr | **Not Expected** | The site has been heavily disturbed, providing little to no potential for diamond-petaled California poppy to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| heartscale<br>(*Atriplex cordulata* var. *cordulata*) | None/None<br>1B.2 | Occurs in alkaline flats and scalds in sandy soils of the Central Valley. Found in chenopod scrub, meadows and seeps and Valley and foothill grasslands<br><br>Elevation: 0 – 1835 feet<br>Blooms: Apr - Oct | **Not Expected** | Although CNDDB records indicate observations of heartscale within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |
| hispid salty bird's-beak<br>(*Chloropyron molle* ssp. *hispidum*) | None/None<br>1B.1 | Occurs in meadows, seeps, playas, and valley and foothill grasslands.<br><br>Elevation: 5 – 510 feet<br>Blooms: Jun – Sep | **Not Expected** | The site has been heavily disturbed, providing little to no potential for hispid salty bird's-beak to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| Lemmon's jewelflower<br>(*Caulanthus lemmonii*) | None/None<br>1B.2 | Occurs in pinyon and juniper woodland, valley and foothill grassland<br><br>Elevation: 260 – 5185 feet<br>Blooms: Feb - May | **Not Expected** | The site has been heavily disturbed, providing little to no potential for Lemmon's jewelflower to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| lesser saltscale<br>(*Atriplex minuscula*) | None/None<br>1B.1 | Occurs in chenopod scrub, playas, and valley and foothill grassland<br><br>Elevation: 50 – 655 feet<br>Blooms: May - Oct | **Not Expected** | Although CNDDB records indicate observations of lesser saltscale within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |
| prairie wedge grass<br>(*Sphenopholis obtusata*) | None/None<br>2B.2 | Occurs in cismontane woodland, meadows, and seeps<br><br>Elevation: 985 – 6560 feet<br>Blooms: Apr - Jul | **Not Expected** | The site has been heavily disturbed, providing little to no potential for prairie wedge grass to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |

| Scientific Name<br>Common Name | Status<br>(Fed/State)<br>(CRPR) | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| prostrate vernal pool navarretia<br>(*Navarretia prostrata*) | None/None<br>1B.2 | Occurs in Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps<br><br>Elevation: 10 – 3970 feet<br>Blooms: Apr - Jul | **Not Expected** | The site has been heavily disturbed, providing little to no potential for prostrate vernal pool navarretia to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| San Joaquin spearscale<br>(*Extriplex joaquinana*) | None/None<br>1B.2 | Occurs in chenopod scrub, alkali meadow, playas, valley and foothill grassland<br><br>Elevation: 5 – 2740 feet<br>Blooms: Apr - Oct | **Not Expected** | The site has been heavily disturbed, providing little to no potential for San Joaquin spearscale to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| Sanford's arrowhead<br>(*Sagittaria sanfordii*) | None/None<br>1B.2 | Occurs in marshes and swamps associated with shallow freshwater<br><br>Elevation: 0 – 2135 feet<br>Blooms: May – Oct(Nov) | **Not Expected** | The site has been heavily disturbed, providing little to no potential for Sanford's arrowhead to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| shining navarretia<br>(*Navarretia nigelliformis* ssp. *radians*) | None/None<br>1B.2 | Occurs in cismontane woodland, valley and foothill grassland, and vernal pools<br><br>Elevation: 215 – 3280 feet<br>Blooms: (Mar)Apr - Jul | **Not Expected** | The site has been heavily disturbed, providing little to no potential for shining navarretia to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| spiny-sepaled button-celery<br>(*Eryngium spinosepalum*) | None/None<br>1B.2 | Occurs in vernal pools and valley and foothill grassland<br><br>Elevation: 260 – 3200 feet | **Not Expected** | The site has been heavily disturbed, providing little to no potential for spiny-sepaled button-celery to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| subtle orache<br>(*Atriplex subtilis*) | None/None<br>1B.2 | Occurs in valley and foothill grassland<br><br>Elevation: 130 – 330 feet<br>Blooms: (Apr)Jun – Sep(Oct) | **Not Expected** | The site has been heavily disturbed, providing little to no potential for subtle orache to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| vernal pool smallscale<br>(*Atriplex persistens*) | None/None<br>1B.2 | Occurs in vernal pools (alkaline)<br><br>Elevation: 35 – 375 feet<br>Blooms: Jun - Oct | **Not Expected** | Although CNDDB records indicate observations of vernal pool smallscale within five miles of the project site, the site itself has been heavily disturbed and offers little to no potential for the species to occur. |

| Scientific Name<br>Common Name | Status<br>(Fed/State)<br>(CRPR) | Habitat Requirements | Potential to Occur | |
|---|---|---|---|---|
| Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*) | None/None<br>2B.1 | Occurs in meadows and seeps, marshes, swamps, riparian forest, and vernal pools<br><br>Elevation: 15 - 1425 feet<br>Blooms: May - Sep | **Not Expected** | The site has been heavily disturbed, providing little to no potential for Wright's trichocoronis to occur, and there are no recorded CNDDB occurrences within a 5-mile radius. |
| | | | | |
| Valley Sink Scrub | | | **None** | The site consists of previously disturbed lands that lack native habitats, including sensitive vegetation communities. |
| Cismontane Alkali Marsh | | | **None** | The site consists of previously disturbed lands that lack native habitats, including sensitive vegetation communities. |
| Coastal and Valley Freshwater Marsh | | | **None** | The site consists of previously disturbed lands that lack native habitats, including sensitive vegetation communities. |
| Great Valley Oak Riparian Forest | | | **None** | The site consists of previously disturbed lands that lack native habitats, including sensitive vegetation communities. |
| Sycamore Alluvial Woodland | | | **None** | The site consists of previously disturbed lands that lack native habitats, including sensitive vegetation communities. |
| Valley Sacaton Grassland | | | **None** | The site consists of previously disturbed lands that lack native habitats, including sensitive vegetation communities. |

FE = Federally Endangered
FC = Federal Candidate
FT = Federally Threatened
SE = State Endangered
ST = State Threatened
SC = State Candidate
SR = State Rare

**CNPR (CNPS California Rare Plant Rank):**

1A = Plants presumed extirpated in California
1B = Plants rare, threatened, or endangered in California and elsewhere

**CRPR Threat Code Extension**

.1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Fairly endangered in California (20%-80% occurrences threatened)
.3 = Not very endangered in California (<205 of occurrences threatened

**Potential to Occur Classifications**

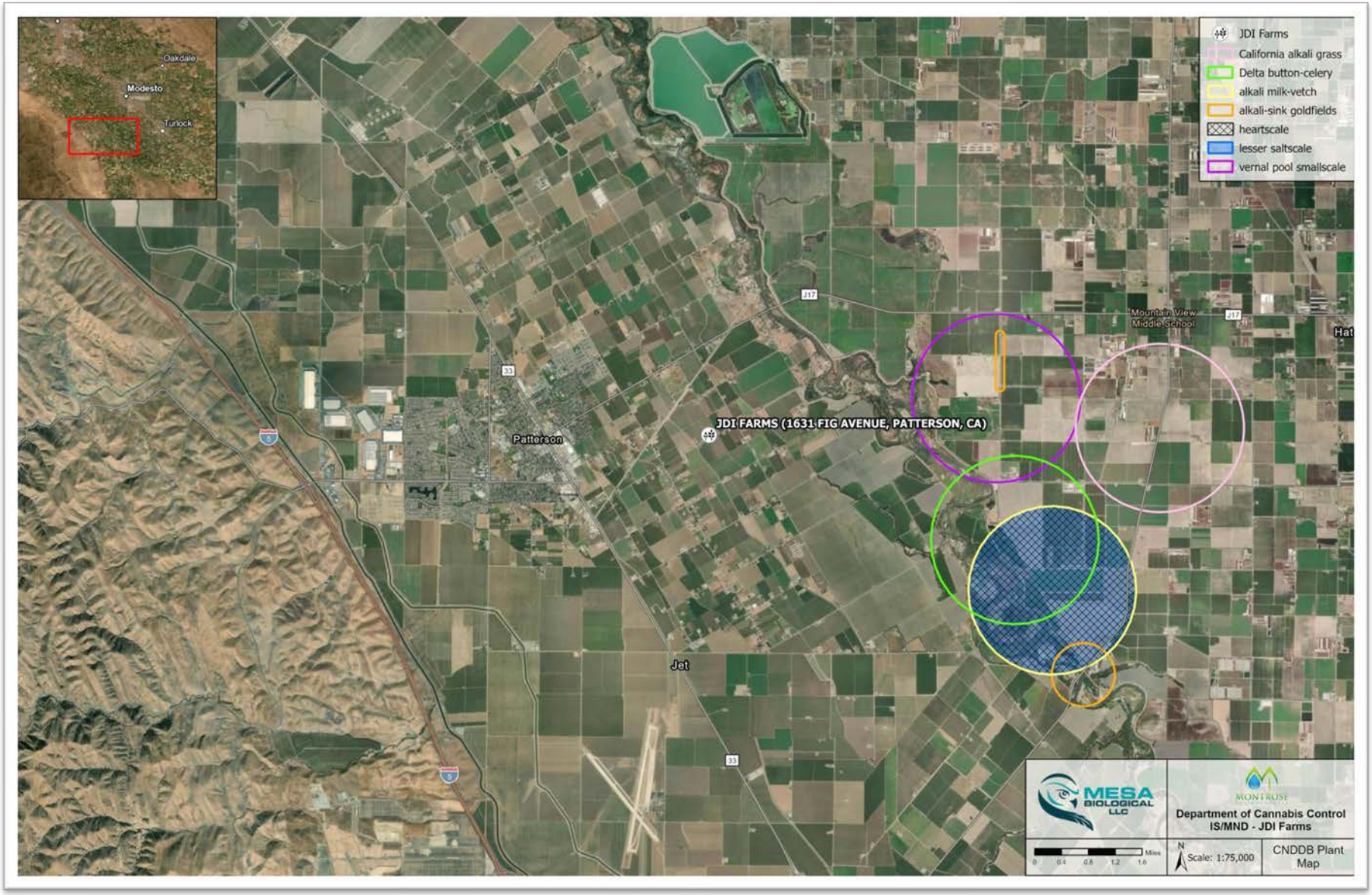
**None:** classification indicates that the species is determined to be completely absent from the site. This determination is based on the absence of suitable habitat features required by the species, a lack of documented occurrences in the local area or surrounding quadrangles, and environmental conditions incompatible with the species' known habitat requirements.

**Not Expected** classification is used for species that are unlikely to occur at the site but cannot be entirely ruled out. This classification applies when the site contains minimal or limited habitat features that are suboptimal for the species. Few or no documented occurrences exist in the surrounding area, and the site may experience environmental factors such as disturbance or habitat fragmentation that make it unlikely for the species to inhabit or use the area.

**Possible** classification is assigned to species that have a reasonable likelihood of occurring on the site. This classification applies when the site contains suitable habitat that meets the species' known requirements, and there are documented occurrences within a reasonable distance, such as nearby quadrangles or within the species' typical range. Species in this category may use the site seasonally, sporadically, or for specific life history activities like foraging, breeding, or migration.

**Occurs:** classification is used for species that are known to inhabit or regularly use the site. This determination is based on the presence of optimal or high-quality habitat that fully meets the species' requirements, along with confirmed records of the species' presence in close proximity, such as direct observations or documented data. Environmental conditions and habitat features at the site are well-suited for the species' long-term or consistent presence.

**Attachment B** –
CNDDB Sensitive Plant Observations within 5 Miles of the JDI Farms Site


Oakdale
Modesto
Turlock
JDI Farms
California alkali grass
Delta button-celery
alkali milk-vetch
alkali-sink goldfields
heartscale
lesser saltscale
vernal pool smallscale
J17
Mountain View Middle School
33
JDI FARMS (1631 FIG AVENUE, PATTERSON, CA)
Patterson
Jet
MESA BIOLOGICAL LLC
MONTROSE
Department of Cannabis Control
IS/MND - JDI Farms
Miles
0 0.4 0.8 1.2 1.6
N
Scale: 1:75,000
CNDDB Plant Map

**Attachment C** – Special Status Wildlife in the Regional Vicinity of the JDI Farms Site

**Special-Status Wildlife Species in the Regional Vicinity (Nine Quad) of the Evaluation Site**

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| **Crustaceans** | | | | |
| conservancy fairy shrimp (*Branchinecta conservatio*) | FE/None | Conservancy fairy shrimp inhabit seasonal vernal pools and other astatic rain-filled depressions in grassland and woodland areas, requiring freshwater habitats that form during winter and spring rains. | **None** | Conservancy fairy shrimp are unlikely to occur in previously disturbed lands, as such areas typically lack the intact soil structure, hydrology, and native vegetation necessary to support their specialized vernal pool habitats. Furthermore, no CNDDB records of Conservancy fairy shrimp have been documented within a 5-mile radius of the site. |
| longhorn fairy shrimp (*Branchinecta longiantenna*) | FE/None | Longhorn fairy shrimp inhabit seasonal vernal pools, swales, and other astatic freshwater habitats in grasslands and alkaline playas, relying on temporary rain-filled depressions with specific water chemistry and turbidity. | **None** | Longhorn fairy shrimp are unlikely to occur in previously disturbed lands, as these areas typically lack the intact hydrology and soil conditions needed to support their vernal pool habitats. Moreover, there are no CNDDB records of longhorn fairy shrimp within a 5-mile radius of the site. |
| vernal pool fairy shrimp (*Branchinecta lynchi*) | FT/None | Vernal pool fairy shrimp inhabit seasonal vernal pools and other shallow, astatic freshwater depressions in grasslands and woodlands, requiring temporary rain-filled habitats with suitable water quality and duration. | **None** | Vernal pool fairy shrimp are unlikely to occur in previously disturbed lands because such disturbances often disrupt the soil structure, hydrology, and pool formation necessary to sustain their specialized vernal pool habitats. Furthermore, there are no CNDDB records of this species within a 5-mile radius of the site. |
| vernal pool tadpole shrimp (*Lepidurus packardi*) | FE/None | Vernal pool tadpole shrimp inhabit seasonal vernal pools, swales, and other astatic freshwater depressions in grasslands, relying on rain-filled habitats with a clay or hardpan substrate that retains water long enough for their life cycle to complete. | **None** | Vernal pool tadpole shrimp are unlikely to occur in previously disturbed lands, as disturbances often degrade or eliminate the intact soil layers, hydrology, and conditions required to support their specialized vernal pool habitats. These features are not present on the project site. Furthermore, there are no CNDDB records of this species within a 5-mile radius of the site. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| **Amphibians** | | | | |
| California red-legged frog (*Rana draytonii*) | FT/SSC | California red-legged frogs inhabit freshwater habitats such as ponds, marshes, streams, and other slow-moving water bodies with dense riparian vegetation. They require permanent or semi-permanent water sources for breeding and areas with upland vegetation or debris for shelter and foraging. | **None** | The California red-legged frog is unlikely to occur in previously disturbed lands surrounded by agriculture, as such areas typically lack the permanent water sources, dense riparian vegetation, and suitable upland habitat required for its breeding, foraging, and sheltering needs. Additionally, there are no CNDDB records of California red-legged frogs within a 5-mile radius of the site. |
| California tiger salamander (*Ambystoma californiense*) | FT/ST/WL | California tiger salamanders inhabit grasslands and low-elevation woodlands with vernal pools, seasonal ponds, or other temporary water bodies for breeding. They rely on underground refuges, such as small mammal burrows, for shelter during their terrestrial life stages. | **None** | California tiger salamanders are unlikely to occur in previously disturbed lands surrounded by agriculture, as these areas often lack the vernal pools, seasonal wetlands, and intact small mammal burrows required for breeding, foraging, and sheltering. No CNDDB records occur within 5-miles of the site. |
| foothill yellow-legged frog – central coast DPS (*Rana boylii* pop. *4*) | FT/SE | The foothill yellow-legged frog inhabits perennial streams and rivers with rocky substrates, open sunny banks, and shallow pools. These habitats are typically found in foothill and mountain regions with various vegetation types, including riparian zones, hardwood forests, and chaparral. The species depends on clean, flowing water for breeding and is rarely found far from stream edges. | **None** | The Central Coast foothill yellow-legged frog is unlikely to occur in previously disturbed lands surrounded by agriculture, as these areas often lack the clean, rocky streams with natural flow regimes and shaded riparian habitats essential for their breeding, foraging, and sheltering needs. No CNDDB records of this species exist within 5-miles of the site. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| western spadefoot toad<br>*(Spea hammondii*) | PT/SSC | The western spadefoot inhabits grasslands, open scrublands, and occasionally agricultural areas with loose, sandy, or gravelly soils. It relies on temporary, rain-filled pools and vernal pools for breeding and spends most of its life underground in burrows, emerging primarily during wet conditions. | **None** | The western spadefoot toad is unlikely to occur in previously disturbed lands surrounded by agriculture, as such areas often lack the seasonal rain-filled pools and loose, undisturbed soils necessary for breeding, burrowing, and completing their life cycle. Additionally, no CNDDB records of this species exist within 5-miles of the site. |
| **Reptiles** | | | | |
| giant gartersnake<br>(*Thamnophis gigas*) | FT/ST | In the San Joaquin Valley, the giant gartersnake inhabits freshwater wetlands, sloughs, irrigation canals, and slow-moving streams with abundant emergent vegetation for cover and foraging. It requires nearby upland areas with dry soil for basking, shelter, and overwintering, and is most commonly found in areas with minimal human disturbance and consistent water availability. | **Not Expected** | The giant gartersnake is unlikely to occur in previously disturbed lands surrounded by agriculture, as such areas typically lack the aquatic habitats, emergent vegetation, and nearby upland refuges required for foraging, shelter, and breeding. Disturbances often degrade or eliminate the water quality and habitat features essential for this species. There are no CNDDB records within 5-miles of the site. |
| northern California legless lizard<br>(*Anniella pulchra*) | None/SSC | Northern California legless lizard inhabits sandy or loose loamy soils in coastal dunes, chaparral, oak woodlands, and scrub habitats. It requires areas with abundant leaf litter, decaying vegetation, or other ground cover for burrowing and protection, avoiding heavily disturbed or compacted soils. | **Not Expected** | The northern California legless lizard is unlikely to occur in previously disturbed lands surrounded by agriculture, as these areas often lack the loose, sandy or loamy soils and vegetative cover necessary for burrowing and sheltering. Habitat disturbances typically remove the ground litter and soil conditions critical for this species. There are no recent CNDDB records of this species within 5-miles of the site. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| northwestern pond turtle<br>(*Actinemys marmorata*) | FPT/SSC | The northwestern pond turtle inhabits a variety of freshwater environments, including ponds, lakes, rivers, streams, and marshes, often with basking sites like logs or rocks. It requires aquatic habitats with slow-moving or still water and nearby upland areas for nesting and overwintering, often preferring sites with soft, sandy, or loamy soils. | **None** | The northwestern pond turtle is unlikely to occur in previously disturbed lands surrounded by agriculture, as such areas often lack the calm, clean water bodies with suitable basking sites and nearby upland areas required for nesting, foraging, and overwintering. Disturbances typically degrade or eliminate these essential habitat features. No CNDDB observations have been recorded within 5-miles of the site. |
| San Joaquin coachwhip<br>(*Masticophis flagellum ruddocki*) | None/SSC | The San Joaquin coachwhip inhabits open, dry habitats such as grasslands, deserts, scrublands, and agricultural areas, often with sparse vegetation. It requires loose, well-drained soils for burrowing and may use small mammal burrows or natural cover for shelter, frequently ranging widely in search of prey. | **Not Expected** | Although the CNDDB records show occurrences of this species within five miles of the project site, the San Joaquin coachwhip is unlikely to occur in previously disturbed lands surrounded by agriculture, as these areas often lack the open, undisturbed habitats with loose soils, sparse vegetation, and natural cover required for foraging, shelter, and movement. Disturbances typically reduce habitat quality and prey availability essential for this species. |
| **Birds** | | | | |
| bald eagle<br>(*Haliaeetus leucocephalus*) | FD/SE/SFP | The bald eagle inhabits areas near large bodies of water such as lakes, rivers, reservoirs, estuaries, and coastal regions, where fish, its primary food source, is abundant. It requires tall trees or cliffs for perching and nesting and prefers habitats with minimal human disturbance for successful foraging, nesting, and roosting. | **None** | The bald eagle is unlikely to occur in previously disturbed lands and agricultural fields, as such areas often lack the large water bodies, tall perching or nesting trees, and minimal human disturbance required for successful foraging, nesting, and roosting. No historical CNDDB records exist within the area. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| burrowing owl<br>(*Athene cunicularia*) | None/SC/SSC | The burrowing owl inhabits open areas with sparse vegetation, such as grasslands, deserts, agricultural fields, and urban landscapes. It relies on burrows, often abandoned by mammals, for nesting and shelter, and it can adapt to disturbed environments like golf courses, airports, and road embankments if suitable prey and burrow availability exist. | **Possible** | The burrowing owl may occur in previously disturbed lands if suitable conditions, such as open areas with sparse vegetation, abandoned mammal burrows for nesting, and sufficient prey availability, are present. However, extensive disturbances that remove burrows or significantly alter the landscape reduce the likelihood of their presence. CNDDB records occur within 5-miles of the site. |
| cackling goose<br>(*Branta hutchinsii leucopareia*) | FD/WL | The cackling goose inhabits wetlands, lakes, rivers, and grassy fields during migration and wintering periods. It prefers areas near water for resting and forages in open fields or pastures, feeding on grasses, grains, and other vegetation. | **None** | CNDDB records indicate the presence of cackling goose within five miles of the site, with the most recent record dating back to 1987. The cackling goose may occasionally occur in previously disturbed lands if open fields or water sources are available for foraging and resting during migration or wintering. However, heavily altered landscapes lacking these features significantly reduce the likelihood of their presence. |
| California condor<br>(*Gymnogyps californianus*) | FE/SE | The California condor inhabits rugged canyons, cliffs, and open savannas in mountainous or coastal areas. It requires large, remote territories for foraging and nesting, feeding primarily on carrion. Nesting often occurs in caves, crevices, or large trees, with minimal human disturbance critical for its survival. | **None** | The California condor requires vastly open areas and high vantage points. The project site is relatively flat and within a developed area surrounded by agricultural fields. The species is not expected to nest or forage on the site. Additionally, no CNDDB records exist within 5-miles of the site. |
| California horned lark<br>(*Eremophila alpestris actia*) | None/WL | The California horned lark inhabits open, sparsely vegetated areas such as grasslands, deserts, coastal plains, agricultural fields, and alpine meadows. It prefers flat or gently sloping terrain with short grasses or bare ground for nesting and foraging. | **Possible** | The California horned lark may occur in previously disturbed lands if the area retains open, sparsely vegetated habitats suitable for foraging and nesting. However, significant disturbances that eliminate bare ground or low vegetation can reduce the likelihood of their presence. No CNDDB records exist within 5-miles of the site. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| golden eagle<br>(*Aquila chrystaetos*) | None/SFP | The golden eagle inhabits open landscapes such as grasslands, deserts, shrublands, and mountainous areas, often with cliffs or tall trees for nesting. It requires large territories with abundant prey, such as small mammals, and prefers areas with minimal human disturbance for successful breeding and foraging. | **Not Expected** | The golden eagle is unlikely to occur in heavily disturbed lands, as these areas often lack the open landscapes, cliffs or tall trees for nesting, and abundant prey required for foraging. However, they may occasionally traverse disturbed areas while hunting or during migration. No CNDDB records of this species exist within five miles of the site. |
| great blue heron<br>(*Ardea herodias*) | None/None | The great blue heron inhabits wetlands, rivers, lakes, estuaries, and coastal areas, typically near shallow waters where it forages for fish, amphibians, and small mammals. It nests in trees, shrubs, or on the ground near water, often forming colonies in areas with minimal disturbance. | **Not Expected** | The great blue heron may occur in previously disturbed lands if suitable water sources, such as ponds, lakes, or wetlands, are present for foraging. There have been no recent CNDDB occurrences of this species within five miles of the site. |
| least Bell's vireo<br>(*Vireo bellii pusillus*) | FE/SE | The least Bell's vireo inhabits riparian habitats with dense willow, mulefat, or cottonwood thickets and an understory of shrubs. It requires areas near slow-moving streams or rivers for breeding and foraging, often selecting habitats with minimal disturbance during the nesting season. | **None** | The least Bell's vireo is unlikely to occur in previously disturbed lands, as these areas typically lack the dense riparian vegetation and nearby water sources required for nesting and foraging. No CNDDB records of this species has been observed within 5-miles of the project site. |
| loggerhead shrike<br>(*Lanius ludovicianus*) | None/SSC | The loggerhead shrike inhabits open habitats such as grasslands, shrublands, agricultural fields, and deserts with scattered trees, shrubs, or fence lines for perching. It prefers areas with a mix of open ground for hunting and dense vegetation or structures for impaling prey and nesting. | **Possible** | The loggerhead shrike may occur in previously disturbed lands if scattered trees, shrubs, or perching structures remain for nesting and hunting. CNDDB records within five miles of the project site have been observed. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| prairie falcon<br>(*Falco mexicanus*) | None/WL | The prairie falcon inhabits open landscapes such as grasslands, deserts, shrublands, and agricultural areas, often near cliffs or rocky outcrops used for nesting. It hunts in open areas, preying on small mammals, birds, and reptiles, and requires minimal human disturbance for successful breeding. | **Not Expected** | The prairie falcon may occur in previously disturbed lands surrounded by agricultural fields if the area provides open landscapes for hunting and sufficient prey, such as small mammals and birds. Although CNDDB records occur within 5-miles, the lack of natural cliffs or rocky outcrops for nesting in such disturbed environments reduces the likelihood of breeding activity. |
| snowy egret<br>(*Egretta thula*) | None/None | The snowy egret inhabits wetlands, including marshes, swamps, tidal flats, estuaries, and the edges of lakes and rivers. It forages in shallow waters for fish, amphibians, and invertebrates and nests in colonies, typically in trees or shrubs near water. | **Not Expected** | The snowy egret may occur in previously disturbed lands surrounded by agricultural fields if water sources, such as irrigation canals or ponds are present for foraging. Although CNDDB records occur within 5-miles, extensive disturbances that eliminate aquatic habitats or reduce prey availability significantly decrease the likelihood of their presence. |
| song sparrow ("Modesto" population)<br>(*Melospiza melodia* pop. 1) | None/SSC | The Modesto population of the song sparrow inhabits emergent freshwater marshes with dense vegetation like tules and cattails, as well as riparian willow thickets and vegetated irrigation canals. It prefers early successional wetlands and riparian habitats with sufficient understory for nesting and foraging. | **Not Expected** | The Modesto population of the song sparrow may occur in previously disturbed lands surrounded by agricultural fields if suitable riparian vegetation, such as willows or blackberry thickets, remains intact. However, extensive disturbances that remove dense vegetation or riparian habitats reduce the likelihood of their presence. No CNDDB records occur within 5-miles. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| Swainson's hawk<br>(*Buteo swainsoni*) | None/ST | Swainson's hawk inhabits open grasslands, agricultural fields, and desert scrublands, often near riparian corridors or scattered trees for nesting. It relies on open landscapes for foraging, primarily preying on small mammals, birds, and insects, and prefers areas with minimal human disturbance during the breeding season. | **Possible** | Swainson's hawks may occur in previously disturbed lands surrounded by agricultural fields if suitable nesting trees, tall structures and open areas for foraging on small mammals and insects are present. However, significant disturbances that eliminate nesting sites or reduce prey availability can limit their presence. Multiple CNDDB observations of Swainson's hawk have been recorded within 5-miles. |
| tricolored blackbird<br>(*Agelaius tricolor*) | None/ST/SSC | The tricolored blackbird inhabits freshwater marshes, grasslands, and agricultural fields, favoring dense vegetation such as cattails, bulrushes, or blackberries for nesting. It forms large breeding colonies near water and forages in nearby open areas, feeding on insects, seeds, and grains. | **Not Expected** | The tricolored blackbird may occur in previously disturbed lands surrounded by agricultural fields if dense vegetation, such as cattails, bulrushes, or blackberries, is available for nesting and nearby open areas provide foraging opportunities. However, extensive disturbances that remove suitable nesting habitat or reduce food availability significantly decrease the likelihood of their presence. CNDDB records indicate multiple observations within 5-miles of the site. |
| **Fish** | | | | |
| green sturgeon<br>(*Acipenser medirostris* pop. 1) | FT/SSC | The green sturgeon inhabits estuaries, bays, and coastal marine environments, migrating to freshwater rivers for spawning. It requires deep pools with cobble, gravel, or sandy substrates in large, fast-flowing rivers for spawning and rearing, often in areas with minimal disturbance and suitable water quality. | **None** | The San Joaquin River is present and historical CNDDB records occur within five miles of the project site that could provide spawning sites for this species. Green sturgeons are absent in previously disturbed lands surrounded by agricultural fields, as they require clean, free-flowing rivers with deep pools and suitable substrates for spawning. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| hardhead<br>(*Mylopharodon conocephalus*) | None/SSC | The hardhead is a freshwater fish found in clear, warm streams and rivers with low to moderate flow in California. It prefers habitats with deep pools, slow-moving waters, and substrates of sand, gravel, or cobble, often associated with dense aquatic vegetation or shaded areas. Hardheads thrive in areas with good water quality and minimal human disturbance. | **None** | The hardhead inhabits medium to large streams and rivers in California, typically at low to mid-elevations. They prefer deep pools with rocky or sandy substrates and relatively undisturbed conditions. However, no aquatic habitat is present within the site and no CNDDB records of this species occur within 5-miles. |
| Sacramento splittail<br>(*Pogonichthys macrolepidotus*) | None/SSC | The Sacramento splittail is a freshwater fish endemic to California's Central Valley, primarily inhabiting slow-moving rivers, floodplains, and brackish estuaries. It thrives in shallow, vegetated areas with low salinity and uses floodplains for spawning and rearing, relying on seasonal flooding to create suitable habitat for its life cycle. | **None** | The Sacramento splittail will not occur if suitable floodplain habitats where seasonal inundation are not present. Although CNDDB records occur within 5-miles. No aquatic habitat is present within the site. |
| steelhead – Central Valley DPS<br>(*Oncorhynchus mykiss irideus* pop. 11) | FT/SSC | Steelhead in the Central Valley inhabit cold, clear rivers and streams with gravel substrates for spawning and rearing. They rely on well-oxygenated water and access to riparian vegetation or woody debris for cover, with juveniles often using riffles and pools for foraging and shelter. These habitats must maintain connectivity to the ocean for their anadromous lifecycle. | **None** | The Steelhead – Central Valley Distinct Population Segment (DPS) inhabits the Sacramento and San Joaquin rivers and their tributaries. The San Joaquin River is present within five miles of the project site that could provide spawning sites for this species. However, no aquatic habitat is present within the site. |
| Central California roach<br>(*Hesperoleucus symmetricus symmetricus*) | None/SSC | The Central California roach is a freshwater fish that inhabits small, warm streams and rivers with low to moderate flow, often in areas with rocky or gravelly substrates. It is highly tolerant of variable conditions, including fluctuating water temperatures and low oxygen levels, and typically resides in pools or shallow riffles with sparse aquatic vegetation. | **None** | The central California roach requires small streams present or isolated pools, however the project site does not have access to a permanent water source. No CNDDB records of this species have been observed within five miles of the site. |
| **Mammals** | | | | |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| American badger<br>(*Taxidea taxus*) | None/SSC | The American badger inhabits open grasslands, prairies, savannas, and shrublands with loose, well-drained soils suitable for digging. It relies on these habitats for burrowing and foraging, preying primarily on small mammals, and is often associated with areas of minimal human disturbance. | **Not Expected** | The American badger may occur in previously disturbed lands surrounded by agricultural fields if sufficient prey, such as small mammals, and undisturbed areas for burrowing are available. However, extensive disturbances that compact soils or eliminate prey populations significantly reduce the likelihood of their presence. No CNDDB records of this species occur within 5-miles. |
| hoary bat<br>(*Lasiurus cinereus*) | None/None | The hoary bat inhabits a wide range of environments, including forests, woodlands, and riparian areas, often near open water. It roosts in the foliage of trees, typically preferring dense, mature forests, and is highly migratory, adapting to different habitats during its seasonal movements. | **Not Expected** | The hoary bat may occur in previously disturbed lands surrounded by agricultural fields if mature trees or wooded areas remain for roosting and open spaces or water sources are available for foraging. However, significant disturbances that remove suitable roosting sites or foraging opportunities reduce the likelihood of their presence. No CNDDB records of this species occur within 5-miles of the site. |
| pallid bat<br>(*Antrozous pallidus*) | None/SSC | The pallid bat inhabits a variety of arid and semi-arid environments, including deserts, grasslands, and canyons, often roosting in rocky crevices, caves, or man-made structures. | **Not Expected** | The pallid bat may occur in previously disturbed lands surrounded by agricultural fields if structures such as buildings, trees, or rocky crevices suitable for roosting remain and open areas provide foraging opportunities. However, extensive disturbances that eliminate roosting sites or reduce prey availability significantly decrease the likelihood of their presence. No CNDDB records of this species occur. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| riparian (=San Joaquin Valley) woodrat<br>(*Neotoma fuscipes riparia*) | FE/SSC | The San Joaquin Valley riparian woodrat inhabits dense riparian forests and thickets, primarily along rivers and streams in the San Joaquin Valley. It relies on areas with abundant vegetation, such as willows, cottonwoods, and wild grape, for shelter and food. This species constructs nests in tree cavities, burrows, or dense vegetation and requires well-structured riparian habitats with minimal disturbance. | **Not Expected** | The riparian woodrat requires a combination of vegetative features (e.g. bushes or trees), and access to aquatic features. Although the site contains some trees, there is a low potential for the species to forage and nest on the project site. No CNDDB records of this species have been observed within 5-miles of the site. |
| riparian brush rabbit<br>(*Sylvilagus bachmani riparius*) | FE/SE | The riparian brush rabbit inhabits dense riparian forests and shrublands, primarily in the San Joaquin Valley, where it relies on areas with dense understory vegetation such as willows, blackberries, and wild roses for cover and foraging. This species requires intact riparian habitats with proximity to water and elevated areas for refuge during flooding events. | **Not Expected** | The riparian brush rabbit relies on dense riparian vegetation, such as willows, blackberries, and wild roses, for cover and foraging. Habitat disturbances that eliminate riparian habitats or reduce connectivity to suitable refuge areas significantly decrease the likelihood of their presence. No CNDDB records of this species have been observed within five miles of the site. |
| San Joaquin kit fox<br>(*Vulpes macrotis mutica*) | FE/ST | The San Joaquin kit fox inhabits arid grasslands, scrublands, and open agricultural areas in California's San Joaquin Valley. It prefers habitats with loose, well-drained soils for digging dens and minimal vegetation for visibility and movement. This species relies on a mix of natural and modified environments, preying on small mammals and birds, and requires large, undisturbed territories to sustain its populations. | **Not Expected** | Although CNDDB records occur within 5-miles of the site, the San Joaquin kit fox is not likely to occur in previously disturbed lands surrounded by agricultural fields if sufficient prey, such as small mammals, and denning opportunities are unavailable. Extensive disturbances that compact soils, eliminate prey populations, or increase human activity significantly reduce the likelihood of their presence. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| San Joaquin pocket mouse<br>(*Perognathous inornatus*) | None/None | The San Joaquin pocket mouse inhabits arid grasslands, scrublands, and sandy or gravelly soils in California's San Joaquin Valley. It prefers open habitats with sparse vegetation, using its burrows for shelter and foraging on seeds, grasses, and vegetation. This species thrives in areas with minimal disturbance and loose soils suitable for burrowing. | **Not Expected** | San Joaquin pocket mice are not expected to occur in previously disturbed lands surrounded by agricultural fields as they lack loose, well-drained soils and intact sparse vegetation for burrowing and foraging. Significant disturbances that compact soils or remove habitat features reduce the likelihood of their presence. NO CNDDB records occur within 5-miles of the site. |
| Townsend's big-eared bat<br>(*Corynorhinus townsendii*) | None/SSC | Townsend's big-eared bat inhabits a variety of environments, including deserts, forests, and riparian areas, but is most commonly associated with caves, mines, and old buildings for roosting. It prefers areas with minimal human disturbance and relies on proximity to open spaces for foraging on moths and other insects. The species is sensitive to disturbance, particularly at maternity and hibernation roosts. | **Not Expected** | Townsend's big-eared bat is not expected to occur in previously disturbed lands surrounded by agricultural fields because these areas typically lack essential roosting habitats, such as caves, mines, or old structures, and the undisturbed conditions necessary for foraging and reproduction. There are no CNDDB records of this species within five miles of the project site. been observed within five miles of the site. |
| western red bat<br>(*Lasiurus frantzii*) | None/SSC | The western red bat inhabits riparian forests, woodlands, and areas with dense canopy cover, often near water sources. It roosts primarily in the foliage of trees and shrubs, typically in cottonwoods, willows, or sycamores, and forages over open areas and water bodies for insects. This species is highly dependent on intact riparian habitats and suitable roosting sites. | **Not Expected** | The western red bat is not expected to occur in previously disturbed lands surrounded by agricultural fields due to the absence of dense riparian forests, mature trees for roosting, and intact habitats necessary for foraging and shelter. There are no CNDDB records of this species within five miles of the project site. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| Yuma myotis<br>(*Myotis yumanensis*) | None/None | The Yuma myotis inhabits a variety of habitats, including riparian areas, forests, deserts, and agricultural lands, but is most commonly found near open water sources such as streams, ponds, or lakes where it forages for insects. It roosts in sheltered locations like caves, mines, buildings, bridges, and hollow trees, often forming colonies. This species is closely associated with aquatic habitats for both foraging and drinking. | **Not Expected** | The Yuma myotis is not expected to occur in previously disturbed lands surrounded by agricultural fields because these areas typically lack the aquatic habitats, such as streams or ponds, and suitable roosting structures, like caves, bridges, or trees, that are essential for their foraging and sheltering needs. There are no CNDDB records of this species within five miles of the project site. |
| **Insects** | | | | |
| American bumble bee<br>(*Bombus pensylvanicus*) | None/None | The American bumble bee inhabits open grasslands, meadows, farmlands, and edge habitats with abundant flowering plants for foraging. It nests in underground burrows, abandoned rodent nests, or other protected areas and requires diverse, pesticide-free floral resources throughout its active season for colony development and survival. | **Possible** | The American bumble bee inhabits a variety of open habitats, including farmlands, meadows, grasslands, and open fields. They nest below the grass or underground in tufts of grass, tree cavities, rock piles, or abandoned rodent nests. These bees are known to forage on flowers for pollen and nectar from a wide range of plant genera. The project site may provide suitable foraging habitat if they contain a variety of flowering plants that offer ample nectar and pollen sources. CNDDB records of this species have been observed within 5-miles of the site. |
| California linderiella<br>(*Linderiella occidentalis*) | None/None | In the San Joaquin Valley, California linderiella inhabits seasonal vernal pools and other temporary freshwater habitats with clear, cool water and neutral to slightly alkaline conditions. These pools typically occur in grasslands or open woodlands with intact hydrology and minimal disturbance, relying on seasonal rainfall to form and persist long enough for the species to complete its life cycle. | **Not Expected** | The California linderiella is not expected to occur in previously disturbed lands surrounded by agricultural fields because these areas often lack the intact vernal pools and seasonal wetlands with specific hydrological conditions required for its survival and reproduction. Disturbances typically disrupt the soil and hydrology needed to sustain these habitats. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| Crotch's bumble bee<br>(*Bombus crotchii*) | None/SC | Crotch's bumble bee inhabits open scrublands, grasslands, and agricultural areas, primarily in California's arid and semi-arid regions. It forages on a variety of native and cultivated flowering plants and nests in underground burrows or sheltered areas. This species is highly sensitive to habitat loss, pesticide use, and reduced floral diversity. | **Not Expected** | Crotch's bumble bee (*Bombus crotchii*) thrives in environments that offer abundant floral resources, suitable nesting conditions, and a moderate climate, which are essential for its life cycle and population sustainability. The project site may provide suitable foraging habitat if they contain a variety of flowering plants that offer ample nectar and pollen sources. CNDDB records of this species have been observed within 5-miles of the site. |
| Menke's cuckoo wasp<br>(*Ceratochrysis menkei*) | None/None | Menke's cuckoo wasp is typically found in arid and semi-arid environments, including deserts, scrublands, and open woodlands. It relies on sandy or loose soils for nesting and parasitizes the nests of other solitary wasps or bees. This species thrives in areas with abundant flowering plants that provide nectar for adults and suitable hosts for its reproductive cycle. | **Not Expected** | Menke's cuckoo wasp can be observed in open, low vegetative areas, and are not expected to occur in previously disturbed lands surrounded by agricultural fields. The site lacks native vegetation for foraging and the dry sandy soils preferred for nesting. Additionally, no CNDDB records of this species exist within five miles of the site. |
| Moestan blister beetle<br>(*Lytta moesta*) | None/None | The Moestan blister beetle inhabits arid and semi-arid regions, including deserts and grasslands, typically in areas with sandy soils. It is often associated with flowering plants, which provide nectar and pollen for adults. Larvae are parasitic, relying on the nests of ground-dwelling insects, such as bees, for development. | **Not Expected** | The Moestan blister beetle inhabits portions of central California. Adults are often found on flowers, where they feed on *Lupinus* flowers and seed pods, *Trifolium wormskioldii* in dried vernal pools, and *Eriodium*. They are typically associated with dried vernal pools and vernal pool vegetation. No CNDDB records of this species have been observed within five miles of the site. |

| Scientific Name<br>Common Name | Status<br>Fed/State ESA | Habitat Requirements | Potential to Occur | Discussion |
|---|---|---|---|---|
| monarch butterfly<br>(*Danaus plexippus*) | FC/None | In the San Joaquin Valley, the monarch butterfly inhabits areas with abundant milkweed plants (*Asclepias* spp.) for egg-laying and caterpillar feeding, as well as diverse nectar-producing flowers for adult foraging. It utilizes riparian corridors, grasslands, agricultural edges, and urban gardens, requiring minimal pesticide exposure and suitable overwintering sites, such as eucalyptus, pine, or oak groves, for shelter during migration. | **None** | The monarch butterfly is not expected to occur in previously disturbed lands surrounded by agricultural fields because these areas often lack milkweed plants for reproduction and nectar-rich flowering plants for foraging. Additionally, pesticide use and habitat degradation in such areas further reduce their suitability for monarchs. No CNDDB records occur within 5-miles of the site. |
| obscure bumble bee<br>(*Bombus caliginosus*) | None/None | The obscure bumble bee inhabits diverse habitats, including grasslands, meadows, woodlands, and agricultural areas, where a variety of flowering plants provide nectar and pollen. It typically nests underground in abandoned rodent burrows or in sheltered, grassy areas and is dependent on habitat with abundant floral resources throughout its active season. | **Not Expected** | The Obscure bumble bee is not expected to occur in previously disturbed lands surrounded by agricultural fields because these areas often lack the diverse flowering plants and undisturbed nesting sites, such as grassy areas or underground burrows, that are essential for their survival and reproduction. |
| valley elderberry longhorn beetle<br>(*Desmorcerus californicus dimorphus*) | FT/None | The valley elderberry longhorn beetle is closely associated with riparian habitats in California's Central Valley, where it depends on elderberry shrubs (*Sambucus* spp.) for all stages of its life cycle. The beetle lays eggs on elderberry stems, and the larvae develop within the pith of live elderberry shrubs. This species requires intact riparian corridors with sufficient elderberry shrubs for breeding, feeding, and shelter. | **Not Expected** | The Valley Elderberry longhorn beetle requires riparian habitats in the Sacramento and San Joaquin Valleys of California. They are closely associated with elderberry shrubs (*Sambucus spp.*). The project site does not provide suitable habitat to occur. No CNDDB records of this species have been observed within 5-miles of the project site. |
| **Mollusks** | | | | |
| western ridged mussel<br>(*Gonidea angulata*) | None/None | The western ridged mussel inhabits freshwater rivers, streams, and lakes with clean, well-oxygenated water and stable substrates such as gravel, sand, or cobble. It requires minimal sedimentation and relies on a host fish for the parasitic larval stage of its life cycle. This species is highly sensitive to habitat degradation, including pollution, sedimentation, and changes in water flow. | **None** | The site lacks clean, well-oxygenated freshwater habitats with stable substrates, such as rivers or streams, which are essential for their survival and reproduction. No CNDDB records of this species have been observed within five miles of the project site. |

| | | |
|---|---|---|
| FE = Federally Endangered | FT = Federally Threatened | FC = Federal Candidate Species |
| FPT = Federally Proposed Threatened | FEX = Federally Extinct | FD = Federal Delisted |
| ST = State Threatened | SEX = State Extinct | SE = State Endangered |
| SFP = State Fully Protected | SC = State Candidate | SS = State Sensitive |
| SSC = CDFW Species of Special Concern | WL = Watch List | |

**Potential to Occur Classifications**

**None:** classification indicates that the species is determined to be completely absent from the site. This determination is based on the absence of suitable habitat features required by the species, a lack of documented occurrences in the local area or surrounding quadrangles, and environmental conditions incompatible with the species' known habitat requirements.

**Not Expected** classification is used for species that are unlikely to occur at the site but cannot be entirely ruled out. This classification applies when the site contains minimal or limited habitat features that are suboptimal for the species. Few or no documented occurrences exist in the surrounding area, and the site may experience environmental factors such as disturbance or habitat fragmentation that make it unlikely for the species to inhabit or use the area.

**Possible** classification is assigned to species that have a reasonable likelihood of occurring on the site. This classification applies when the site contains suitable habitat that meets the species' known requirements, and there are documented occurrences within a reasonable distance, such as nearby quadrangles or within the species' typical range. Species in this category may use the site seasonally, sporadically, or for specific life history activities like foraging, breeding, or migration.

**Occurs:** classification is used for species that are known to inhabit or regularly use the site. This determination is based on the presence of optimal or high-quality habitat that fully meets the species' requirements, along with confirmed records of the species' presence in close proximity, such as direct observations or documented data. Environmental conditions and habitat features at the site are well-suited for the species' long-term or consistent presence.

**Attachment D** – CNDDB Sensitive Wildlife Observations within 5-Miles of the JDI Farms Site


Oakdale
Modesto
Turlock
JDI Farms
American bumble bee
Burrowing owl
Cackling goose
Crotch's bumble bee
Great blue heron
Green sturgeon - southern DPS
Loggerhead shrike
Prairie falcon
Sacramento splittail
San Joaquin coachwhip
San Joaquin kit fox
Snowy egret
Steelhead - Central Valley DPS
Swainson's hawk
Tricolored blackbird
Mountain View Middle School
Hatch
JDI FARMS (1631 FIG AVENUE, PATTERSON, CA)
Patterson
Jet
MESA BIOLOGICAL LLC
MONTROSE
Department of Cannabis Control
IS/MND - JDI Farms
Miles
0 0.4 0.8 1.2 1.6
N
Scale: 1:75,000
CNDDB Wildlife Map

**Attachment E** – California Natural Diversity Database (CNDDB) Nine USGS 7.5-Minute Quadrangle Review Surrounding the JDI Farms Site

# Selected Elements by Common Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Crows Landing (3712141) OR Brush Lake (3712151) OR Ceres (3712058) OR Hatch (3712048) OR Gustine (3712038) OR Newman (3712131) OR Orestimba Peak (3712132) OR Patterson (3712142) OR Westley (3712152))

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **alkali milk-vetch**<br>*Astragalus tener var. tener* | PDFAB0F8R1 | None | None | G2T1 | S1 | 1B.2 |
| **alkali-sink goldfields**<br>*Lasthenia chrysantha* | PDAST5L030 | None | None | G2 | S2 | 1B.1 |
| **American badger**<br>*Taxidea taxus* | AMAJF04010 | None | None | G5 | S3 | SSC |
| **American bumble bee**<br>*Bombus pensylvanicus* | IIHYM24260 | None | None | G3G4 | S2 | |
| **bald eagle**<br>*Haliaeetus leucocephalus* | ABNKC10010 | Delisted | Endangered | G5 | S3 | FP |
| **big tarplant**<br>*Blepharizonia plumosa* | PDAST1C011 | None | None | G1G2 | S1S2 | 1B.1 |
| **broadleaf pondweed**<br>*Stuckenia striata* | PMPOT030K0 | None | None | G3G4Q | S2S3 | 2B.3 |
| **burrowing owl**<br>*Athene cunicularia* | ABNSB10010 | None | Candidate Endangered | G4 | S2 | SSC |
| **cackling (=Aleutian Canada) goose**<br>*Branta hutchinsii leucopareia* | ABNJB05035 | Delisted | None | G5T3 | S3 | WL |
| **California alkali grass**<br>*Puccinellia simplex* | PMPOA53110 | None | None | G2 | S2 | 1B.2 |
| **California horned lark**<br>*Eremophila alpestris actia* | ABPAT02011 | None | None | G5T4Q | S4 | WL |
| **California linderiella**<br>*Linderiella occidentalis* | ICBRA06010 | None | None | G2G3 | S2S3 | |
| **California red-legged frog**<br>*Rana draytonii* | AAABH01022 | Threatened | None | G2G3 | S2S3 | SSC |
| **California tiger salamander - central California DPS**<br>*Ambystoma californiense pop. 1* | AAAAA01181 | Threatened | Threatened | G2G3T3 | S3 | WL |
| **central California roach**<br>*Hesperoleucus symmetricus symmetricus* | AFCJB19021 | None | None | GNRT3 | S3 | SSC |
| **Cismontane Alkali Marsh**<br>*Cismontane Alkali Marsh* | CTT52310CA | None | None | G1 | S1.1 | |
| **Coastal and Valley Freshwater Marsh**<br>*Coastal and Valley Freshwater Marsh* | CTT52410CA | None | None | G3 | S2.1 | |
| **Conservancy fairy shrimp**<br>*Branchinecta conservatio* | ICBRA03010 | Endangered | None | G2 | S2 | |
| **Crotch's bumble bee**<br>*Bombus crotchii* | IIHYM24480 | None | Candidate Endangered | G2 | S2 | |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Delta button-celery**<br>*Eryngium racemosum* | PDAPI0Z0S0 | None | Endangered | G1 | S1 | 1B.1 |
| **diamond-petaled California poppy**<br>*Eschscholzia rhombipetala* | PDPAP0A0D0 | None | None | G1 | S1 | 1B.1 |
| **foothill yellow-legged frog - central coast DPS**<br>*Rana boylii pop. 4* | AAABH01054 | Threatened | Endangered | G3T2 | S2 | |
| **giant gartersnake**<br>*Thamnophis gigas* | ARADB36150 | Threatened | Threatened | G2 | S2 | |
| **golden eagle**<br>*Aquila chrysaetos* | ABNKC22010 | None | None | G5 | S3 | FP |
| **great blue heron**<br>*Ardea herodias* | ABNGA04010 | None | None | G5 | S4 | |
| **Great Valley Valley Oak Riparian Forest**<br>*Great Valley Valley Oak Riparian Forest* | CTT61430CA | None | None | G1 | S1.1 | |
| **green sturgeon - southern DPS**<br>*Acipenser medirostris pop. 1* | AFCAA01031 | Threatened | None | G2T1 | S1 | SSC |
| **hardhead**<br>*Mylopharodon conocephalus* | AFCJB25010 | None | None | G3 | S3 | SSC |
| **heartscale**<br>*Atriplex cordulata var. cordulata* | PDCHE040B0 | None | None | G3T2 | S2 | 1B.2 |
| **hispid salty bird's-beak**<br>*Chloropyron molle ssp. hispidum* | PDSCR0J0D1 | None | None | G2T1 | S1 | 1B.1 |
| **hoary bat**<br>*Lasiurus cinereus* | AMACC05032 | None | None | G3G4 | S4 | |
| **least Bell's vireo**<br>*Vireo bellii pusillus* | ABPBW01114 | Endangered | Endangered | G5T2 | S3 | |
| **Lemmon's jewelflower**<br>*Caulanthus lemmonii* | PDBRA0M0E0 | None | None | G3 | S3 | 1B.2 |
| **lesser saltscale**<br>*Atriplex minuscula* | PDCHE042M0 | None | None | G2 | S2 | 1B.1 |
| **loggerhead shrike**<br>*Lanius ludovicianus* | ABPBR01030 | None | None | G4 | S4 | SSC |
| **longhorn fairy shrimp**<br>*Branchinecta longiantenna* | ICBRA03020 | Endangered | None | G2 | S2 | |
| **Menke's cuckoo wasp**<br>*Ceratochrysis menkei* | IIHYM71050 | None | None | G2 | S2 | |
| **moestan blister beetle**<br>*Lytta moesta* | IICOL4C020 | None | None | G2 | S2 | |
| **Northern California legless lizard**<br>*Anniella pulchra* | ARACC01020 | None | None | G3 | S2S3 | SSC |
| **northwestern pond turtle**<br>*Actinemys marmorata* | ARAAD02031 | Proposed Threatened | None | G2 | SNR | SSC |

## Selected Elements by Common Name

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **obscure bumble bee**<br>*Bombus caliginosus* | IIHYM24380 | None | None | G2G3 | S1S2 | |
| **pallid bat**<br>*Antrozous pallidus* | AMACC10010 | None | None | G4 | S3 | SSC |
| **prairie falcon**<br>*Falco mexicanus* | ABNKD06090 | None | None | G5 | S4 | WL |
| **prairie wedge grass**<br>*Sphenopholis obtusata* | PMPOA5T030 | None | None | G5 | S2 | 2B.2 |
| **prostrate vernal pool navarretia**<br>*Navarretia prostrata* | PDPLM0C0Q0 | None | None | G2 | S2 | 1B.2 |
| **riparian (=San Joaquin Valley) woodrat**<br>*Neotoma fuscipes riparia* | AMAFF08081 | Endangered | None | G5T1 | S1 | SSC |
| **riparian brush rabbit**<br>*Sylvilagus bachmani riparius* | AMAEB01021 | Endangered | Endangered | G5T1 | S2 | |
| **Sacramento splittail**<br>*Pogonichthys macrolepidotus* | AFCJB34020 | None | None | G3 | S3 | SSC |
| **San Joaquin coachwhip**<br>*Masticophis flagellum ruddocki* | ARADB21021 | None | None | G5T2T3 | S3 | SSC |
| **San Joaquin kit fox**<br>*Vulpes macrotis mutica* | AMAJA03041 | Endangered | Threatened | G4T2 | S3 | |
| **San Joaquin pocket mouse**<br>*Perognathus inornatus* | AMAFD01060 | None | None | G2G3 | S2S3 | |
| **San Joaquin spearscale**<br>*Extriplex joaquinana* | PDCHE041F3 | None | None | G2 | S2 | 1B.2 |
| **Sanford's arrowhead**<br>*Sagittaria sanfordii* | PMALI040Q0 | None | None | G3 | S3 | 1B.2 |
| **shining navarretia**<br>*Navarretia nigelliformis ssp. radians* | PDPLM0C0J2 | None | None | G4T2T3 | S2S3 | 1B.2 |
| **snowy egret**<br>*Egretta thula* | ABNGA06030 | None | None | G5 | S4 | |
| **song sparrow ("Modesto" population)**<br>*Melospiza melodia pop. 1* | ABPBXA3013 | None | None | G5T3?Q | S3? | SSC |
| **spiny-sepaled button-celery**<br>*Eryngium spinosepalum* | PDAPI0Z0Y0 | None | None | G2 | S2 | 1B.2 |
| **steelhead - Central Valley DPS**<br>*Oncorhynchus mykiss irideus pop. 11* | AFCHA0209K | Threatened | None | G5T2Q | S2 | SSC |
| **subtle orache**<br>*Atriplex subtilis* | PDCHE042T0 | None | None | G1 | S1 | 1B.2 |
| **Swainson's hawk**<br>*Buteo swainsoni* | ABNKC19070 | None | Threatened | G5 | S4 | |
| **Sycamore Alluvial Woodland**<br>*Sycamore Alluvial Woodland* | CTT62100CA | None | None | G1 | S1.1 | |

## Selected Elements by Common Name

**California Department of Fish and Wildlife**

**California Natural Diversity Database**

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Townsend's big-eared bat**<br>*Corynorhinus townsendii* | AMACC08010 | None | None | G4 | S2 | SSC |
| **tricolored blackbird**<br>*Agelaius tricolor* | ABPBXB0020 | None | Threatened | G1G2 | S2 | SSC |
| **valley elderberry longhorn beetle**<br>*Desmocerus californicus dimorphus* | IICOL48011 | Threatened | None | G3T3 | S3 | |
| **Valley Sacaton Grassland**<br>*Valley Sacaton Grassland* | CTT42120CA | None | None | G1 | S1.1 | |
| **Valley Sink Scrub**<br>*Valley Sink Scrub* | CTT36210CA | None | None | G1 | S1.1 | |
| **vernal pool fairy shrimp**<br>*Branchinecta lynchi* | ICBRA03030 | Threatened | None | G3 | S3 | |
| **vernal pool smallscale**<br>*Atriplex persistens* | PDCHE042P0 | None | None | G2 | S2 | 1B.2 |
| **vernal pool tadpole shrimp**<br>*Lepidurus packardi* | ICBRA10010 | Endangered | None | G3 | S3 | |
| **western red bat**<br>*Lasiurus frantzii* | AMACC05080 | None | None | G4 | S3 | SSC |
| **western ridged mussel**<br>*Gonidea angulata* | IMBIV19010 | None | None | G3 | S2 | |
| **western spadefoot**<br>*Spea hammondii* | AAABF02020 | Proposed Threatened | None | G2G3 | S3S4 | SSC |
| **Wright's trichocoronis**<br>*Trichocoronis wrightii var. wrightii* | PDAST9F031 | None | None | G4T3 | S1 | 2B.1 |
| **Yuma myotis**<br>*Myotis yumanensis* | AMACC01020 | None | None | G5 | S4 | |

**Record Count: 74**

**Attachment F** – California Native Plant Society (CNPS) Nine USGS 7.5-Minute Quadrangle Review Surrounding the JDI Farms Site

**JDI Farms (1631 Fig Avenue, Patterson, CA)**
**California Native Plant Society's Online Rare Plant Inventory Nine Quadrangle Search**
**Crows Landing, Newman, Gustine, Hatch, Brish Lake, Ceres, Orestimba Peak, Patterson, Westley USGS 7.5-Minute Quadragles**

| CommonName | ScientificName | Family | Lifeform | CRPR | CESA | FESA | BloomingPeriod |
|---|---|---|---|---|---|---|---|
| alkali milk-vetch | Astragalus tener var. tener | Fabaceae | annual herb | 1B.2 | None | None | Mar-Jun |
| alkali-sink goldfields | Lasthenia chrysantha | Asteraceae | annual herb | 1B.1 | None | None | Feb-Apr |
| big tarplant | Blepharizonia plumosa | Asteraceae | annual herb | 1B.1 | None | None | Jul-Oct |
| Brewer's clarkia | Clarkia breweri | Onagraceae | annual herb | 4.2 | None | None | Apr-Jun |
| broadleaf pondweed | Stuckenia striata | Potamogetonaceae | perennial rhizomatous (aquatic) | 2B.3 | None | None | (Jun)Jul-Aug |
| California alkali grass | Puccinellia simplex | Poaceae | annual herb | 1B.2 | None | None | Mar-May |
| Coulter's goldfields | Lasthenia glabrata ssp. coulteri | Asteraceae | annual herb | 1B.1 | None | None | Feb-Jun |
| crownscale | Atriplex coronata var. coronata | Chenopodiaceae | annual herb | 4.2 | None | None | Mar-Oct |
| Delta button-celery | Eryngium racemosum | Apiaceae | annual/perennial herb | 1B.1 | CE | None | (May)Jun-Oct |
| diamond-petaled California poppy | Eschscholzia rhombipetala | Papaveraceae | annual herb | 1B.1 | None | None | Mar-Apr |
| Ferris' goldfields | Lasthenia ferrisiae | Asteraceae | annual herb | 4.2 | None | None | Feb-May |
| heartscale | Atriplex cordulata var. cordulata | Chenopodiaceae | annual herb | 1B.2 | None | None | Apr-Oct |
| hispid salty bird's-beak | Chloropyron molle ssp. hispidum | Orobanchaceae | annual herb (hemiparasitic) | 1B.1 | None | None | Jun-Sep |
| hogwallow starfish | Hesperevax caulescens | Asteraceae | annual herb | 4.2 | None | None | Mar-Jun |
| large-flowered leptosiphon | Leptosiphon grandiflorus | Polemoniaceae | annual herb | 4.2 | None | None | Apr-Aug |
| Lemmon's jewelflower | Caulanthus lemmonii | Brassicaceae | annual herb | 1B.2 | None | None | Feb-May |
| lesser saltscale | Atriplex minuscula | Chenopodiaceae | annual herb | 1B.1 | None | None | May-Oct |
| little mousetail | Myosurus minimus ssp. apus | Ranunculaceae | annual herb | 3.1 | None | None | Mar-Jun |
| Parry's rough tarplant | Centromadia parryi ssp. rudis | Asteraceae | annual herb | 4.2 | None | None | May-Oct |
| prairie wedge grass | Sphenopholis obtusata | Poaceae | perennial herb | 2B.2 | None | None | Apr-Jul |
| prostrate vernal pool navarretia | Navarretia prostrata | Polemoniaceae | annual herb | 1B.2 | None | None | Apr-Jul |
| San Benito poppy | Eschscholzia hypecoides | Papaveraceae | annual herb | 4.3 | None | None | Mar-Jun |
| San Joaquin spearscale | Extriplex joaquinana | Chenopodiaceae | annual herb | 1B.2 | None | None | Apr-Oct |
| Sanford's arrowhead | Sagittaria sanfordii | Alismataceae | perennial rhizomatous herb (emergent) | 1B.2 | None | None | May-Oct(Nov) |
| serpentine leptosiphon | Leptosiphon ambiguus | Polemoniaceae | annual herb | 4.2 | None | None | Mar-Jun |
| shining navarretia | Navarretia nigelliformis ssp. radians | Polemoniaceae | annual herb | 1B.2 | None | None | (Mar)Apr-Jul |
| spiny-sepaled button-celery | Eryngium spinosepalum | Apiaceae | annual/perennial herb | 1B.2 | None | None | Apr-Jun |
| subtle orache | Atriplex subtilis | Chenopodiaceae | annual herb | 1B.2 | None | None | (Apr)Jun-Sep(Oct) |
| vernal barley | Hordeum intercedens | Poaceae | annual herb | 3.2 | None | None | Mar-Jun |
| vernal pool smallscale | Atriplex persistens | Chenopodiaceae | annual herb | 1B.2 | None | None | Jun-Oct |
| Wright's trichocoronis | Trichocoronis wrightii var. wrightii | Asteraceae | annual herb | 2B.1 | None | None | May-Sep |

**Attachment F** – United States Fish and Wildlife IPaC Resource List - Stanislaus County – JDI Farms Site

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

## Mammals

| NAME | STATUS |
|---|---|
| **San Joaquin Kit Fox** Vulpes macrotis mutica<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/2873 | Endangered |

## Birds

| NAME | STATUS |
|---|---|
| **California Condor** Gymnogyps californianus<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/8193 | Endangered |

## Reptiles

| NAME | STATUS |
|---|---|
| **Giant Garter Snake** Thamnophis gigas<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/4482 | Threatened |
| **Northwestern Pond Turtle** Actinemys marmorata<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/1111 | Proposed Threatened |

## Amphibians

| NAME | STATUS |
|---|---|
| **California Tiger Salamander** Ambystoma californiense<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/2076 | Threatened |

NOT FOR CONSULTATION

**Western Spadefoot** Spea hammondii — **Proposed Threatened**
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5425

## Insects

| NAME | STATUS |
|---|---|
| **Monarch Butterfly** Danaus plexippus<br>Wherever found<br>No critical habitat has been designated for this species.<br>https://ecos.fws.gov/ecp/species/9743 | **Candidate** |
| **Valley Elderberry Longhorn Beetle** Desmocerus californicus dimorphus<br>Wherever found<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/7850 | **Threatened** |

## Crustaceans

| NAME | STATUS |
|---|---|
| **Vernal Pool Fairy Shrimp** Branchinecta lynchi<br>Wherever found<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/498 | **Threatened** |
| **Vernal Pool Tadpole Shrimp** Lepidurus packardi<br>Wherever found<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>https://ecos.fws.gov/ecp/species/2246 | **Endangered** |

## Critical habitats

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

There are no critical habitats at this location.

NOT FOR CONSULTATION