

**PUBLICATION DATE: March 25, 2019**

**Trinity County Department of Planning**

**NOTICE OF AVAILABILITY OF  
DRAFT INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION**

The Trinity County Department of Planning has prepared a Draft Initial Study/Proposed Mitigated Negative Declaration (Draft-IS/MND) for the Trinity Sungrown Cannabis Conditional Use Permit project.

**Project Location:** The Trinity Sungrown Cannabis Conditional Use Permit project is located within Trinity County, at 610 Kaut Road in Burnt Ranch. The 200-acre site is identified as Assessor Parcel Number (APN) 008-210-10 and is part of the existing Trinity Sungrown Ranch. Primary site access is provided via Kaut Road, located approximately 1.5 miles from State Route 299 (SR-299). The site is also identified on the Ironside Mountain, California 7.5-minute USGS quadrangle map, Township 5 North, Range 6 East, Section 23 West, Humboldt Base Meridian (HBM).

**Description of Project:** The project applicant is currently licensed to cultivate up to 10,000 square feet (sf) of mature cannabis canopy. The proposed project includes the addition of up to 33,560 sf of cannabis canopy under a Type-3 medium license and the construction of a 10,000 square foot nursery for the propagation of cannabis through clones, immature plants, and seeds under a Type- 4 license. The nursery would initially consist of two (2) 30 feet by 96 feet greenhouses. The proposed project would not alter existing activities at the existing residence or the shop.

The proposed project requests to expand existing onsite activities through the addition of six (6) greenhouses (20 feet by 74 feet each), two (2) hoop house (96 feet by 30 feet each), two (2) nursery greenhouses (30 feet by 96 feet each), and approximately 22,800 sf of outdoor cultivation. The proposed expansion would employ three (3) full-time employees with an additional seven (7) seasonal employees needed temporarily from August through December. The applicant proposes to utilize the local labor force within the County. Employees will not live on the subject property.

The applicant has submitted a separate application for a variance to the 500-foot setback requirement from the property line for cannabis cultivation as required by Trinity County Ordinance 315-823 and amendments. The Draft-IS/MND recognizes that as a condition of approval of the Use Permit, the variance will need to be approved before the applicant can proceed with the proposed project.

**Environmental Topics Evaluated:** The Initial Study examines the potential impacts of the proposed project to the environment.

**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** Trinity County, as Lead Agency for the proposed project, has discretionary authority over the primary project proposal. To implement this project, the applicant may need to obtain the following discretionary permits/approvals from other agencies:

- Trinity County Department of Environmental Health
- Trinity County Solid Waste
- CALFIRE
- California Department of Fish & Wildlife (Region 1)
- North Coast Regional Water Quality Control Board
- State Water Resources Control Board
- State Division of Water Rights

A copy of the Draft-IS/MND is available for review at the Trinity County Department of Planning, 61 Airport Road, Weaverville, California, weekdays 9:00 A.M. to 4:30 P.M.

The public comment period begins on March 25, 2019 and will end on April 24, 2019 at 3:00 PM. Written comments can be mailed to the attention of Leslie Hubbard, Trinity County, Department of Planning, 61 Airport Road, Weaverville, California 96093.

# **ENVIRONMENTAL INITIAL STUDY**

## **INITIAL STUDY CHECKLIST PROPOSED MITIGATED NEGATIVE DECLARATION Trinity Sungrown Cannabis Conditional Use Permit**

Cannabis Cultivation Use Permit No.: CCUPT3-18-07  
CCUPN-19-03

Prepared by:  
**TRINITY COUNTY**  
**Department of Planning**  
61 Airport Road  
Weaverville, California 96093  
(530) 623-1351

March 2019

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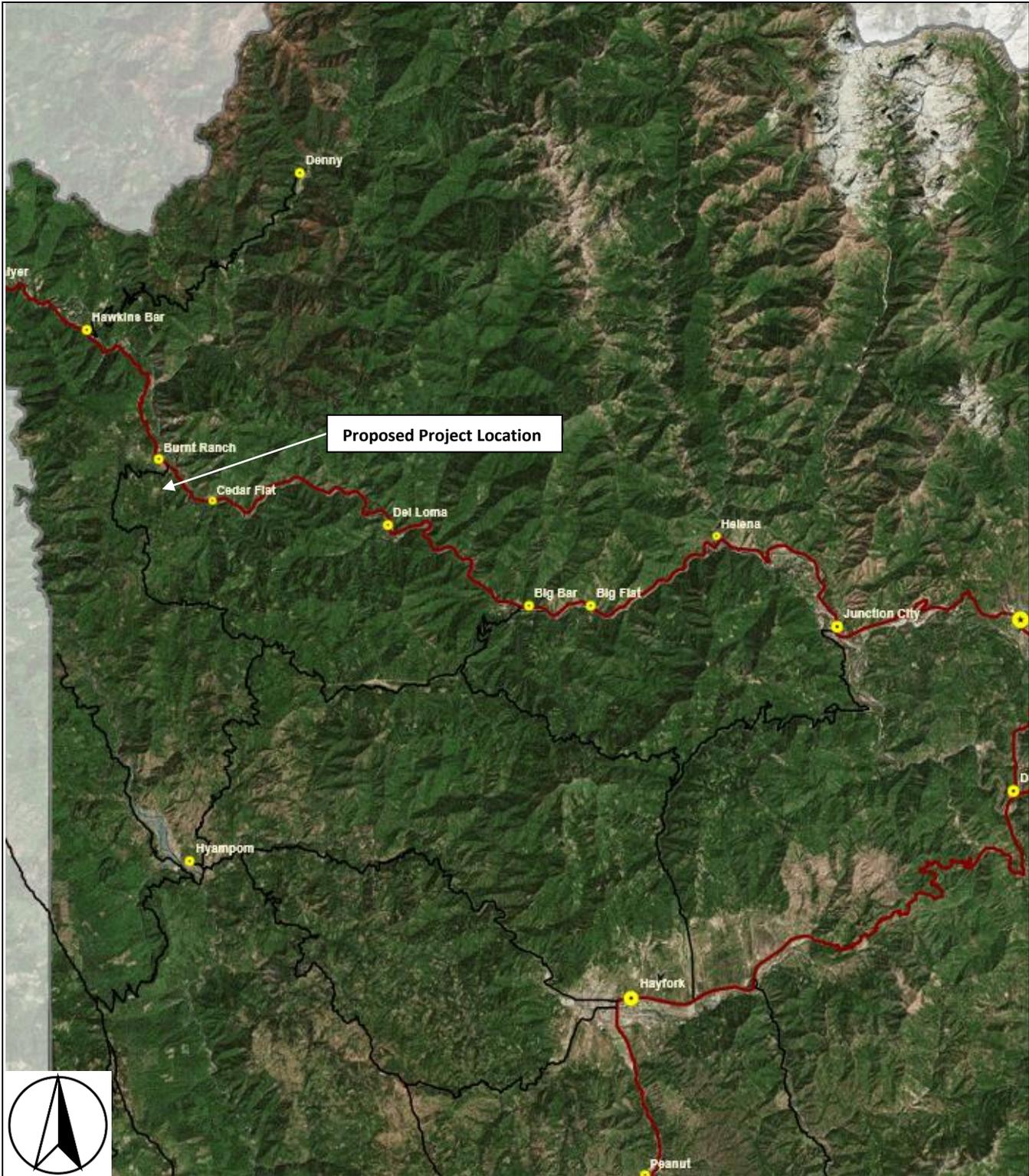
## TRINITY COUNTY ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Trinity Sungrown Cannabis Conditional Use Permit – CCUPT3-18-07 and CCUPN-19-03
2. **Lead Agency Name and Address:**  
  
TRINITY COUNTY  
Department of Planning  
61 Airport Road  
Weaverville, CA 96093
3. **Contact Person and Phone Number:** Leslie Hubbard (530) 623-1351 ext. 3
4. **Project Location:** The Trinity Sungrown Cannabis Conditional Use Permit project is located within Trinity County, at 610 Kaut Road in Burnt Ranch. The 200 acre site is identified as Assessor Parcel Number (APN) 008-210-10 and is part of the existing Trinity Sungrown Ranch. Primary site access is provided via Kaut Road, located approximately 1.5 miles from State Route 299 (SR-299). The site is also identified on the Ironside Mountain, California 7.5-minute USGS quadrangle map, Township 5 North, Range 6 East, Section 23 West, Humboldt Base Meridian (HBM). The location of the proposed project is shown on **Figure 1**, with the proposed project site shown on **Figure 2**, and the project site plan shown on **Figure 3**.
5. **Applicant's Name and Address:**  
Trinity Sungrown  
PO Box 220  
Burnt Ranch, CA 95527
6. **General Plan Designation:** Resource (RE)
7. **Zoning:** Agricultural Preserve (AP)
8. **Description of Project:** The project applicant is currently licensed to cultivate up to 10,000 square feet (sf) of mature cannabis canopy. The property currently includes a residence, a shop, a 750,000 gallon water storage pond and 10,000 sf of cannabis cultivation within eight greenhouses (20 feet by 74 feet each). Currently plants are planted directly into the ground and drip irrigated. Although outdoor cultivation does not occur onsite at present, the applicant proposes to use a combination of full-sun outdoor and light deprivation cultivation techniques. The existing shop building is utilized as equipment storage, as well as, cannabis processing and storage. The proposed project includes the addition of up to 33,560 sf of cannabis canopy under a Type-3 medium license and the construction of a 10,000 square foot nursery for the propagation of cannabis through clones, immature plants, and seeds under a Type- 4 license. The nursery would initially consist of two (2) 30 feet by 96 feet greenhouses. The proposed project would not alter existing activities at the residence or the shop.

The Trinity Sungrown Ranch maintains pre-1914 water rights allowing water to be diverted from two separate water systems, a perennial creek for irrigation and a spring for domestic use. Water storage for onsite irrigation consists of an approximate 750,000 gallon storage pond and a 5,000 gallon above ground water storage tank. An additional 2,500 gallon storage tank is provided on site for fire suppression purposes.

The proposed project requests to expand existing onsite activities through the addition of six (6) greenhouses (20 feet by 74 feet each), two (2) hoop house (96 feet by 30 feet each), two (2) nursery greenhouses (30 feet by 96 feet each), and approximately 22,800 sf of outdoor cultivation.

The Northern Spotted Owl (NSO) has been observed in the project vicinity. In order to minimize unintended harm to NSOs the project applicant will use preventative measures and Integrated Pest management (IPM) practices as recommended by the California Department of Pesticide Regulation (DPR) for rodent control. The rodent prevention strategy will focus on the reduction of the property's rodent carrying capacity by removing food access and features that could provide habitat to rodents. The project applicant will also utilize domestic predators such as cats or dogs bred to hunt rodents if needed. In



**Holliday Cannabis Cultivation Facility  
 Conditional Use Permit Project  
 APN 008-210-10  
 Burnt Ranch, Trinity County, California**

**Project Location**  
 JOB #518009.800

January 2019

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**Figure #1**



**Holliday Cannabis Cultivation Facility**  
**Conditional Use Permit Project**  
**APN 008-210-10**  
**Burnt Ranch, Trinity County, California**

**Project Site**  
 JOB #518009.800  
**Figure #2**

January 2019

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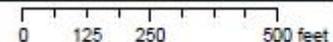
# SITE PLAN: Trinity Sungrown



- ### Legend
- Barn
  - Garage
  - Residence
  - Shed
  - Shop
  - Project Areas
  - Parking
- ### Hydrology
- Perennial Stream
  - Intermittent Stream
  - Ephemeral Stream
  - Manmade Channel
  - Suspected Wetlands
  - Ponds
- ### Cultivation
- Greenhouse, Current
  - Greenhouse, Future
  - Mature Canopy, Future

The map is property of Down River Consulting. Modification or reproduction by a private individual or company without prior explicit permission from DRC is strictly forbidden.

While we strive to use the most accurate data available, the positions, scales, and dimensions are approximate. The septic location is unknown.



TRINITY COUNTY PLANNING DEPARTMENT	
APPLICANT PREPARED SITE PLAN	
Application No. _____	
Drawn By: M. Petersen	APN: 008-210-10-00
Date: 3/7/2019	Zoning: Ag Preserve
Scale: 1:8,000	Lot Area: 210 Acres

Source: Down River Consulting, Applicant Site Plan, 2019

	<b>Holiday Cannabis Cultivation Facility</b> <b>Conditional Use Permit Project</b> <b>APN 008-210-10</b> <b>Burnt Ranch, Trinity County, California</b>		<b>Site Plan</b>  JOB #518009.800
	March 2019	I:\2018\518009-TrinityCo-CUP\200- "\\REDDINGSVR\projects\2018\518009-TrinityCo-CUP\800-Holiday CUP\	Figure #3

addition, traps and EradiBait, a non-coagulant powder corn cob will be used to reduce the species population at the site.

The proposed expansion would employ three (3) full-time employees with an additional seven (7) seasonal employees needed temporarily from August through December. The applicant proposes to utilize the local labor force within the County. Employees will not live on the subject property.

The project as proposed does not comply with the Trinity County Ordinance 315-823 and amendments, requiring a 500-foot setback from the property line for a medium (up to one acre of canopy) cannabis cultivation site. The applicant has submitted an application for a variance from the requirements of the 500-foot setback. As a condition of approval the variance will need to be approved before the applicant can proceed with the proposed project development of cultivation.

9. **Surrounding Land Uses and Setting:** The parcels immediately surrounding the project are designated by the County's General Plan as a part of the Resource (RE) land designation, and are largely zoned as Unclassified (U). North of the project site, along SR-299, parcels are situated within the Rural Residential (RR) General Plan designation and zoned as Rural Residential (5-acre minimum). Vacant land surrounds the site to the south, east, and west is comprised of public lands managed by the US Forest Service (USFS). Vegetation in the area consists primarily of mixed conifer forest, with an even distribution between evergreen forest, oak woodland, and grassland.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** Trinity County as Lead Agency for the proposed project has discretionary authority over the primary project proposal. To implement this project, the applicant may need to obtain, at a minimum, the following discretionary permits/approvals from other agencies:
  - Trinity County Department of Environmental Health
  - Trinity County Solid Waste
  - CALFIRE
  - California Department of Fish & Wildlife (Region 1)
  - North Coast Regional Water Quality Control Board
  - State Water Resources Control Board
  - State Division of Water Rights
11. **Tribal Consultation:** Tribal consultation pursuant to AB 52 was initiated on January 14, 2019 with the Nor-Rel-Muk Nation, Wintu Tribe of Northern California, Wintu Educational and Cultural Council and the Redding Rancheria. No responses were received from these entities requesting initiation of consultation under the provisions of AB 52.
12. **Purpose of this Document:** This document analyzes the environmental impacts of development of the proposed uses of Cannabis Cultivation on up to one acre (Type-3 license) and the construction of a 10,000 square foot nursery for the propagation of cannabis under a Type- 4 license.

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## SECTION 1.0 INTRODUCTION

### 1.1 Introduction and Regulatory Guidance

This document is an Initial Study that summarizes the technical studies prepared for the proposed Trinity Sungrown Cannabis Conditional Use Permit (CUP) and provides justification for a Mitigated Negative Declaration (MND). This document has been prepared in accordance with the current California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines. The purpose of this document is to evaluate the potential environmental impacts of the proposed Trinity Sungrown Cannabis Conditional Use Permit project. Mitigation measures have been proposed to avoid or minimize any significant impacts that were identified.

### 1.2 Lead Agency

The Lead Agency is the public agency with primary responsibility for implementing a proposed project. Accordingly, the Trinity County Planning Department (County) is the CEQA Lead Agency.

### 1.3 Purpose of the Initial Study

CEQA requires that public agencies document and consider the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as activities that involve public agency approvals or funding. Guidelines for an agency's implementation of CEQA are found in the "CEQA Guidelines" (Title 14, Chapter 3 of the California Code of Regulations).

Provided that a project is not exempt from CEQA, the first step in the agency's consideration of its potential environmental effects is the preparation of an Initial Study. The purpose of an Initial Study is to determine whether the project would involve "significant" environmental effects, as defined by CEQA, and to describe feasible mitigation measures that would avoid significant effects or reduce them to a level that is less than significant. If the Initial Study does not identify significant effects, then the agency prepares a Negative Declaration. If the Initial Study notes significant effects but also identifies mitigation measures that would reduce these significant effects to a level that is less than significant, then the agency prepares a Mitigated Negative Declaration. If a project would involve significant effects that cannot be readily mitigated, then the agency must prepare an Environmental Impact Report. The agency may also decide to proceed directly with the preparation of an Environmental Impact Report without an Initial Study.

The proposed project is a "project" as defined by CEQA and is not exempt from CEQA consideration. The County has determined that the project may potentially have significant environmental effects and therefore would require preparation of an Initial Study. This Initial Study describes the proposed project and its environmental setting, discusses the potential environmental effects of the project, and identifies feasible mitigation measures that would eliminate any potentially significant environmental effects of the project or reduce them to a level that would be less than significant.

This Initial Study is a public information document that describes the proposed project, existing environmental setting at the project site, and potential environmental impacts of construction and operation of the proposed project. It is intended to inform the public and decision-makers of the proposed project's potential environmental impacts and to document the lead agency's compliance with CEQA and the State CEQA Guidelines.

This Initial Study concludes that the project would have potentially significant environmental effects, all of which would be avoided or reduced to a level that would be less than significant with recommended mitigation measures. The project applicant has accepted all the recommended mitigation measures. As a result, the County has prepared a Mitigated Negative Declaration and has issued a Notice of Intent to adopt the Mitigated Negative Declaration for the project. The time available for public comment on the Initial Study and Mitigated Negative Declaration is shown on the Notice of Intent.

## 1.4 Regulatory Background Related to Cannabis

### State Regulatory Framework

Until 1996, the cultivation, use, and sale of cannabis (also known as marijuana) for any purpose was illegal in the State of California. In 1996, California voters approved Proposition 215, which allowed seriously ill Californians the right to obtain and use cannabis for medical purposes when recommended by a physician. In 2015, the State Legislature enacted the Medical Cannabis Regulation and Safety Act (MCRSA), which mandated a comprehensive State licensure and regulatory framework for cultivation, manufacturing, distribution, transportation, testing, and dispensing of medical cannabis on a commercial basis.

As the State was drafting regulations in compliance with MCRSA, California voters in 2016 approved Proposition 64, which legalized the use and possession of non-medicinal cannabis products within California by adults age 21 years and older. In June 2017, the State Legislature passed a budget trailer bill, Senate Bill (SB) 94, that repealed MCRSA and integrated its medicinal licensing requirements with Proposition 64 to create the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). MAUCRSA provides the regulatory structure for commercial cannabis activities in California.

MAUCRSA designates applicable responsibilities for oversight of cannabis commerce in California to several State agencies. The Bureau of Cannabis Control (BCC) is the lead agency in regulating commercial cannabis licenses for retailers, distributors, testing labs, and microbusinesses involved with medical and adult-use cannabis. CalCannabis Cultivation Licensing, a division of the California Department of Food and Agriculture (CDFA), licenses and regulates commercial cannabis cultivators and manages the State's "track-and-trace" system that tracks cannabis and its products from cultivation to sale. The Manufactured Cannabis Safety Branch of the California Department of Public Health (CDPH) is responsible for regulation of commercial cannabis manufacturing. In accordance with MAUCRSA, all three agencies have adopted emergency regulations related to their respective responsibilities, and all three have drafted permanent regulations that are currently undergoing the State rulemaking process.

It is important to note that, although California allows medicinal and adult use, cannabis remains classified as a Schedule 1 controlled substance under the federal Controlled Substances Act of 1970. Individuals engaging in cultivation and other cannabis-related activities risk prosecution under federal law.

### Local Regulatory Framework

Trinity County occupies an area of about 2.053 million acres (3,208 square miles) in northwestern California. Of the total acreage, about 75% is owned and managed by federal agencies such as the U.S. Forest Service (USFS), the Bureau of Reclamation (BOR), and the Bureau of Land Management (BLM). The remaining lands are mostly privately-owned properties under the land use authority of the County. Lands in private ownership are located mainly along the primary waterways and in adjacent valleys (Trinity County 2017).

Trinity County has a history as a cannabis-producing region. The County's geographic and climatic conditions, low population density, and availability of resource lands previously utilized for forestry and grazing have attracted an influx of individuals for the purpose of participating in cannabis activity (Trinity County Project Initial Study 2017). Since 2016, the County has issued approximately 425 cultivation licenses. Currently, there are approximately 310 active licensed sites and another 25 in the licensing process. It is estimated that more than 3,500 unpermitted cultivation operations exist on private land in the County, and 10-20 illegal trespass grows on public lands.

Trinity County has enacted several ordinances that apply to various aspects of commercial cannabis. Ordinance No. 315-823, subsequently amended, created regulations on commercial cannabis cultivation, including the designation of several zoning districts as appropriate locations for licensed cultivation without encumbrances. The total amount of land within these designated zoning districts is approximately 187,782 acres, with another 11,989 acres encumbered by ordinance provisions (Trinity County Project Initial Study 2017). The license types for cannabis cultivation, described in the CDFA regulations that are allowed by the County at this time are the following:

- "Specialty Cottage Outdoor" – for outdoor cultivation up to 25 mature plants.
- "Specialty Cottage Indoor" – for indoor cultivation with 500 square feet or less of total canopy.
- "Specialty Cottage Mixed-Light Tier 1 and 2" – for cultivation using mixed light (i.e., sunlight and artificial light) with 2,500

square feet or less of total canopy. “Tier 1” means the use of artificial light at a rate of six watts or less per square foot, and “Tier 2” means the use of artificial light at a rate greater than six watts but no greater than 25 watts per square foot.

- “Specialty Outdoor” – for outdoor cultivation less than or equal to 5,000 square feet of total canopy, or up to 50 mature plants on noncontiguous plots.
- “Specialty Mixed-Light Tier 1 and 2” – for cultivation using mixed light between 2,501 and 5,000 square feet of total canopy.
- “Small Outdoor” – for outdoor cultivation between 5,001 and 10,000 square feet of total canopy.
- “Small Mixed-Light Tier 1 and 2” – for cultivation using mixed light between 5,001 and 10,000 square feet of total canopy.
- “Medium Outdoor” – for outdoor cultivation between 10,001 square feet and one acre in total canopy.

Ordinance No. 315-838, enacted on August 7, 2018, sets conditions for commercial cannabis manufacturing in the County. The license types for cannabis manufacturing, described in the CDPH regulations, which are allowed by the County at this time, are the following:

- Type 6 – extractions using non-volatile solvents or mechanical methods.
- Type 7 – extractions using volatile substances.
- Type N – infusions, including using pre-extracted oils to create edibles, beverages, capsules, water cartridges, tinctures, or topicals.
- Type P – packaging and labeling only.

Ordinances No. 315-826 and 315-827 allows for wholesale cannabis nurseries and resale of auxiliary nursery products. All cannabis nurseries require a Type 4 State license, as described in the BCC regulations.

Ordinance No. 315-828 regulates cannabis distribution. Distribution activities require a Type 11 State license, as described in the BCC regulations.

## 1.5 Incorporation By Reference

In accordance with Section 15150 of the State CEQA Guidelines to reduce the size of the report, the following documents are hereby incorporated by reference into this Initial Study and are available for public review at the Trinity County Planning Department. A brief synopsis of the scope and content of each of these documents is provided below.

### Trinity County General Plan

The Trinity County General Plan (General Plan) is a long-range planning guide for growth and development for the County. The General Plan serves two basic purposes: 1) to identify the goals for the future physical, social, and economic development of the County; and 2) to describe and identify policies and actions adopted to attain those goals. The General Plan is a comprehensive document that addresses seven (7) mandatory elements/ issues in accordance with State law. These elements include Land Use, Housing, Circulation, Conservation, Open Space, Noise, and Public Safety. Other issues that affect the County, including Public Facilities and Services, Recreation, and Economic Development are addressed on a local level in the Douglas City, Hayfork, Junction City, Lewiston, and Weaverville Community Plans. The County’s General Plan was utilized throughout this Initial Study as the fundamental planning document governing development on the proposed project site. Background information and policy information from the General Plan is cited in several sections of this Initial Study.

### Trinity County Zoning Ordinance

The Trinity County Ordinance No. 315 established a Zoning Plan in an effort to promote and protect public health. The Zoning Plan

serves three (3) basic purposes: 1) to assist in providing a definite plan of development for the County, and to guide, control and regulate the future growth of the County, in accordance with said plan; 2) to protect the character and the social and economic stability of agricultural, residential, commercial, industrial, and other areas, within the County and to assure the orderly and beneficial development of such areas; and 3) to minimize harm to public safety resulting from the location of buildings, and the uses thereof, and of land adjacent to highways which are a part of the Circulation Element of the General Plan, or which are important thoroughfares, in such manner as to cause interference with existing or prospective traffic movement on said highways. The Zoning Plan specified and established designations, locations and boundaries of zoning districts. The districts explicitly established permitted uses including building types, building heights, lot dimensions, yard dimensions, lot setbacks, lot coverage, allowable uses, density, and allowable accessory buildings and uses.

### **Trinity County Cannabis Cultivation Ordinance No. 315-823**

Under the Ordinance No. 315, enacted on October 3, 2017, Trinity County enacted several ordinances that apply to various aspects of commercial cannabis cultivation. Initially Ordinance No. 315-823, subsequently amended, created regulations on commercial cannabis cultivation, including the designation of several zoning districts as appropriate locations for licensed cultivation without encumbrances. The Ordinance also identified exclusionary standards to indicate restrictions that would cause an application to not be approved.

### **Trinity County Cannabis Nursery Ordinance No. 315-826**

The Trinity County Ordinance No. 315-826, enacted on December 4, 2017, allows for wholesale cannabis nurseries and the resale of auxiliary nursery products. The ordinance established allowable zoning districts, requirements to apply to all cannabis nurseries, conditions of approval and reasons for denial or rescission of a nursery license.

### **Trinity County Cannabis Nursery Ordinance No. 315-827**

Trinity County Ordinance No. 315-827, enacted on January 3, 2018, amended Ordinance No. 315-826 related to cannabis nurseries. The amendment allows for variances, upon review of the planning commission, related to allowable cannabis nursery location.

### **Trinity County Cannabis Cultivation Ordinance No. 315-829**

Under Ordinance No. 315-829, enacted on February 6, 2018, Trinity County amended Section 28 of the Zoning Ordinance No. 315 pertaining to commercial cannabis cultivation.

### **Trinity County Cannabis Cultivation Ordinance No. 315-830**

Under Ordinance No. 315-830, enacted on March 6, 2018, Trinity County amended Section 28 of the Zoning Ordinance No. 315 pertaining to commercial cannabis cultivation. The amendment clarified allowable cultivation types and allowable simultaneous commercial cannabis activities.

### **Trinity County Cannabis Nursery Ordinance No. 315-833**

Under Ordinance No. 315-833, enacted on June 19, 2018, Trinity County amended Section 43 of the Zoning Ordinance No. 315 pertaining to commercial cannabis nurseries. The amendment clarified that nursery facilities in Agricultural Preserve zoning may not have Auxiliary nursery sales.

### **Trinity County Cannabis Cultivation Ordinance No. 315-841**

Under Ordinance No. 315-841, enacted on September 19, 2018, Trinity County amended Section 43 of the Zoning Ordinance No. 315 pertaining to commercial cannabis cultivation. The amendment clarified that a cultivator may “self-transport” their product without being required to obtain a County distribution permit.

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## Trinity County Cannabis Cultivation Ordinance No. 315-843

The Cannabis Ordinance No. 315-843, enacted on March 20, 2019, amended Section 43 of the Zoning Ordinance No. 315 pertaining to commercial cannabis cultivation. The amendment removed the requirement for an applicant to prove residency in the county for a minimum of one year as well as the limit of one application per person/ entity or legal parcel.

### 1.6 Project Environmental Studies

As part of the preparation of this Initial Study, the following studies, which are included in Section 6.0, Appendix, were prepared or utilized to develop baseline information and project-related impact discussions. These studies are available for inspection at the Trinity County Planning Department, 61 Airport Road Weaverville, California 96093, during normal business hours (8:00 AM to 5:00 PM Monday through Friday).

- Down River Consulting. *Biological Report: Trinity Sungrown*. June 2018
- Natural Investigations Company. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 610 Kaut Road Project, Burnt Ranch, Trinity County, California*. July 2018.

Information contained in the cultural resources documentation related on the specific location of prehistoric and historic sites is confidential and exempt from the Freedom of Information Act (FOIA) and the California Public Records Act (CPRA); therefore, this information is not included in Section 6.0, Appendix. Professionally qualified individuals, as determined by the California Office of Historic Preservation, may contact the Trinity County Planning Department directly in order to inquire about its availability.

### 1.7 Review Process

This Initial Study is being circulated for public and agency review as required by CEQA. Because State agencies will act as responsible or trustee agencies, the County will circulate the Initial Study to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a 30-day review period. During the review period, written comments may be submitted to:

TRINITY COUNTY  
Department of Planning  
61 Airport Road  
Weaverville, CA 96093

Ruth Hanover, Administrative Coordinator  
ruhanover@trinitycounty.org  
(530) 623-1351 ext. 4

and

Leslie Hubbard, Deputy Director of Planning  
lhubbard@trinitycounty.org  
(530) 623-1351 ext. 3

## SECTION 2.0 PROJECT DESCRIPTION

### 2.1 Project Location and Setting

#### Regional Setting

The project area lies within Trinity County, California in the Klamath Mountain Province. This region is at the junction of the uplifted Coast Ranges, the volcanic Cascades, and the ancient volcanic roots of the Sierra Nevada. The Trinity Basin is characterized by cold, wet winters and dry summers. The Trinity watershed drains into the Klamath River, which empties into the Pacific Ocean west of Trinity County. Several plant communities are present in the region, including Klamath mixed conifer, foothill pine (gray pine), mixed chaparral, montane hardwood, montane riparian, and riverine flora. In general, the growing season ranges from March 1 to October 31, but may be as short as mid-June through early September in some areas. Most herbaceous growth occurs during a relatively short period in late spring, ceasing as soil moisture depletes in early summer.

#### Local Setting

The proposed project is located in the McDonald Creek watershed, a sub-watershed of the Trinity River watershed. The sparsely populated mountain community of Burnt Ranch consists of private lands surrounded by the Shasta-Trinity National Forest and private commercial forest lands. The proposed project property does not fall within a Federal Emergency Management Agency (FEMA) floodplain. Existing and historical onsite activities have been limited to agricultural activities.

#### Project Location

The proposed Trinity Sungrown Cannabis Conditional Use Permit Project (CCUPT3-18-07 and CCUPN-19-03) is located within Trinity County, in the community of Burnt Ranch. The proposed project is located on land that is designated for primarily agriculture by the County's Agricultural Preserve (AP) zoning and is managed under the provisions of the Williamson Act. The project site is located at 610 Kaut Road in Burnt Ranch. The 200-acre site is identified as Assessor Parcel Number (APN) 008-210-10 and is part of the existing Trinity Sungrown Ranch. Primary site access is provided via Kaut Road, located approximately 1.5 miles from State Route 299 (SR-299). The site is also identified on the Ironside Mountain, California 7.5-minute USGS quadrangle map, Township 5 North, Range 6 East, Section 23 West, Humboldt Base Meridian (HBM). The location of the proposed project is shown on **Figure 1** and **2** with a site plan shown on **Figure 3**.

#### Existing Conditions

The land encompassing the project area has been historically used for agricultural purposes and falls under the Resource (RE) General Plan designation, with a zoning designation of Agricultural Preserve (AP). The land is also covered under a Williamson Act contract. The site is surrounded by US Forest Service (USFS) land and privately-owned land that has a Resource (RE) General Plan designation and Unclassified (U) zoning. There are Rural Residential (5-acre minimum) zoned parcels near the intersection of Underwood Mountain Road and SR-299; however these roadways do not border or intersect with the subject property.

The site currently has a permitted Type-2 cultivation (up to 10,000 sf of mature canopy), a residence, water storage tanks (two 5,000 gallon and one 2,500 gallon), a 750,000 gallon water storage pond, and a metal "shop" building for storage and processing. Existing cultivation occurs within eight (8) greenhouses. Currently plants are planted directly into the ground and drip irrigated. The existing shop building is utilized as equipment storage, as well as, cannabis processing and storage.

### 2.2 Proposed Uses

The purpose of this project is to expand cannabis cultivation operations and add a nursery onsite as a permitted use under the County's cannabis ordinances. The project, as proposed, meets the requirements for uses compatible within the Resource (RE) General Plan designation, is consistent with the Agricultural Preserve (AP) zoning, and would not conflict with the site's existing Williamson Act contract. Although outdoor cultivation does not occur onsite at present, the applicant proposes to use a combination of full-sun outdoor and light deprivation cultivation techniques. The proposed project includes the addition of up to one acre (43,560

sf) of cannabis canopy under a Type-3 medium license and the construction of a 10,000 sf nursery for the propagation of cannabis through clones, immature plants, and seeds under a Type- 4 license. The proposed project would not alter existing activities at the residence or the shop.

## **Related Zoning and Uses**

The subject property has been zoned by the County as Agricultural Preserve (AP). AP zoning allows for agricultural production of food and fiber now and in the future. The surrounding properties all have Unclassified (U) zoning. The properties that border the project site to the south, east, and west are public lands managed by the USFS. The proposed uses, as described by the applicant and evaluated in this document, are consistent with the uses allowed for AP zoned lands and are consistent with uses allowed on lands subject to Williamson Act contracts.

The project as proposed does not comply with the Trinity County Ordinance 315-823, that requires a 500 ft setback from the property line for a medium (up to one acre of canopy) cannabis cultivation site. The applicant has submitted an application for a variance. As a condition of approval the variance will need to be approved before the applicant can proceed with the proposed project.

## **Proposed Operations**

The proposed project requests to expand existing onsite activities through the addition of six (6) greenhouses (20 feet by 74 feet), two (2) hoop house (96 feet by 30 feet each), two (2) nursery greenhouses (30 feet by 96 feet each), and approximately 22,800 sf of outdoor cultivation.

The proposed expansion would employ three (3) full-time employees with an additional seven (7) seasonal employees needed temporarily from August through December. The applicant proposes to utilize the local labor force within the County. Employees will not live on the subject property.

The Northern Spotted Owl (NSO) has been observed in the project vicinity. In order to minimize unintended harm to NSOs the project applicant will use preventative measures and Integrated Pest management (IPM) practices as recommended by the California Department of Pesticide Regulation (DPR) for rodent control. The rodent prevention strategy will focus on the reduction of the property's rodent carrying capacity by removing food access and features that could provide habitat to rodents. The project applicant will also utilize domestic predators such as cats or dogs bred to hunt rodents if needed. In addition, traps and EradiBait, a non-coagulant powder corn cob will be used to reduce the species population at the site.

## **Site Access**

The subject property's main access is provided through an existing encroachment onto CO 424 Kaut Road (Trinity County maintained road) which is also used to access other offsite parcels. Kaut Road connects to CO 417 Underwood Mountain Road (Trinity County maintained road), which then connects to SR-299. No new roadway encroachments are required for the implementation of the proposed project.

## **Water Availability**

Water is provided to the project site from a perennial creek and a spring as a part of the property's pre-1914 water rights. The water diversions for irrigation and domestic uses are maintained as two separate systems. Water storage onsite consists of two 5,000-gallon water storage tanks, a 750,000-gallon storage pond and a 2,500-gallon storage tank. The applicant will be required, as a condition of approval, to apply for a revised Division of Water Rights permit for any additional water uses beyond those currently existing.

The County Fire Safe Ordinance 1162 requires buildings created and/or approved after January 1, 1992 to provide a minimum 2,500-gallon water tank. The existing 2,500-gallon water tank is dedicated for fire suppression uses during a wildland fire or a fire originating from within the building. The dedicated tank is located at the residence and is available for fire suppression use at the project. Additional fire suppression systems may be required based on the ultimate occupancy and use of the property. Review of the project by CALFIRE will determine the required fire suppression equipment specifications as a condition of approval of the use permit.

## **Domestic Wastewater Discharge**

The site maintains an existing permitted septic system that would continue to serve the subject property treating typical residential wastewater from the residence and daily workers. Three (3) full-time employees are anticipated, along with approximately seven (7) seasonal temporary workers.

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## SECTION 3.0

### ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This chapter provides an evaluation of the potential environmental impacts of the proposed cannabis cultivation expansion for the Trinity Sungrown project in Burnt Ranch, as well as the CEQA Mandatory Findings of Significance. A discussion of cumulative impacts is included at the end of this chapter. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agricultural 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

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the State CEQA Guidelines and used by Trinity County in its environmental review process. This checklist has been updated with the revisions of the January 1, 2019 State CEQA Guidelines. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable impact on the environment.
- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Potentially Significant Impact Unless Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

All answers must take into account the whole action involved, including potential off- and onsite, indirect, direct, construction, and operation, except as provided for under State CEQA Guidelines Section 15183 and State CEQA Statute Section 21083. The setting discussion under each resource section in this chapter is followed by a discussion of impacts and applicable mitigation measures.

This Initial Study identifies several potentially significant environmental effects related to the proposed project. Some effects are mitigated by implementation of existing provisions of law and standards of practice related to environmental protection. Such provisions are considered in the environmental impact analysis, and the degree to which they would reduce potential environmental effects is discussed. Additional mitigation measures are specifically identified when necessary to avoid potential environmental effects or to reduce them to a level that is less than significant.

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

**Setting:** The project site is surrounded by resource lands that have significant vegetative screening and topographic relief that screen the site from many offsite views, and is not adjacent to any historic sites, therefore the project is unable to adversely affect a scenic resource (Trinity County GIS). The existing built environment in the vicinity of the proposed project includes both public and privately maintained access roads, residential buildings, and a variety of associated rural structures. The proposed project has the same general features and also includes a shop building, water diversions, water storage tanks, a surface water storage pond, cannabis cultivation areas, non-cannabis agricultural lands and a variety of above and below ground utility services. The nearest residence (offsite) is located approximately 1000 ft north of the property line.

The project area is characterized by forested mountainous terrain and generally level developed agricultural lands with surface waters at the project site. Vegetation grades between developed sites with scattered grassland vegetation, transitioning to hardwoods and conifers. The Trinity River, part of the National Wild and Scenic River System is located approximately 0.8 miles to the north, and runs along SR-299. The Trinity River is designated as a National Wild and Scenic River under the Federal system; it was originally designated under the California law which was later brought into the Federal system. While the Trinity River is in proximity to the proposed project site, there are no views of the project from the river and no views of the river from the project site.

The County has not designated specific scenic vistas in the immediate project area as a part of the General Plan and there are no designated State or federal scenic highways or scenic highway corridors in the vicinity of the project (California Department of Transportation, California Scenic Highway Mapping System).

**Impact Analysis:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

a) Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. There are limited mid-ground views of the site from Kaut Road, but the development is consistent with historical uses and the development of the proposed project is expected to be viewed as a continuation of the existing development on the site. There are no designated scenic vistas in the project vicinity; therefore, there would be no impact. The Trinity River is located approximately 0.8 miles to the north and east of the site, but there are no views of the river from the project site and no one using the Trinity River would be able to see the proposed project from the river due to the steep slopes and vegetation screening that block views of the proposed development activity. Based on these factors, there will be no impact to visual resources from the development of the project.

b) California’s Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic

highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. According to Caltrans' California Scenic Highway Program and the National Scenic Byways Program, the proposed project is not located near a highway which has been listed as a State or federal Scenic Highway or as an Eligible State Scenic Highway-Not Officially Designated. Additionally, the project is not located on a National Scenic Byway System route. The proposed project will develop facilities in areas previously developed for agricultural uses and would not change the visual character of the area. Therefore, there is no impact.

- c) Project development would not have any short- or long-term visual effects on the immediate area surrounding the areas of development, because they are proposed for areas or within structures that have been developed by previous activities that changed the visual landscape at that time; proposed activities are expected to be viewed as historically activities. The project does not propose to add significant new above ground structures, and those that are constructed are not expected to change the visual character or quality of the site as it will be consistent with other existing structures at these locations. Therefore, impacts to the visual character of the surrounding area or impacts to public views are considered less than significant.
- d) Light pollution occurs when nighttime views of the stars and sky are diminished by an over-abundance of light coming from the ground. Light pollution is a potential impact from the operation of any light source at night. Proper light shields, lighting design, and landscaping are commonly used to reduce light pollution generated from lighting by blocking the conveyance of light upwards. The result is that the lights are not visible from above; therefore, ambient light is not added to the nighttime sky. In addition, light reflecting off surfaces during daylight hours has the potential to create a source of glare in the vicinity of the proposed project.

The proposed project site currently has minimal uses that include minor amounts of nighttime light sources (residence, shop, security lighting). These sources of light are limited and while they are generally seen from a distance as a small light source, do not generate large amounts of light either on or offsite. Introduction of new lighting from the proposed project would include lights within and around the proposed new greenhouses or for security lighting purposes. The County Cannabis Cultivation ordinance (Ordinance No. 315-823 and amendments) requires that the light generated by the proposed project would be required to be both (1) downcast, shielded and/or screened to keep light from emanating offsite or into the sky, and (2) light uses for operations require that lighting in greenhouses is shielded so that little to no light escapes, and light shall not escape at a level that is visible from neighboring properties between sunset and sunrise. No light will be generated from the proposed cultivation site because the applicant proposes to use light deprivation and will not use artificial lights on the cultivation site at any time.

After evaluation of the proposed project, and the potential for impacts due to new lighting sources, the implementation of the standard requirements of the County's General Plan and Cannabis Cultivation Ordinance provide a uniform standard for reduction and minimization of light trespass. With adherence to applicable General Plan policies and provisions of the Cannabis Cultivation Ordinance impacts related to light pollution and glare impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Aesthetics* resources were found to be less than significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

**References:**

California Department of Transportation. *California Scenic Highway System*. 2018. [Online]:

[http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm). Accessed: January 30, 2019.

National Scenic Byways Program. 2018. [Online]: <https://www.fhwa.dot.gov/byways/states/CA>. Accessed: January 30, 2019.

Trinity County. *General Plan Open Space and Conservation Element*.

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

National Wild and Scenic Rivers System. [Online]: <https://www.rivers.gov/california.php>. Accessed: January 30, 2019.

<b>II. AGRICULTURE RESOURCES:</b> <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural, Land Evaluation and Site Assessment Mode (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i>	<b>Potentially Significant Impact</b>	<b>Potentially Significant Impact Unless Mitigation Incorporated</b>	<b>Less-Than-Significant Impact</b>	<b>No Impact</b>
a) Convert Prime Farmland, Unique Farmland, or 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>X</b>
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				<b>X</b>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				<b>X</b>

**Setting:** The proposed project is located on lands that have been zoned as Agricultural Preserve (AP) and utilized for agricultural development historically. The General Plan describes AP zoning as areas that should be used for the “production of food and fiber now and in the future”. The land is also under a Williamson Act contract, also known as the California Land Conservation Act, which allows for the local government to enter into contracts with private landowners for the purpose of restricting parcels of land to agricultural or open space uses. Current uses have installed irrigation systems, buildings and utility systems related to agricultural production.

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The project site has been historically used for agricultural purposes and possesses soils that are considered “prime” for agricultural production. The County has zoned the area as Agricultural Preserve (AP) which allows for production of food or fibers now and in the future. The land is also under a Williamson Act contract which restricts use of the land to agricultural or open space uses. The proposed project is consistent with these agricultural uses. The site is also located within an area of Prime Farmland as identified by the California Department of Conservation’s Important Farmland Series Mapping and Monitoring Program. Current and historical uses of the site have maintained conditions favorable for agricultural uses. Based on the above, development Impacts related to the conversion of prime, unique, or important farmland would not occur. There is no impact.
- b) The proposed project site is under a current Williamson Act contract. Therefore, project implementation would not result in conflicts with existing agricultural zoning. As the project continues agricultural development no impact would occur.
- c) Implementation of the proposed project would not result in a conversion of farmland to non farmland. Therefore, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation, impacts associated with *Agricultural Resources* were found to not be significant because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

**References:**

State of California Farmland Mapping and Monitoring Program, [Online]: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed: February 1, 2019.

Trinity County. *General Plan Open Space and Conservation Element*.

<b>III. AIR QUALITY:</b> <i>Where 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:</i>	<b>Potentially Significant Impact</b>	<b>Potentially Significant Impact Unless Mitigation Incorporated</b>	<b>Less-Than-Significant Impact</b>	<b>No Impact</b>
a) Conflict with or obstruct implementation of the applicable air quality plan?				<b>X</b>
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?				<b>X</b>
c) Expose sensitive receptors to substantial pollutant concentrations?			<b>X</b>	
d) Result in other emissions (such as those leading to odors or dust) affecting a substantial number of people?			<b>X</b>	

**Setting:** The project is located in Trinity County, which is a part of the North Coast Air Basin (NCAB). The NCAB extends for 250 miles from Sonoma County in the south to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces. The climate is moderate with the predominant weather factor being moist air masses from the ocean. Average annual rainfall in the area is approximately 50 to 60 inches with the majority falling between October and April. Predominate wind direction is typically from the northwest during summer months and from the southwest during winter storm events.

Project activities are subject to the authority of the North Coast Unified Air Quality Management District (NCUAQMD) and the California Air Resources Board (CARB). The NCUAQMD is listed as "attainment" or "unclassified" for all the federal and state ambient air quality in Trinity County. The only exception is for 24-hour particulate (PM10) standards in Humboldt County (which is not a part of the project area). Due to the large size of the NCUAQMD, it is well understood that particulate matter can travel from other areas into Humboldt County (such as from Trinity County) and affect air quality. In the NCUAQMD, particulate matter has been determined to be primarily from vehicles, with the largest source of fugitive emissions from vehicular traffic on unpaved roads.

In determining whether a project has significant air quality impacts on the environment, agencies often apply their local air district's thresholds of significance to project in the review process. The District has not formally adopted specific significance thresholds, but rather utilizes the Best Available Control Technology (BACT) emissions rates for stationary sources as defined and listed in the NCUAQMD Rule and Regulations, Rule 110 – New Source Review (NSR) and Prevention of Significant Deterioration (PSD), Section 5.1 – BACT (pages 8-9) (NCUAQMD, 2018).

Sensitive receptors (e.g. children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. The nearest sensitive receptors to the project site are residential buildings (approximately 1000 ft to the north of the property) and the Burnt Ranch Elementary School (approximately 1 mile distant).

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

**a-b)** Since Trinity County is in attainment or unclassified for all federal and state air quality standards, the project is not subject to an air quality plan. The NCUAQMD prepared a Draft Particulate Matter Attainment Plan in May 1995, which is only applicable to portions of the District which are nonattainment for PM<sub>10</sub> (e.g., Humboldt County).

Construction activities proposed by the project may create minor amounts of dust from construction of greenhouse/hoop-houses, but these activities are considered minor activities and would not create dust emissions that would require specialized abatement practices. Vehicle use during operation of the project would be limited to light duty vehicles and truck traffic for delivery purposes, and dust emissions would be minor and insignificant. Vehicle traffic associated with the project is not expected to generate dust emissions that would cause a substantial increase in PM<sub>10</sub> within the surrounding area, Trinity County or the NCUAQMD. Developing

a cannabis cultivation facility within the community of Burnt Ranch is not anticipated to impact vehicle miles traveled and associated vehicular exhaust emissions. As such, the project will not violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulative increase of any criteria pollutant for which the region is in non-attainment.

The project does not propose to use generators for power, as the site has power provided by Pacific Gas and Electric. Should generators be used at a future time, those uses would be required to be in compliance with the California Air Resources Board (CARB) requirements for the Portable Equipment Registration Program (PERP), should the generators qualify for coverage by this permitting program, or as may be required by the NCUAQMD. Based on the analysis above, there were no impacts identified.

- c-d)** Due to the nature and size of the project, construction and operational activities are not expected to generate air quality pollutants that would cause a significant impact, and the development of the project will not expose sensitive receptors or a large number of people to substantial pollutant concentrations or objectionable odors.

Pesticide applications are normally required to be administered a minimum of 300 feet from sensitive receptors (e.g. residences) in the case of dry pesticides and 200 feet in the case of wet pesticides. Generally, pesticide application should occur at low wind velocities (less than 10 mph). As shown on **Figure 3** (Site Plan) and based on a review of aerial photography, application of pesticides in the greenhouse and hoop-house structures and outdoor cultivation area would occur approximately 1,000 feet from the closest sensitive receptors which includes the residential buildings to the north. The requirement to maintain appropriate setbacks from nearby residences and limit spraying activities at low wind velocities is a standard County development condition related to cannabis operations. Specifically the following condition of approval will be a part of the CUP:

*Condition of Approval.* The spray application of pesticides (e.g. neem oil, sulfur or other materials) shall occur no closer than 500 feet to an adjacent residence. Spraying shall not occur at wind speeds greater than 10 miles per hour (CCR, Title 3, Division 6, 6960(b)(3)). The operator shall measure the wind speed prior to and during spraying activities to ensure wind speeds are below 10 mph. Spraying activities shall cease if wind speeds are measured at greater than 10 mph.

Odors that would be generated by the proposed cannabis facility would primarily occur from the outdoor cultivation activities. While odors from flowering cannabis plants can be strong within the immediate vicinity of cultivation sites, the distance of the operation to the nearest sensitive receptor, a single-family home (approximately 1,000 feet to the north), is more than the 500 foot setback from the property line requirement and would result in cannabis odors from the operations not being a significant issue to offsite sensitive receptors.

As proposed, the project's outdoor cultivation facility requires a variance as it does not meet the property line setback requirements of the Cannabis Ordinance. Once a variance is issued by the County, the variance is evaluated on an annual basis. Should odor from the project become an issue at the offsite residence the County could terminate the variance and require relocation of the outdoor cultivation area farther from the property line or require mitigation be implemented to reduce odors. Based on the analysis above and proposed operating restrictions, development of the project would have a less than significant impact.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Air Quality* were found to be less than significant because of the project design, size, location, and proposed operating restrictions.

**References:**

California Air Resources Board. 2017. *Area Designation Maps / State and National*. [Online]:<https://www.arb.ca.gov/permits/permits.htm>. Accessed: January 30, 2019.

California Department of Pesticide Regulation. *California Code of Regulations, Title 3, Food and Agriculture, Division 6. Pesticides and Pest Control Operations. Chapter 4. Environmental Protection, Subchapter 5. Surface Water, Article 1, Pesticide Contamination Prevention. Section 6960*. [Online]: <https://www.cdpr.ca.gov/docs/legbills/calcode/040501.htm>. Accessed: March 1, 2019.

North Coast Unified Air Quality Management District. 2018. [Online]: <http://ncuaqmd.org/index.php?page=rules.regulations>. Accessed: January 30, 2019.

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

Trinity County. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

Trinity County. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

Trinity County. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

Trinity County. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

Trinity County. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

IV. <b>BIOLOGICAL RESOURCES:</b> <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
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?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?				X

**Setting:** The project is situated on lands that have been previously disturbed by agricultural operations, cannabis production activities, single-family residential uses, as well as appurtenant structures and related uses. The project site has vegetation that is primarily ruderal and non-native.

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) A Biological Report was prepared for the project by the applicants’ consultant, Down River Consulting (Refer to Appendix, Section 6.0). The biological report included an evaluation of onsite wildlife habitats and the potential presence of Threatened, Endangered, or Sensitive (TES) plant and animal species. The evaluation found that the site has been historically disturbed by past agricultural activities and existing plant communities and wildlife habitats consist primarily of non-native and invasive plant species.

Literature searches and data analysis of the nine quadrangle area surrounding the project site documented occurrences of 18 TES plants, 24 TES animals, and four (4) TES fish. No TES plants were observed at the project site based on the botanical field investigations (Down River, 2018). The nearest known TES plant, Heckner’s *Lewisia*, is approximately 7 miles from the proposed project site. The proliferation of invasive species has caused the area to become an undefined vegetative community.

Of the 24 identified TES animal species listed, no mollusk, fish, reptile, or amphibian TES species will be impacted by development of the project as they are either not present on the site or the habitat areas are not considered part of the project site (Down River, 2018). Investigations determined that the Fisher (*Pekania pennanti*), and seven bat species including the Townsend’s big-eared bat (*Corynorhinus townsendii*), the Silver-haired bat (*Lasionycteris noctivagans*), the Hoary bat (*Lasiurus cinereus*), the Long-eared myotis (*Myotis evotis*), the Yuma myotis (*Myotis yumanensis*), the Long-legged myotis (*Myotis volans*), and the Fringed myotis (*Myotis thysanodes*) are all considered sensitive and can be assumed to be present due to habitat

suitability and historical observations in the area. Impacts to the fisher and bat species will be mitigated using preventative and integrated pest management strategies as noted below under **Mitigation Measure BR-1**.

Of the identified bird species listed as species of concern, only the Northern Spotted Owl (NSO) has been observed in the project area. While no nesting activity is known to occur onsite, the site could potentially be utilized for foraging activities. It should be noted that no NSO habitat will be removed as a result of the proposed project. In order to minimize unintended harm to foraging NSOs the project applicant proposes to utilize IPM strategies to control rodents as described in **Mitigation Measure BR-1**. The rodent prevention strategy focuses on the reduction of the property's rodent carrying capacity by removing food access and features that could provide habitat to rodents. The project applicant may also utilize domestic predators such as cats or dogs bred to hunt rodents if needed. Traps utilizing EradiBait, a non-coagulant powder corn cob, may also be used to reduce the rodent species as necessary at the project site (refer to **Mitigation Measure BR-1**).

Although the proposed project would not require the use of onsite generators, any typical onsite maintenance activities that could include the use of gas-powered mechanical equipment shall adhere to the following condition of approval. Specifically the following condition applies:

*Condition of Approval:* NSO are most active during dawn and dusk. Should the use of temporary onsite gas-powered maintenance equipment be required (i.e., leaf blowers, mowers), operation of such equipment shall be restricted during the 2 hour period prior to sunrise and 2 hour period before sunset.

With implementation of **Mitigation Measure BR-1** potential onsite impacts to the NSO would be less than significant. This mitigation measure will be included as a Condition of Approval in the CUP for ongoing activities.

- b) The project does not propose any development or impacts to riparian habitat or any sensitive natural community. Riparian habitat has not been identified onsite. No impacts will occur in this regard.
- c) The Biological Report identified several wetland areas that are seasonally inundated onsite; however these occur in areas that are not proposed for cultivation or the nursery site. Since no wetlands will be disturbed by the proposed project, no impacts to federally protected wetlands would occur.
- d) Due to the small scale of the proposed project, the movement of any native resident or migratory wildlife species or established native resident or migratory wildlife corridors is not anticipated to be significant. The project does not propose to alter any streams or rivers or otherwise impact fish movements. Also, the project site has been previously developed, farmed and otherwise developed with historical activities prior to the project proposal. These historic activities may have previously altered deer migration or local travel patterns, but this impact is considered the baseline condition and is not considered an impact for this project. Fencing that may be required around the cannabis operations represents a small portion of the overall historically impacted area and is not seen as an impediment to deer migration or the migration of other mammals. There will be no impact to avian migration from the project.
- e) The County General Plan, Conservation Element, discusses the need for the protection and conservation of natural resources including biological resources within the county. While the plan outlines various goals and objectives, there has been no policy developed related to specific biological resources or tree preservation or management that would specifically apply to the project and the lands where the project is located. The project does not propose to remove any trees or otherwise impact tree vegetation, as there are no trees on the project site that would be impacted. There will be no impact to these resources from development of the project.
- f) No habitat conservation plans, or other similar plans have been adopted for the project site or project area. No impact would occur in this regard.

**Mitigation Measures:** The following mitigation measures have been developed to reduce potential impacts related to Northern Spotted Owls to less than significant levels.

**Mitigation Measure BR-1:** Integrated Pest Management – The project applicant and/or operator shall utilize preventative non-chemical strategies, and IPM strategies identified by the California Department of Pesticide Regulation for cannabis production, to control the onsite proliferation of rodents. This shall include the following strategies to reduce the property's rodent carrying capacity:

- Remove food access and features that could provide habitat to rodents. Examples include, but are not limited to, using trash cans with lids, sealing holes along structures, maintaining a sealed compost area, eliminating standing surface water (puddles) and limiting the height of grasses around the project vicinity.
- Utilize traps and EradiBait, a non-coagulant powder corn cob to extirpate the species.
- If necessary, utilize domestic predators such as cats or dogs bred to hunt rodents.
- Use of rodenticides that are not DPR-restricted or federally restricted-use pesticides and registered for a broad enough use to include use in or around marijuana cultivation sites.

**Findings:** In the course of the above evaluation, impacts associated with *Biological Resources* were found to be less than significant with the implementation of the mitigation measures because of the project size, location, and limited scope of potential impact and lack of suitable habitat onsite.

**References:**

California Department of Pesticide Regulation. *Cannabis Pesticides that are Legal to Use*. December 2017. [Online]: <https://www.cdpr.ca.gov/cannabis>. Accessed: March 1, 2019.

California Department of Pesticide Regulation. *Cannabis Pesticides that Cannot be Used*. September 2018. [Online]: <https://www.cdpr.ca.gov/cannabis>. Accessed: March 1, 2019.

California Department of Pesticide Regulation. *Legal Pest Management Practices for Marijuana Growers in California*. 2015.

California Department of Pesticide Regulation. *Pesticide Use on Marijuana*. 2015.

Downriver Consulting. *Biological Report-Trinity Sungrown*. June 2018.

Trinity County. *General Plan Open Space and Conservation Element*.

USFWS. *National Wetland Inventory*. August 2018.

USFWS. *Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*. July 2006.

V. CULTURAL RESOURCES: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

**Setting:** The project site has a documented history of being developed for agriculture for over one hundred years. Other non-historical cultural uses may have occurred at the project site and in the surrounding vicinity.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) An onsite cultural resources survey was conducted by Natural Investigations Company on July 2, 2018 (Appendix, Section 6.0). The survey identified one historic-era house and four associated outbuildings at the site, however they do not qualify as a historical resource. There are no National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR) sites located at the project, or within close proximity of the site, that would call for the retention of the historical structure or listing. Therefore, no impacts to historical resources would occur with implementation of the proposed project.
- b) A cultural resources review completed for the project did not find any archaeological site that could be impacted by the proposed project. However, there is a possibility that cultural resources, including buried archaeological materials, could exist in the area and may be uncovered during project development. Therefore, if any resources are found during the construction of the proposed project, they will be mitigated through implementation of **Mitigation Measure CR-1**. Adherence to protocols established by **Mitigation Measure CR-1** would serve to avoid impacts that would result in a substantial adverse change in the significance of an archaeological resource as defined in CEQA §15064.5. Impacts would be less than significant with mitigation incorporated.
- c) There are no known burial sites on or immediately adjacent to the proposed project site. If human remains are unearthed during future development of the site, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this Section, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to California Public Resources Code Section 5097.98 and **Mitigation Measure CR-2**. Impacts are considered less than significant with mitigation incorporated.

**Mitigation Measures:**

The following mitigation measures have been developed, to reduce potential impacts related to undocumented cultural resources and unknown human burials to less than significant levels:

**Mitigation Measure CR-1.** If cultural resources, such as chipped or ground stone, or bone are discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior’s Standards and Guidelines, has evaluated the material and offered recommendations for further action.

**Mitigation Measures CR-2.** If In the event that previously unidentified evidence of human burial or human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie human remains (Public Resources Code, Section 7050.5)., The Trinity County Coroner must be informed and consulted, per State law. If the coroner determines the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify

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the person or persons it believes to be the most likely descendent. The most likely descendent will be given an opportunity to make recommendations for means of treatment of the human remains and any associated grave goods. when the commission is unable to identify a descendant or the descendants identified fail to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendants and the mediation provided for in subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance. Work in the area shall not continue until the human remains are dealt with according to the recommendations of the County Coroner, Native American Heritage Commission and/or the most likely descendent have been implemented.

**Findings:** With the implementation of the mitigation measures identified the project will have a less than significant impact to *Cultural Resources*.

**References:**

Natural Investigations Company. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 610 Kaut Road Project, Burnt Ranch, Trinity County, California*. July 2018.

VI. <u>ENERGY</u> :	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

**Discussion:** Based on the analysis undertaken as part of this Initial Study, the following findings can be made:

- a) Due to the limited scope of the proposed project as a minor expansion of an existing agricultural use, there are no proposed sources of new or expanded sources energy consumption onsite that could potentially cause significant environmental impact. There are no generators or other large machinery proposed for use either during construction or during operation. Due to the nature of project impacts are considered less than significant.
- b) There are no local plans for renewable energy or energy efficiency. California passed AB 32 which requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions using methods such as energy efficiency in new development. As noted above, the proposed project would not result in a substantial increase in energy consumption beyond existing conditions. Therefore, the proposed project would not conflict or obstruct plans related to renewable energy or energy efficiency, and impacts are less than significant.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** Based upon the review of the information above the implementation of the project will have a less than significant impact with respect to *Energy*.

**References:**

Trinity County. *Trinity County General Plan*.

VII. GEOLOGY AND SOILS: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> <li>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 Publications 42.</li> <li>ii) Strong seismic ground shaking?</li> <li>iii) Seismic-related ground failure, including liquefaction?</li> <li>iv) Landslides?</li> </ul>			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
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 waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

**Setting:** The project is situated in the Western Paleozoic and Triassic Belt of the Klamath Mountains province. The area consists of sedimentary and metamorphic rocks from the Weaverville and Bragdon Formations, the pre-Silurian meta-volcanic schist deposits, and Quaternary alluvium and terrace deposits. The project site consists of undivided Paleozoic metasedimentary rocks, including slate, sandstone, shale, limestone, marble, phyllite, schist, hornfels and quartzite. All soils have gravelly compositions, are well drained and are derived from ultramafic rock and serpentinite.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

a) The project may expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) *Rupture of a known earthquake fault:*

There are no active faults mapped in the project vicinity. The California Geological Survey (CGS, 2018) has the responsibility for mapping active earthquake faults in California, through legislation referred to as the Alquist-Priolo Earthquake Fault Zoning Act. There are no Alquist-Priolo earthquake fault zones identified in close proximity to the project site. There is no supplemental geologic data to suggest unmapped active faults in the region. Based on this existing information, there will be no impact to the project components from impacts related to surface fault rupture.

*ii) Strong seismic ground shaking:*

Although there are no known earthquake faults in the project vicinity, the entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the project vicinity. Seismic shaking potential is considered minimal and the hazard is not higher or lower at the project site than throughout the region. Standard design and construction practices meeting current California Building Code (where applicable) will provide adequate protection for buildings, pipelines and other facilities anticipated for the project. The implementation of these standard building practices will allow the project to have less than significant impacts.

*iii) Seismic-related ground failure, including liquefaction:*

Although located in a seismically active region (northern California), the project site is not likely to be subject to seismic shaking of adequate strength or duration to generate secondary seismic effects. Likely seismic sources are too far from the project site to generate sufficient long-duration strong shaking. Construction standards that meet the current California Building Codes (as applicable) will provide adequate protections and ensure less than significant impacts.

*iv) Landslides:*

The proposed project site is located on flat terrain, surrounded by steep slopes and mountainous terrain. There are no documented landslide hazard areas identified within the immediate vicinity of the site that would have an impact on the proposed project. Impacts would be less than significant.

- b)** The project soil classifications gravelly loam and very gravelly loam weathered from ultramafic rock and serpentinite. These gravelly soils in the Weitchpec-Dunsmuir families have high permeability as indicated by their well drained and runoff is very slow. The hazard of erosion is minor. With the alluvial land type, it can be subject to frequent flooding. There are no significant proposed modifications to the surface terrain from the project, as historical land development has significantly modified the site; therefore, the project is not expected to alter the susceptibility of the land to unstable earth conditions or erosion. Impacts would be less than significant.
- c)** See discussion VI.a, above.
- d)** There are no documented expansive soils located at the project site. No impacts would occur in this regard.
- e)** An existing septic system is installed on the project site that has been in operation for several years. The applicant must comply (as a Condition of Approval) that the septic system meets the requirements of Trinity County Environmental Health Department.
- f)** No paleontological resources or unique geologic features have been identified on the proposed project site, and the potential for their occurrence is considered minimal; there will be no impact.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** Based upon the review of the information above, the implementation of the project will have a less than significant impact with respect to *Geology and Soils*.

**References:**

National Resource Conservation Service. *WebSoil Survey*. [Online]:  
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed: January 30, 2019.

<b><u>IIX. GREENHOUSE GAS EMISSIONS:</u> <i>Would the project:</i></b>	<b>Potentially Significant Impact</b>	<b>Potentially Significant Impact Unless Mitigation Incorporated</b>	<b>Less-Than-Significant Impact</b>	<b>No Impact</b>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			<b>X</b>	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			<b>X</b>	

**Setting:** Greenhouse gases (GHGs) are gases in the atmosphere that absorb and emit radiation. The greenhouse effect traps heat in the troposphere through a three-fold process, summarized as follows: short wave radiation emitted by the sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHGs in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect. The main GHGs in the Earth's atmosphere are water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), ozone (O<sub>3</sub>), hydrofluorocarbons (HCFs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

California has passed Assembly Bill 32, mandating a reduction in greenhouse gas (GHG) emissions and Senate Bill 97, evaluating and addressing GHG under CEQA. On April 13, 2009, Governor’s Office of Planning and Research (OPR) submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for GHG emission, as required by Senate Bill 97 {Chapter 185, 2007} and they became effective March 18, 2010. As a result of these revisions to the CEQA Guidelines, lead agencies are obligated to determine whether a project’s GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects. At this time, neither the NCUAQMD nor Trinity County has established thresholds of significance for evaluating a project’s GHG emissions. In addition, neither a Climate Action Plan nor GHG Reduction Plan has been developed for Trinity County.

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) There are several unique challenges to analyzing greenhouse gas emissions and climate change largely because of the global nature of climate change. Most environmental analyses examine the “project specific” impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that while the magnitude of global warming effects is substantial, the contribution of an individual project is so small that direct project specific impacts are highly unlikely.

The proposed project involves the construction and operation of cannabis cultivation and a cannabis nursery. The proposed project could generate both direct and indirect GHG emissions. Direct GHG emissions include emissions from construction activities, area sources, and mobile (vehicle) sources. Typically, mobile sources make up the majority of direct emissions. Indirect GHG emissions are generated by incremental electricity consumption and waste generation. Electricity consumption is responsible for the majority of indirect emissions.

As noted above, neither the NCUAQMD nor Trinity County has established thresholds of significance for evaluating a project’s GHG emissions. Since there are no applicable thresholds for projects in the Air District or Trinity County, the NCUAQMD recommends the use of thresholds and guidance provided by other air districts in the State such as the Bay Area Air Quality Management District (BAAQMD). The BAAQMD has developed project screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant impacts related to greenhouse gas emissions. Projects below the applicable screening criteria would not exceed the 1,100 metric tons (MT) of CO<sub>2</sub>e/yr GHG threshold established by the BAAQMD for land use projects, other than permitted stationary sources.

The BAAQMD has not established a threshold of significance for this type of project as it is agricultural rather than commercial or industrial. Additionally, due to the nature of the project the crops will sequester carbon minimizing any overall emissions. Since the proposed project does not have specific screening criteria based on the limited potential for emissions, emissions from construction and operation of the project are determined to be less than significant. Based on the analysis above, development of the project would have a less than significant impact.

- b) The proposed project involves the expansion of a cannabis cultivation facility and development of a cannabis nursery. As a result, the proposed project could generate both direct and indirect GHG emissions. As noted above, there are no local plans that have been adopted for the purpose of reducing the emissions of greenhouse gases.

In 2006, the California Global Warming Solutions Act (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (Health & Safety Code §38500 et sec.), including setting a target of reducing GHG emissions to 1990 levels by 2020. AB 32 requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions. Recommendations to reduce residential GHG emissions include promoting energy efficiency in new development and improved coordination of land use and transportation planning on the city, county and subregional level, and other measures to reduce automobile use.

It is noted that the California Air Resources Board (CARB) announced in July 2018, that the State has already met the AB 32 goal of reducing emissions to 1990 levels by 2020 approximately four years early. As stated in the Executive Summary of the 2018 Edition of the California Greenhouse Gas Emissions Inventory: 2000-2016:

*"The inventory for 2016 shows that California's GHG emissions continue to decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million metric tons of CO2 equivalent (MMTCO2e), 12 MMTCO2e lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million metric tons. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the state remains on track to meet its climate targets in 2020 and beyond."*

The project is subject to a myriad of state regulations applicable to project design, construction, and operation that would reduce GHG emissions, increase energy efficiency, and provide compliance with the California Air Resources Board (CARB) Climate Change Scoping Plan (CARB, 2017). The State of California has the most comprehensive GHG regulatory requirements in the United States, with laws and regulations requiring reductions that affect project emissions. Legal mandates to reduce GHG emissions from vehicles, for example, reduce project-related vehicular emissions. Legal mandates to reduce GHG emissions from the energy production sector that will serve the proposed project would also reduce project-related GHG emissions from electricity consumption. Legal mandates to reduce per capita water consumption and impose waste management standards to reduce methane and other GHGs from solid wastes are all examples of mandates that reduce GHGs.

Trinity County ordinance 315-833 restricts auxiliary nursery sales for cannabis nurseries established in the Agricultural Preserve zoning district, therefore, operations will preclude access to the site from the general public. Due to the limited size of the project and due to the agricultural rather than industrial nature of the project there will be no significant sources of GHGs either during construction or during routine operation. Based on the analysis above, development of the project would have a less than significant impact.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation, impacts associated with *Greenhouse Gas Emissions* were found to be less than significant because of the limited size, nature, and location of the project.

**References:**

Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. 2017.

California Air Resources Board. *2017 Climate Change Scoping Plan: The Strategy for achieving California's 2030 greenhouse gas reduction target*. January 20, 2017.

California Air Resources Board. *8<sup>th</sup> Edition, California Greenhouse Gas Emissions Inventory: 2000-2016. California Greenhouse Gas Emissions for 2000 to 2016, Trends of Emissions and Other Indicators*. 2018.

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

Trinity County. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

Trinity County. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

Trinity County. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

Trinity County. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

Trinity County. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

Trinity County Public Utility District. *District History*. [Online]: <https://www.trinitypub.com/about/history.aspx>. Accessed: February 2, 2019.

Trinity County. *Regional Transportation Plan. October 2017*.

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

**Setting:** Hazards are those physical safety factors that can cause injury or death, and while by themselves in isolation may not pose a significant safety hazard to the public, when combined with development of projects can exacerbate hazardous conditions. Hazardous materials are typically chemicals or processes that are used or generated by a project that could pose harm to people, working at the site or on adjacent areas. Many of these chemicals can cause hazardous conditions to occur should they be improperly disposed of or accidentally spilled as part of project development or operations. Hazardous materials are also those listed as hazardous pursuant to Government Code Section 65962.5.

Lists of hazardous materials are maintained by federal and state agencies and are available for public review. The US Environmental Protection Agency (USEPA) maintains a database of hazardous materials as well as radiological materials as part of its RCRAInfo database (USEPA, 2018). The State of California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substances and contaminated sites as part of its Envirostor database (DTSC, 2018), as well as other hazardous and waste sites being overseen by the various State Water Resources Control Board which are inventoried in their Geotracker database (SWRCB, 2018). These databases are available to the public for review. No hazardous facilities or sites have been documented to be present at the project site, however, the site formerly contained an underground fuel storage tank (UST) that was identified as part of the State of California Leaking Underground Storage Tank (LUST) program. Documentation on the Geotracker data base indicates that this is a “Closed Case” meaning that the site has been cleaned up or remediated and a hazard or contamination from this case no longer exists.

The CALFIRE Fire and Resource Assessment Program (FRAP), delineates the project area as a part of a designated “Very High Fire Hazard Severity Zone” (VHFHSZ). The FRAP designates lands in three general classifications, “Moderate”, “High” and “Very High” Fire Hazard Severity Zones. Fire suppression for the area is provided by a combination of first responders such as CALFIRE (designated as a State Responsibility Area), with additional fire fighting support from nearby the US Forest Service (USFS) stations, and local volunteer fire companies.

Additionally, the Trinity County General Plan-Safety Element discusses wildland fires and outlines Wildland Urban Interface Zones Fuels Treatment Goals (Safety Plan, 2002) that describe fuel treatment activities around residential and other structures.

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) Small quantities of potentially hazardous substances (e.g., petroleum, chemicals used to operate and maintain vehicles and equipment) would be used at the project site, but none of these materials will be stored at the project facilities in quantities to be considered a significant hazard. Fertilizers are used during cultivation operations and are purchased and transported to the site as needed, with none stored onsite after use. Fertilizer is commercially available Maxsea All Purpose Plant Food in 100-pound containers. Pest management consists of applications of commercially available neem oil, sulfur and citric acid. The products are listed by the California Department of Pesticide Regulation (DPR) as “Legal to Use on Cannabis.” The applicant states that these are routinely purchased and utilized onsite but are not stored in quantity. Application of fertilizers and pesticides are used on cultivation areas only. Applicant has stated that used fertilizer and chemical containers are disposed of according to manufacturer’s requirements. Compliance with standard transport and handling procedures of the chemical manufacturers and standard conditions of approval through the various County cannabis ordinances and DPR requirements would ensure that impacts would not be significant.
- b) The proposed project could expose workers, the public, or the environment to hazardous materials through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers and pesticides) would be used at the proposed project site. Accidental releases of these substances could potentially contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. Compliance with standard safety procedures, hazardous materials handling regulations, and pesticide application requirements would ensure that impacts would not be significant.
- c) The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impacts would occur in this regard.
- d) The proposed project is not located on a site which is included on a list of hazardous materials sites and would not create a significant hazard to the public or the environment. No impacts would occur in this regard.
- e) The proposed project is not located within two miles of a public or private airport. No impacts would occur in this regard.
- f) There are no indications at this time that the proposed project would impair implementation of, or physically interfere, with an adopted emergency response plan or emergency evacuation plan. There would be no impact from this project and there would be no impact to users of the project site.
- g) The majority of the site has been previously disturbed by onsite agricultural activities. Development of the project will comply with State Fire Safe Standards for protection of life and property from wildfires through maintaining appropriate vegetation management around proposed greenhouse structures, the availability and accessibility of onsite water storage (i.e., existing pond, water storage tanks), and other actions required for fire protection/suppression actions as may be determined by the County or CALFIRE. Through implementation of fire safe standards, the project will not be at significant risk of damage from wildfire and the project would not cause significant wildfire risk to the area from project related activities and be in compliance with the County General Plan Safety Element. Based on this evaluation the project would contribute to a less than significant impact related to increased wildfire risk in the area.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Hazards and Hazardous Materials* were found to be less than significant because of the project size, location and limited scope of potential impact.

**References:**

California Department of Pesticide Regulation. *Cannabis Pesticides that are Legal to Use*. December 2017. [Online]: <https://www.cdpr.ca.gov/cannabis>. Accessed: March 1, 2019.

California Department of Pesticide Regulation. *Legal Pest Management Practices for Marijuana Growers in California*. 2015.

California Department of Toxics Substances Control (DTSC). *Envirostor Database*. 2018.

State of California Fire and Resource Assessment Program. *State Responsibility Areas*. 2012.

State of California Fire and Resource Assessment Program. *Fire Hazard Severity Zones*. 2007.

State Water Resources Control Board. *Geotracker Database*. 2018

Trinity County. *General Plan Safety Element*. Revised March 2002.

Trinity County. *General Plan Circulation Element*. Revised 2002.

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

Trinity County. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

Trinity County. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

Trinity County. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

Trinity County. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

Trinity County. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

USEPA. *RCRA Database*. 2018.

X. <u>HYDROLOGY AND WATER QUALITY</u> : <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: <ul style="list-style-type: none"> <li>i. Result in substantial erosion or siltation on- or off-site;</li> <li>ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</li> <li>iii. Create or contribute runoff water which would exceed the capacity of existing planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</li> <li>iv. Impede or redirect flood flows?</li> </ul>			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

**Setting:** The project is on private lands surrounded by minimal development and National Forest land. The nearest water source is a tributary of McDonald Creek which runs north-south through the western portion of the project area. There are no stream crossings or additional water diversions proposed as a part of this project.

Impacts to water quality associated with cannabis cultivation activities proposed by the Project were initially regulated by the North Coast Regional Water Quality Control Board (RWQCB) under Order No. 2015-0023 and are required to transition to regulations of the State Water Resources Control Board (SWRCB) Order No. WQ 2017-0023-DWQ by July, 2019 as applicable to cannabis production. Additionally, the Cannabis Ordinances developed by the County identify specific requirements for water use and quality, including compliance with Senate Bill 94 (SB 94) and any applicable NCRWQCB or SWRCB regulations in effect. The project applicant has also completed a Water Resource Protection Plan (WRPP) for the operations at the project site, in compliance with the conditions outlined in Order 2015-0023.

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The proposed project is served by an existing onsite septic system for the treatment of domestic wastewater. Additionally, the applicant has had a WRPP completed for the site and the current operations. The plan documents that the applicant has been working on improvements outlined in the plan and there is an agreement in place between the applicant and CDFW. The Regional Water Quality Control Board has determined that the proposed project is exempt from the Construction General Permit Order; however the applicant is required to comply with the requirements of the Regional Order No. R1-2015-0023 which requires dischargers to implement Appendix B: *Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects*. Based on the above, the project will have a less than significant impact.
  
- b) Water service for the proposed project is provided by two existing water diversions. Water is carried from these diversions to a storage pond and several storage tanks. There are no existing groundwater wells and none are proposed as part of the project. There will be no impact to groundwater resources.

- c) No significant land alteration is proposed by this project; land alteration has occurred with the historical developments at the site and the proposed use will continue to operate within existing facilities. There will be a less than significant impact.
- The project activities will be required to comply with the standard provisions of the County Cannabis Ordinances as well as Regional Order No. R1-2015-0023 which requires dischargers to implement Appendix B: *Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects*. Implementation of these standard conditions will result in the protection of water quality and not impact drainage patterns or surface runoff.
  - The project does not include the addition of impervious surfaces or any other structural changes that would cause an increase in the volume or flow rate of any runoff.
  - Due to the rural location of the project and the nature of the agricultural activities there are no stormwater drainage systems which would be impacted by the proposed project. The project does not include any features which would cause the addition of polluted runoff to the stormwater runoff or a drainage system.
  - The project does not propose any features which would impede or redirect flood flows.
- d) Flood zones are geographic areas that FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM). Each zone reflects the anticipated type of flooding in the area. As depicted on the FEMA Flood Zones maps for the area, the project site is in Zone D and not in a floodway, 100-year flood zone, or the 500-year flood zone. Zone D areas are those in which flood hazards are undetermined, but possible. This ranking has a lower potential for flooding than the Zone X (areas outside of the 0.2% annual chance floodplain). Based upon this information, and the location of the project site well out of the Trinity River floodplain, there no risk of release of pollutants due to project inundation. No impact would occur.
- e) The location of the project site is in an area where inundation from dam failures will not occur because the project site will be situated well above the floodplain of the Trinity River. There are no levees near the proposed project. The threat of a tsunami wave is not applicable to inland areas; there is no potential for the generation of a seiche. No impact has been identified.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated *Hydrology and Water Quality* were found to be less than significant.

**References:**

Federal Emergency Management Agency. 2010. Flood Insurance Rate Map (FIRM), Map Number 06105C0750E, Revised January 20, 2010.

State of California. *Regional Water Quality Control Board Order No. 2015-0023*.

State of California. *State Water Resources Control Board Order No. WQ 2017-0023-DWQ*. [Online]:  
[https://www.waterboards.ca.gov/water\\_issues/programs/cannabis/docs/finaladoptedcango101717.pdf](https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/finaladoptedcango101717.pdf)

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

Trinity County. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

Trinity County. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

Trinity County. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

Trinity County. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

Trinity County. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

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Trinity County. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

XI. LAND USE AND PLANNING: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

**Setting:** The project site is located on the southern end of the community of Burnt Ranch. Development surrounding the subject site is generally limited due to the large parcel size (200 acres) and the surrounding property largely being within the Shasta-Trinity National Forest. The project site is surrounded by County General Plan designated Resource (RE) lands with Unclassified (U) zoning with minimal development. There are minimal commercial and public service developments in the community of Burnt Ranch.

The project site has been designated Resource (RE) land by the County General Plan and zoned for Agricultural Preserve (AP). Both the County General Plan and Zoning Districts did not specifically anticipate development of commercial cannabis when these land use plans and zoning districts were developed. In response to California State Law that allows commercial cannabis activities under permitted and controlled conditions, Trinity County developed County-specific ordinances to regulate commercial cannabis cultivation, testing, nurseries, manufacturing, distribution, microbusiness, events and sales within the County. Ordinances 315-823, 315-829, 315-830 and 315-841 regulate cultivation and are all specifically titled “An Ordinance of the Board of Supervisors of the County of Trinity Amending Zoning Ordinance No. 315 Creating Section 28: Commercial Cannabis Cultivation Regulations,” while Ordinances 315-826, 315-827 and 315-833 regulate cannabis nurseries and are all specifically titled “An Ordinance of the Board of Supervisors of the County of Trinity amending Section 43.4 of Trinity County Zoning Ordinance No. 315 Regarding Wholesale Cannabis Nurseries and Resale of Auxiliary Nursery Products.” All of these ordinances are referred to, collectively, in this section as the “Cannabis Ordinance.”

The Cannabis Ordinance, in combination with the provisions of the General Plan and requirements of the Zoning Districts are used to determine appropriate land uses of cannabis operations in Trinity County. An applicant can apply for a Use Permit for cannabis cultivation and nursery operations under the Cannabis Ordinance, including a variance to the provisions and requirements of the Cannabis Ordinance, with approval at the discretion of the County Planning Commission and Board of Supervisors.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The project does not have the potential to physically divide an established community; the project does not propose to divide land or rezone the parcel. Access to the site is limited and the land surrounding the property on three sides is National Forest. No impact has been identified.
- c) The County’s General Plan serves as the overall guiding policy document for land use and development. The subject property is designated in the General Plan as Resource (RE) land and is zoned for Agricultural Preserve (AP). The surrounding properties all have Unclassified (U) zoning and are identified as RE in the General Plan. The properties that border the project site to the south, east, and west are public lands managed by the US Forest Service. As the proposed project includes a relatively minor expansion of agricultural related activities onsite, the project is considered consistent with the County AP zoning and the actions allowed under the Williamson Act contract for the site. Additionally, the project will not conflict with any conservation plans as there is no Habitat Conservation Plan or Natural Community Conservation Plan for the area.

The project as proposed does not comply with the Trinity County Ordinance 315-823, requiring a 500 ft setback from the property line for Type- 3 (medium, or up to one acre of canopy) cannabis cultivation. The applicant has submitted an application for a variance. As a condition of approval for the Use Permit, the variance will need to be approved by the County before the applicant can proceed with the proposed project. Based on the proposed uses of the project, the proposed project does not conflict with the land use designations for the project site. Therefore, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

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**Findings:** In the course of the above evaluation impacts associated with *Land Use and Planning* were found to be less than significant as the project is compatible with the current land use designations.

**References:**

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

Trinity County. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

Trinity County. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

Trinity County. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

Trinity County. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

Trinity County. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

XII. MINERAL RESOURCES: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan?				X

**Setting:** Mineral production has historically been a significant part of the economy of the County but has waned in the last 75 years. Historically, the County has seen a wide array of mineral production, including asbestos, chromite, copper, sand and gravel, limestone and manganese to name a few. The proposed project site has historically been used for agricultural purposes. The project area has not been designated by the State or Trinity County as an area of significant mineral resources or an area of locally important minerals.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

**a-b)** A mineral resource is land on which known deposits of commercially viable mineral or aggregate deposits exist. The designation is applied to sites determined by the California Geological Survey as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses. The project would not 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 and would not result in the loss of availability of a locally-important mineral resource recovery site. The site has not been designated as an important mineral resource recovery site by a local general plan, specific plan, or other land use plan or by the State of California. No impact has been identified.

**Mitigation Measures:** No mitigation measures are required.

**Findings:** In the course of the above evaluation it was determined that there were no impacts associated with *Mineral Resources*.

**References:**

California Geological Survey. *Mineral Land Classifications*. 2018.

National Resource Conservation Service. *WebSoil Survey*. [Online]: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed: January 30, 2019.

Trinity County. *General Plan Open Space and Conservation Element*.

XIII. NOISE: <i>Would the project result in:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive ground borne vibration or ground borne noise levels				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

**Setting:** Noise impacts are those that exceed general plan or other local ordinances developed to provide reasonable control of noise to residences, parks, open spaces and other specific designated sites. Noise sources typically include roadways, freeways, schools, industrial and commercial operations and other facilities that can generate noise. The Trinity County General Plan Noise Element and the Cannabis Ordinances provide guidelines and direction for noise sources and attenuation requirements for various uses. Projects proposed for development within the County will have their development evaluated to determine potential conformance with the Noise Element and as necessary, specific conditions of approval will be placed on projects.

In the vicinity of the project, noise generation sources are varied and consist of vehicle traffic along SR-299 and County Roads, and any maintenance activities on surrounding residential and forest service lands. The flat terrain of the area allows noise to travel distance, without attenuation due to structures or vegetation.

Residential developments, schools and hospitals are considered sensitive noise receptors as these are locations where people sleep or typically expect quiet conditions. Sensitive noise conditions are typically at night and measured as indoor levels in decibels (dB). The nearest sensitive receptors to the project site are residential developments (approximately 1000 ft to the north of the property line) and the Burnt Ranch Elementary School (approximately 1 mile from the property line).

**Discussion:** Based on a field review by the Planning Department and other agency staff, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The nearest offsite sensitive receptor is a residence approximately 1000 ft north of the property line. Project generated noise may be heard at these residences, but normal cannabis operations are not considered a significant noise generation source because the daily activities are generally hand operations with minimal equipment use. The project will not have any onsite generators, therefore there will be no noise associated with stationary generation devices. Minor amounts of noise could be generated from the development of hoop-houses for cultivation and nursery activities, but this noise is time limited to facility construction and daytime hours, then is ceased. Assuming a generation of noise during the construction period of 80 dBA at the proposed project site, construction noise is calculated to be reduced to 24 dBA at the property line (north towards the residence) and further reduced to 19dBA at the exterior of the residence. These levels are below the General Plan Noise Element maximum limits for noise at residential sites. Implementation of standard conditions of the various cannabis ordinances and review by County for compliance during operations will reduce impacts to less than significant.
- b) Ground borne vibrations are usually associated with heavy vehicle traffic (including railroad traffic), and with heavy equipment operations. The proposed project does not include activities that would result in groundborne vibration, such as pile driving or heavy construction equipment. Therefore, there will be no impact.
- c) The proposed project is not located within the vicinity of a private or public airport or airstrip. No impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Noise* were found to be less than significant.

**References:**

Environmental Protection Agency, Noise Effects Handbook. USEPA, Revised 1981. [Online]:  
[www.nonoise.org/library/handbook/handbook.htm](http://www.nonoise.org/library/handbook/handbook.htm)

Trinity County. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

Trinity County. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

Trinity County. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

Trinity County. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

Trinity County. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

Trinity County. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

Trinity County. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

Trinity County. *General Plan Noise Element. 2003*.

XIV. POPULATION AND HOUSING: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

**Setting:** The community of Burnt Ranch has a population of approximately 281 persons based on the 2010 US Census Data, this was an increase from 177 people in 2000. The median household income is \$37,723 per year. Housing throughout the area is primarily individual rural residences on larger lots and parcels of land.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) Implementation of the proposed project would result in the development and use of existing lands and facilities, with no new housing being proposed. Three (3) permanent workers and approximately seven (7) seasonal workers are proposed for this project, and the applicant states that these workers will come from the existing local population. If these employees do not already live in the area, they would be required to find off-site housing as no housing is proposed by the project. Based on the information provided, and evaluation of the area, there are no growth-inducing impacts associated with this project.
- b) The project site is currently developed with historical agricultural uses, cannabis crops, and associated agricultural buildings and a single-family residence. The proposed project would not displace any people or existing housing, as none is located at the project site; the existing housing onsite would be retained for use by two of the permanent employees. No impact has been identified.

**Mitigation Measures:** No mitigation measures are required.

**Findings:** Based on the information reviewed for the *Population and Housing* resource, the project will have no impact.

**References:**

US Census Bureau. *American Fact Finder*. [Online]: [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml). Accessed: February 1, 2019.

<b>XV. PUBLIC SERVICES:</b> <i>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>	<b>Potentially Significant Impact</b>	<b>Potentially Significant Impact Unless Mitigation Incorporated</b>	<b>Less-Than-Significant Impact</b>	<b>No Impact</b>
Fire Protection?			X	
Police Protection?			X	
Schools?			X	
Parks?				X
Other public facilities?			X	

**Setting:** The project site is located on the southern end of the community of Burnt Ranch, which has public services available to residential, commercial and industrial users. Fire protection is provided by CALFIRE; the US Forest Service has a fire station in the vicinity (Salyer Ranger Station) and the nearest volunteer fire department is the Hawkins Bar Volunteer department which provides mutual aid services. Law enforcement to the area is provided by the Trinity County Sheriff’s Department and the California Highway Patrol. There are no medical services in the immediate vicinity, with the nearest medical services provided approximately 16 miles west in the community of Willow Creek, which has a medical clinic. The nearest hospital is located in Weaverville, approximately 40 miles east. Burnt Ranch Elementary School serves grades K-8, with high schools located in both Weaverville and Hoopa, California.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

*Fire and Police Protection:*

Fire and police protection services to the proposed project are currently provided by County, State and Federal agencies and private emergency responders. Development of the project within the community is not expected to significantly increase the demand for these protection services. As required by the County Cannabis Ordinance for Nursery facilities, security measures must be in place for nursery operations including fencing, sufficient to restrict access and deter trespass and theft of Cannabis or Cannabis products. A security plan is required for this operation and must be approved by the County Board of Supervisors, as a standard condition of approval, after the Conditional Use Permit is issued. Based on these factors and standard conditions, impacts are considered less than significant.

*Schools:*

Burnt Ranch Elementary and Trinity High School provide primary education to students in the area. While the development of this project could attract employees with families that may have school age children, and those students may contribute to the total student enrollment in these schools, the implementation of the proposed project is not expected to result in a significant increase in the number of school-age children as the result of three (3) permanent employees who work and may also reside within the school districts. Therefore, the potential impacts are considered less than significant.

*Parks:*

There are no developed parks in the vicinity of the project site, and the proposed project will not increase the intensity of the land use, impacts to parks and recreational facilities in the project area would remain at existing conditions; no new residential uses are proposed. The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, there is no impact.

*Other public facilities:*

The proposed project does not involve a substantial change in the land use, does not substantially increase the numbers of people employed in the region, and does not create or require new housing or related facilities, an increased demand on public facilities is unlikely to occur. There would be a less than significant impact to other public services related to this project.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** Based on the evaluations above for Public Services the impacts associated with development of the project were found to be less than significant.

**References:**

California Board of Forestry and Fire Protection. *State Responsibility Area Viewer*. [Online]: [http://www.fire.ca.gov/firepreventionfee/srviewer\\_launch](http://www.fire.ca.gov/firepreventionfee/srviewer_launch). Accessed January 30, 2019.

Klamath-Trinity Joint Unified School District. [Online]: [www.ktjUSD.k12.ca.us](http://www.ktjUSD.k12.ca.us). Accessed March 5, 2019.

Trinity County. *General Plan Safety Element*. Revised March 2002.

Trinity County Office of Education. [Online]: [www.tcoek12.org](http://www.tcoek12.org). Accessed February 26, 2019.

XVI. <u>RECREATION</u> :	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

**Setting:** There are no developed recreation specific parks or facilities near the project. The nearest developed site is the Burnt Ranch Elementary School that has play equipment and sports fields. Other dispersed recreation facilities are National Forest campgrounds, day use sites and river access points along the Trinity River.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The proposed project does not propose to add significant new numbers of people that would require housing and ancillary recreation facilities, therefore the proposed project would not 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) The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment

**Mitigation Measures:** No mitigation measures are required.

**Findings:** In the course of the above evaluation it was determined that there were no impacts associated with *Recreation*.

**References:**

Trinity County. *General Plan Open Space and Conservation*.

USDA Forest Service, Shasta-Trinity National Forest, Recreation. [Online]: <https://www.fs.usda.gov/recmain/stnf/recreation>

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

**Setting:** The project site is located on private property that has existing access to Kaut Road (a Trinity County road). Kaut Road is currently accessed by three other parcels and connects to Underwood Mountain Road (a County road) which intersects with SR-299, the main east/west transportation route in the region.

The Trinity County General Plan, Circulation Element was last updated in 2002 to address changes to state requirements for regional transportation planning and to address other changes to the Circulation element. The Circulation Element does not address vehicle miles traveled (VMT).

Public transit services are provided by the County through Trinity Transit, which provides daily bus service from Willow Creek to Weaverville with two route stops in Burnt Ranch. Other private transit carriers also operate in Trinity County to provide services to the elderly, disabled, school children and others.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

**a-b)** Project approval would allow for the development of a cannabis cultivation site and cannabis nursery on existing agricultural land. As this project does not propose the development of new roads or easements there is no conflict with the current Circulation Element of the General Plan. The facility is expected to employ three employees during a majority of the year with a maximum of ten employees during peak harvest season; this will not cause a significant increase in traffic or require changes to any roadways, public transit, or pedestrian facilities.

Since the proposed project is a continuation of an existing cannabis development, the impacts to VMT are similar to the existing condition. While some additional traffic can be anticipated with final product transport off of the site, the impacts are not considered significant. This is due to the remote nature of the proposed project, which is isolated from existing commerce areas (Willow Creek and Weaverville). Vehicles must currently travel to these destinations (or in cases farther to Redding and Eureka), to access goods and the incremental increase in traffic is not anticipated to be significant. Also, new employees (as well as seasonal employees) are presumed to be from the local Burnt Ranch population and would not cause significant additional traffic in the area. Impacts from development of this project are considered less than significant.

**c)** The proposed project has not proposed any new roads and does not propose or require any realignment of existing roads that might cause hazards to geometric design features or have incompatible uses. No significant hazards are anticipated with the development of this project; the project would have a less than significant impact.

**d)** Adequate existing access is provided to the site with State, County and onsite private roads. The project does not change the existing access to the project site; therefore, the ability for emergency vehicles and personnel to access the subject property will remain at existing condition levels upon completion of the proposed project. The project will be required to comply with State and local Fire Safe Standards and applicable regulations for emergency vehicle access to the project sites including implementation of requirements by the Trinity County Department of Transportation and as directed by CALFIRE for compliance with State Fire Safe Standards. No impacts are anticipated in this regard.

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**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Transportation and Traffic* were found to be less than significant.

**References:**

Trinity County. *General Plan Circulation Element*. Revised 2002.

<b><u>XVIII. TRIBAL CULTURAL RESOURCES:</u></b> <i>Would the project 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>	<b>Potentially Significant Impact</b>	<b>Potentially Significant Impact Unless Mitigation Incorporated</b>	<b>Less-Than-Significant Impact</b>	<b>No Impact</b>
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			<b>X</b>	
b) 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. 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.			<b>X</b>	

**Discussion:** The County circulated an AB 52 notification to interested Tribal entities on January 14, 2018. No responses were received within the 30-day comment period requesting formal consultation under the provision of AB 52. Additional Tribal outreach occurred during the development of the Cultural Resources Assessment (Natural Investigations Company), and those efforts and results are discussed in Section V, Cultural Resources.

Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The County circulated an AB 52 notification to interested Tribal entities on January 14, 2018. No responses were received within the 30-day comment period requesting formal consultation under the provision of AB 52. Based on the lack of response, and the additional Tribal outreach during development of the Cultural Resources Assessment for the proposed project, there are no known historical resources that are listed, or eligible for listing, on the California Register of Historical Resources. Mitigation measures were developed for the potential future location of cultural resources, and are identified in Section V of this document. Based on the lack of response by Tribal entities and lack of known resources, impacts are anticipated to be less than significant.
- b) Trinity County (as lead agency) has determined that there are no resources present that are considered significant, and no additional mitigation or project modifications are required. Mitigation measures for cultural resources are provided in Section V, Cultural Resources section for development of this project that are considered to be sufficient to protect unknown future cultural resources that may be found at the project site.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Tribal Cultural Resources* were found to be less than significant. Mitigation measures for the protection of currently unknown but discovered resources are provided for in Section IV-Cultural Resources.

**References:**

Natural Investigations Company. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 610 Kaut Road Project*. July 2018.

XIX. UTILITIES AND SERVICE SYSTEMS: <i>Would the project:</i>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?			X	

**Setting:** Limited public utilities and service systems are provided and available in the area of the project. Pacific Gas & Electric (PG&E) provides electric power service to Burnt Ranch, no piped natural gas is provided. The Trinity County Solid Waste Department provides solid waste services at County landfills, with waste disposal by private waste haulers or individuals. Cannabis waste is not permitted at County landfills.

Water is provided to the site through permitted spring and creek diversions. Wastewater is disposed of through an existing residential onsite septic system.

**Discussion:** Based on a field review by the Planning Department, information provided by the applicant, existing information available to the Planning Department, and observations made on the project site and in the vicinity, the following findings can be made:

- a) The proposed project has an existing onsite septic system that disposes of domestic wastewater. This system would continue to be utilized for the three permanent workers at the site and the seven seasonal workers, and is not proposed to be expanded to accommodate other future onsite uses. Should the applicant need to expand the system, they would be required to follow standard County procedures for septic system development as provided for by the Trinity County Department of Environmental Health. It is the applicants' responsibility to continue to provide normal maintenance and repairs to the septic system. The applicant has indicated that no other wastewater would be generated, as the bulk of the water used onsite will be for irrigation. The proposed project is currently served by existing water supplies and systems that are privately owned and operated by the applicant, and there would be no impact on other water systems. There is sufficient power provided to the site for the proposed project, and there are no stationary generators proposed for the project. Based on the current anticipated uses at the site, there would be no impact.
- b) Implementation of the proposed project would not require new infrastructure to support water service. Water is currently provided to the site by a permitted spring diversion, the water is then directed to a 5,000 gallon storage tank for domestic use. Additionally, there is a creek diversion that provides water for irrigation. This diversion allows for a maximum diversion rate of 300 gallons per day between May 15<sup>th</sup> and October 31<sup>st</sup> during the annual forbearance period. Water for irrigation is provided by this diversion and is stored in a 75,000 gallon pond. The 75,000 gallon pond is of sufficient capacity to provide irrigation water during the forbearance period. There is a 2,500 gallon water tank on the property for fire suppression. Should there be new uses of the water the applicant will be required to apply for a revision to their existing permit with the Department of Water Rights. Based on the water available to the proposed project, impacts are anticipated to be less than significant.

- 
- c) The proposed project is served by an onsite septic system that is owned by the applicant; there are no impacts to community/public wastewater systems, as there are none in the area. The applicant shall ensure that the existing septic system meets the requirements of Trinity County Environmental Health Department, within 60 days of issuance of the use permit.
  
  - d) Non-cannabis solid waste produced by the project would be disposed of at existing solid waste facilities as other residential and commercial solid waste is currently handled in the County. Sending the solid waste stream to existing permitted facilities, either by existing contract haulers or self disposal, will ensure that the project does not violate any federal, State or local statutes related to solid waste. The project will also develop onsite composting of organic debris from the cannabis cultivation operations, which will reduce the solid waste impact to the landfills. Based on the above, the impact to solid waste services will be less than significant.
  
  - e) The County regulates and operates programs that promote the proper disposal of toxic and hazardous materials from households, including those created by the project. There are no current waste reduction plans or statues in place in the County. However, should they be implemented the proposed project would comply with local statutes and regulations related to solid waste. Less than significant impacts are anticipated in this regard.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** In the course of the above evaluation impacts associated with *Utilities and Service Systems* were found to be less than significant.

**References:**

Trinity County Solid Waste. [Online]: <https://www.trintycounty.org/Solid-Waste>. Accessed February 10, 2019.

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

The proposed project is located in an area designated as being in the Very High Fire Hazard Severity Zone (VHFHSZ), as identified by the CALFIRE Fire and Resource Assessment Program (FRAP) Fire Hazard Severity Zones in State Responsibility Areas (SRA) (CALFIRE 2007). However, the majority of land in Trinity County has a designation of VHFHSZ (for both SRA and non-SRA lands) including the existing residential parcels and undeveloped timbered parcels in the area surrounding the project in the Burnt Ranch area. Fire hydrants in the County are limited to highly developed areas, and none are located in the area of the project. However, the County General Plan has taken this fact into consideration as a part of the Trinity County General Plan Safety Element. In addition to the local General Plan, the State of California has developed Fire Safe Standards (Public Resource Code Sections 4290 and 4291) which dictate development in rural areas throughout the state, and require vegetation clearing, onsite water storage requirements and other building and development standards.

**Discussion:** Based on the analysis undertaken as part of this Initial Study the, following findings can be made:

- a) Based on the Trinity County General Plan Safety Element, both Underwood Mountain Road and SR-299 are considered Major Evacuation Routes. As the project will not impact traffic intensity on either of these roadways or impair access to these roadways or surrounding properties, the project is not expected to impair the emergency evacuation plan. Due to the location of the project the impacts are considered to be less than significant.
- b) The project area has been previously developed and the proposed project does not propose changes to the project site or surrounding property that would exacerbate wildfire risks. Due to the landscape of the site, developed agricultural lands adjacent to forest lands, there is no reason to believe that the project would expose project occupants to elevated concentrations of pollutants from a wildfire. The Trinity River canyon (which includes Burnt Ranch), has a recent history of significant smoke impacts to public health from wildfires in the region. However, there is no significant change to the site from the proposed project that would lead to the project exacerbating wildfires and related pollutant contamination. Based on past land uses at the site and in the area that have cleared flammable vegetation, including conformance with State and County fire safe standards, the project will result in impacts that are less than significant.
- c) The project does not include the addition of new roads, fuel breaks, emergency water sources, power lines or other utilities. Currently on the site there is a 2,500-gallon water storage tank for use in fire suppression. There are no temporary or ongoing activities that will exacerbate the fire risk in the area, impacts are considered less than significant.
- d) The location of the proposed project does not fall within a FEMA flood zone, nor are there any sheer or unstable cliffs in the immediate area. There is no reason to believe that occupants or structures would be exposed to significant risks from flooding or landslides as a result of post-fire runoff, impacts are considered to be less than significant.

**Mitigation Measures:** No mitigation measures are required. Impacts would be less than significant.

**Findings:** Based upon the review of the information above the implementation of the project will have a less than significant impact with respect to *Wildfire*.

**References:**

California Public Resources Code, Division 4, Forests, Forestry and Range and Forage Lands. Part 2 Protection of Forest, Range and Forage Lands. Chapter 2, Hazardous Fire Areas, Sections 4251-4290.5.

California Public Resources Code, Division 4, Forests, Forestry and Range and Forage Lands. Part 2 Protection of Forest, Range and Forage Lands. Chapter 3, Mountainous, Forest-, Brush- and Grass-Covered Lands, Sections 4291-4299.

California Board of Forestry and Fire Protection. *State Responsibility Area Viewer*. [Online]: [http://www.fire.ca.gov/firepreventionfee/srviewer\\_launch](http://www.fire.ca.gov/firepreventionfee/srviewer_launch). Accessed: January 30, 2019.

California Board of Forestry and Fire Protection. *SRA Fire Safe Regulations*. [Online]: [www.fire.ca.gov/fire\\_prevention/download/Title\\_14.pdf](http://www.fire.ca.gov/fire_prevention/download/Title_14.pdf). Accessed January 30, 2019.

Trinity County. *General Plan Safety Element*. Revised March 2002.

Trinity County. *Parcel Viewer*. [Online]: <http://trinitycounty.maps.arcgis.com/apps/Viewer/index.html?appid=320cf1c1558c43c8b1f2f70c23d35026>, Accessed: January 30, 2019.

XXI. <u>MANDATORY FINDINGS OF SIGNIFICANCE:</u>	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) 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 the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
c) Does the project have potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly?			X	

**Discussion:** Based on the analysis undertaken as part of this Initial Study the, following findings can be made:

- a) Evaluation of the proposed project in this document (Section IV, *Biological Resources*) has shown that the activities of the proposed project do not have the potential to degrade the quality of the environment and will not substantially reduce the habitat or cause wildlife populations to drop below self-sustaining levels. Mitigation measures for the Northern Spotted Owl (a listed species) have been developed to reduce potential impacts on the species from noise disturbance and require the proposed project to comply with requirements regarding rodent control methods.

Also, based on the discussion and findings in Section V. *Cultural Resources*, there is evidence to support a finding that the proposed project is not eligible for listing in the NRHP or CRHR under any significance criteria. Considering the history of extensive agricultural disturbance within the project area and all its previous uses, including over 100 years of documented and related activities, the potential for discovery of intact archaeological deposits or features by implementation of this project is considered low. Although no archaeological deposits or features were found during the Cultural Resources study, implementation of mitigation measures will ensure that any additional archaeological deposits or features may be discovered are fully protected during implementation of the project.

- b) As discussed throughout this document, implementation of the proposed project has the potential to result in impacts to the environment that are individually limited, but are not cumulatively considerable, including impacts to biological and cultural resources.

In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resources listed above) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed throughout this document, the proposed project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

- c) Based on the discussion and findings in all Sections above, there is no evidence to support a finding that the proposed project has potential environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly.

**Findings:** Based upon the review of the information above, the implementation of the project is not anticipated to have a substantial adverse effect on the environment. Therefore, there is no significant impact.

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## SECTION 4.0 DETERMINATION

### DETERMINATION: (To be completed by the Lead Agency)

On the basis of the initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described 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.

Copies of the Initial Study and related materials and documentation may be obtained at the Trinity County Planning, 61 Airport Road, Weaverville, CA 96093. Contact Leslie Hubbard, Deputy Director of Planning (530) 623-1351 ext. 3.

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Leslie Hubbard, Deputy Director of Planning  
Trinity County Planning Department

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Date

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## SECTION 5.0 REFERENCES

The following technical studies, reference documents, and data sources were utilized as primary references in developing the Trinity Sungrown Cannabis Initial Study:

Bay Area Air Quality Management District. 2017. *California Environmental Quality Act Air Quality Guidelines*. 2017.

California Air Resources Board. 2017. *Area Designation Maps / State and National*. [Online]: <https://www.arb.ca.gov/permits/permits.htm>. Accessed: January 30, 2019

California Air Resources Board. *2017 Climate Change Scoping Plan: The Strategy for achieving California's 2030 greenhouse gas reduction target*. January 20, 2017.

--. 2018. *8<sup>th</sup> Edition, California Greenhouse Gas Emissions Inventory: 2000-2016. California Greenhouse Gas Emissions for 2000 to 2016, Trends of Emissions and Other Indicators*.

California Board of Forestry and Fire Protection. 2019. *State Responsibility Area Viewer*. [Online]: [http://www.fire.ca.gov/firepreventionfee/sraviewer\\_launch](http://www.fire.ca.gov/firepreventionfee/sraviewer_launch). Accessed: January 30, 2019.

-- 2019. California Board of Forestry and Fire Protection. *SRA Fire Safe Regulations*. [Online]: [www.fire.ca.gov/fire\\_prevention/download/Title\\_14.pdf](http://www.fire.ca.gov/fire_prevention/download/Title_14.pdf). Accessed January 30, 2019.

California Department of Pesticide Regulation. 2019. *California Code of Regulations, Title 3, Food and Agriculture, Division 6. Pesticides and Pest Control Operations. Chapter 4. Environmental Protection, Subchapter 5. Surface Water, Article 1, Pesticide Contamination Prevention. Section 6960*. [Online]: <https://www.cdpr.ca.gov/docs/legbills/calcode/040501.htm>. Accessed: March 1, 2019.

-- 2017. *Cannabis Pesticides that are Legal to Use*. [Online]: <https://www.cdpr.ca.gov/cannabis>. Accessed: March 1, 2019.

-- 2018. *Cannabis Pesticides that Cannot be Used*. September 2018. [Online]: <https://www.cdpr.ca.gov/cannabis>. Accessed: March 1, 2019.

-- 2015a. *Legal Pest Management Practices for Marijuana Growers in California*. [Online]: <https://www.cdpr.ca.gov/docs/cannabis/index.htm>. Accessed March 5, 2019

-- 2015b. *Pesticide Use on Marijuana*. [Online]: <https://www.cdpr.ca.gov/docs/cannabis/index.htm>. Accessed March 5, 2019

California Regional Water Quality Control Board. 2015. *Regional Water Quality Control Board Order No. 2015-0023*.

California Department of Toxics Substances Control. 2018. *Envirostor Database*. [Online]: <https://www.envirostor.dtsc.ca.gov/public/>. Accessed January 30, 2019.

California Department of Transportation. *California Scenic Highway System*. 2018. [Online]: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm). Accessed: January 30, 2019.

California Geological Survey. 2018. *Mineral Land Classifications*.

Calfire. 2012. Fire and Resource Assessment Program, *State Responsibility Areas*. [Online]: [http://frap.fire.ca.gov/projects/sra\\_mapping/index](http://frap.fire.ca.gov/projects/sra_mapping/index). Accessed January 30, 2019.

-- 2007. Fire and Resource Assessment Program, *Fire Hazard Severity Zones*. [Online]: [http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland\\_zones](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones). Accessed January 30, 2019.

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California Public Resources Code, Division 4, Forests, Forestry and Range and Forage Lands. Part 2 Protection of Forest, Range and Forage Lands. Chapter 2, Hazardous Fire Areas, Sections 4251-4290.5.

California Public Resources Code, Division 4, Forests, Forestry and Range and Forage Lands. Part 2 Protection of Forest, Range and Forage Lands. Chapter 3, Mountainous, Forest-, Brush- and Grass-Covered Lands, Sections 4291-4299.

Down River Consulting. 2018. *Biological Report- Trinity Sungrown*.

Federal Emergency Management Agency. 2010. Flood Insurance Rate Map (FIRM), Map Number 06105C0750E, Revised January 20, 2010. [Online]: <https://msc.fema.gov/portal/home>. Accessed February 1, 2019.

Klamath-Trinity Joint Unified School District. 2019. [Online]: [www.ktjUSD.k12.ca.us](http://www.ktjUSD.k12.ca.us). Accessed March 5, 2019.

National Resource Conservation Service. 2019. *USDA NRCS WebSoil Survey*. [Online]: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed: January 30, 2019.

National Scenic Byways Program. 2018. [Online]: <https://www.fhwa.dot.gov/byways/states/CA>. Accessed: January 30, 2019.

National Wild and Scenic Rivers System. 2019. [Online]: <https://www.rivers.gov/california.php>. Accessed: January 30, 2019.

Natural Investigations Company. 2018. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 610 Kaut Road Project, Burnt Ranch, Trinity County, California*. July 2018.

North Coast Unified Air Quality Management District. 2019. [Online]: <http://ncuaqmd.org/index.php?page=rules.regulations>. Accessed: January 30, 2019.

State of California Farmland Mapping and Monitoring Program. 2019. [Online]: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed: February 1, 2019.

State Water Resources Control Board. 2018. *Geotracker Database*. [Online]: <http://geotracker.waterboards.ca.gov/>. Accessed December 21, 2018.

Trinity County. 2002a. *General Plan Circulation Element*. Revised 2002.

-- 2003. *General Plan Noise Element*.

-- 2014. *General Plan Safety Element*. Adopted November 12, 2014.

-- 2017a. *Cannabis Ordinance No. 315-823*. Enacted October 3, 2017.

-- 2017b. *Cannabis Ordinance No. 315-826*. Enacted December 4, 2017.

-- 2017c. *Regional Transportation Plan*. [Online]: <https://www.trinitycounty.org/sites/default/files/DOT/documents/Proposed%20Final%202016%20RTP.pdf>. Accessed February 6, 2019.

--2017d. *Project Initial Study, Trinity County Commercial Cannabis Cultivation Ordinance*. Submitted September 27, 2017.

-- 2018a. *Cannabis Ordinance No. 315-827*. Enacted January 3, 2018.

-- 2018b. *Cannabis Ordinance No. 315-829*. Enacted February 6, 2018

-- 2018c. *Cannabis Ordinance No. 315-830*. Enacted March 6, 2018.

-- 2018d. *Cannabis Ordinance No. 315-833*. Enacted June 19, 2018.

-- 2018e. *Cannabis Ordinance No. 315-841*. Enacted September 19, 2018.

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-- 2019a. *Cannabis Ordinance No. 315-843*. Enacted March 20, 2019.

-- 2019b. *Parcel Viewer*. [Online]:

<http://trinitycounty.maps.arcgis.com/apps/Viewer/index.html?appid=320cf1c1558c43c8b1f2f70c23d35026>. Accessed: January 30, 2019.

-- ND. *General Plan Open Space and Conservation Element*.

-- ND. *Trinity County General Plan*.

Trinity County Office of Education. 2019. [Online]: [www.tcoek12.org](http://www.tcoek12.org). Accessed February 26, 2019.

Trinity County Public Utility District. 2019. *District History*. [Online]: <https://www.trinitypud.com/about/history.aspx>. Accessed: February 2, 2019.

Trinity County Solid Waste. 2019. [Online]: <https://www.trinitycounty.org/Solid-Waste>. Accessed February 10, 2019.

US Census Bureau. 2019. *American Fact Finder*. [Online]: [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml). Accessed: February 1, 2019.

USDA Forest Service, Shasta-Trinity National Forest. 2019. Recreation Information. [Online]: <https://www.fs.usda.gov/recmain/stnf/recreation>. Accessed January 30, 2019.

USEPA. 2019. *RCRA Database*. [Online]: <https://www3.epa.gov/enviro/facts/rcrainfo/search.html>

-- 1981. USEPA Noise Effects Handbook. Revised 1981. [Online]: [www.nonoise.org/library/handbook/handbook.html](http://www.nonoise.org/library/handbook/handbook.html).

USFWS. 2019. *National Wetland Inventory*. [Online]: <https://www.fws.gov/wetlands/data/Mapper.html>. Accessed January 30, 2019.

-- 2006. *Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*. July 2006.

## **SECTION 6.0 APPENDIX**

# **Biological Report**

## Trinity Sungrown

610 Kaut Road, Burnt Ranch, CA 95527

Trinity County, CA

Prepared for:

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## Executive Summary

This initial biological assessment was completed as a requirement of the Conditional Use Permit for a Type 3 Medium Outdoor Cannabis Cultivation License (up to 1 acre of canopy). The project is located on an Agricultural Preserve (AP) zoned parcel with a long history of agricultural uses. A pre-survey nine quad California Natural Diversity Database search revealed 18 threatened, endangered, or sensitive (TES) plants, 24 TES animals, and 4 TES fish, with documented occurrences in the area. In addition, there are at least 5 pollinator invertebrates that are currently in a state of population decline. Although likely to occur in the area, they do not actually have documented occurrences in the CNDDDB data. A majority of the vegetation documented in the project area is ruderal and non-native; however, the property is underlain by serpentine substrates and has the potential to support ultramafic plant communities. Intensive vegetation management incorporating integrated pest management and other land management tools can mitigate the legacy impacts of anthropogenic disturbance and restore the habitat potential for the many TES species that use this property. Project design and mitigation requirements should include a thoughtfully integrated Pest Management Plan that minimizes harm by accounting for biological and behavioral patterns for these species.

## Abbreviations

CDFW- California Department of Fish and Wildlife

CEQA- California Environmental Quality Act

CESA- California Endangered Species Act

CNDDDB- California Natural Diversity Database

CNPS- California Native Plant Society

LSAA- Lake and Streambed Alteration Agreement

MAUCRSA- Medical and Adult-Use Cannabis Regulation and Safety Act

NCRWQCB- North Coast Regional Water Quality Control Board

SWRCB- State Water Resources Control Board

TES- Threatened, Endangered, or Sensitive

USFS- United States Forest Service

## Introduction

The purpose of this report is to provide an initial analysis of the potential for threatened, endangered, and/or sensitive (TES) biological resources to occur on the proposed cannabis cultivation sites applying for a Type 3 Medium Outdoor (up to 1 acre of canopy) cannabis cultivation license. The Trinity County Planning Department requests that the reports only contain a literature review and the results of a basic onsite assessment. This report was prepared with the following elements: introduction, methodology, literature review, and the results of on-site assessments of the observed biological resources.

## Project Description

The project site is located on a 210-acre parcel (Trinity County APN 008-201-10-00) located at 610 Kaut Road in Burnt Ranch, CA. This parcel is in Township 05N, Range 06E, Section 23, Humboldt Meridian. The primary project coordinates are Latitude 40.790754, Longitude - 123.482577. The HUC 12 watershed is McDonald Creek-Trinity River (HUC 12 code 180102111106).



Figure 1: Trinity Sungrown Farm, 2018

Table 1: Property’s Project Coordinates

<b>Subproject Identifier</b>	<b>Latitude</b>	<b>Longitude</b>
Current Garden Area	40.795847	-123.481370
Proposed Expansion Area	40.795850	-123.480727
Metal Shop for Processing	40.796656	-123.481721
Future Pond	40.794346	-123.475431

The Trinity Sungrown farm is a historic ranch that is subject to the Williamson Act. Also known as the California Land Conservation Act of 1965, this Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value (<http://www.conservation.ca.gov/dlrp/ca>). The farm is currently licensed to cultivate up to 10,000 square feet of cannabis canopy and is applying for a Type 3 Medium Outdoor license to cultivate up to 1 acre of cannabis canopy. The parcel consists of 210 acres that is surrounded by USFS on the west, south, and east sides, and three private parcels to the north. Access to the parcel is via a private road.

The property owner/cultivator has been enrolled under the North Coast Regional Water Quality Control Board (NCRWQCB) Discharge Waiver since 2016 and is working on improvements to the property as outlined in the Water Resource Protection Plan. There is a Lake and Streambed Alteration Agreement (LSAA) in place between the owner and the California Department of Fish and Wildlife (CDFW). The Trinity Sungrown farm has pre-1914 water rights. There are two points of diversion on the property. Two ponds exist for storage and a third pond is proposed. There are approximately 300,000 gallons of water storage capacity in the ponds and 5,000 gallons in plastic water tanks. Water conservation methods include planting directly into the ground, keeping the plants small, covering the greenhouses with shade cloth, applying mulch on the soil surface, and irrigating with drip irrigation.

Power is supplied by PG&E. Roads on the property are maintained regularly. The roads not associated with the cultivation sites are minimally used in order to avoid degradation. This is not a hazardous materials site.

Trinity Sungrown houses its immature plants on site. There are currently 10,000 square feet dedicated to mature plant canopy and 10,000 square feet dedicated to immature plants. Light deprivation will be used to grow the mature plants, to allow for multiple harvests. The cannabis is planted directly in the ground. There is one area for composting cannabis waste. Processing will take place in the metal shop adjacent to the cultivation area.

There is one neighboring parcel (Trinity APN 008-210-40-00) located within the 500-foot minimum setback required by Trinity County Ordinance 315-823. The property owner is supportive of Trinity Sungrown obtaining a Type 3 Medium Outdoor cultivation license.

If the Type 3 license is granted, there will be four employees. All employees will live locally, but not on the property. Temporary employees from Emerald Employment will be utilized when needed. There are four areas that will be used as part of this project, as described below.

### 1. Current Garden Location

There are eight permitted greenhouses (20' x 74') that are used to grow mature plants. Vegetative plants are housed just to the north in hoop house structures. The plants are accessed from the sides of these structures, not from within.



Figure 2: Current 10,000 ft<sup>2</sup> Project Area

## 2. Proposed Expansion of Mature Canopy Area

A flat area to the east of the current garden is the proposed location for the Type 3 expansion; the flat has already been constructed. Plants will be grown directly in the ground. Trinity County does not have a grading ordinance. This parcel is zoned Agricultural Preserve. A Storm Water Pollution Prevention Plan is not needed because the State Water Resources Control Board granted an exemption, in this case due to the zoning and purpose of development.



Figure 3: Proposed Expansion Area

## 3. Metal Shop for Processing

There is a 30' x 60' metal shop on site that is used for processing. Cultivation-related supplies are also stored in the shop.



Figure 4: Metal Shop

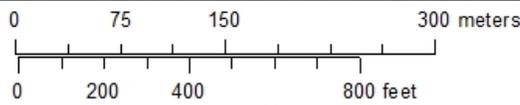
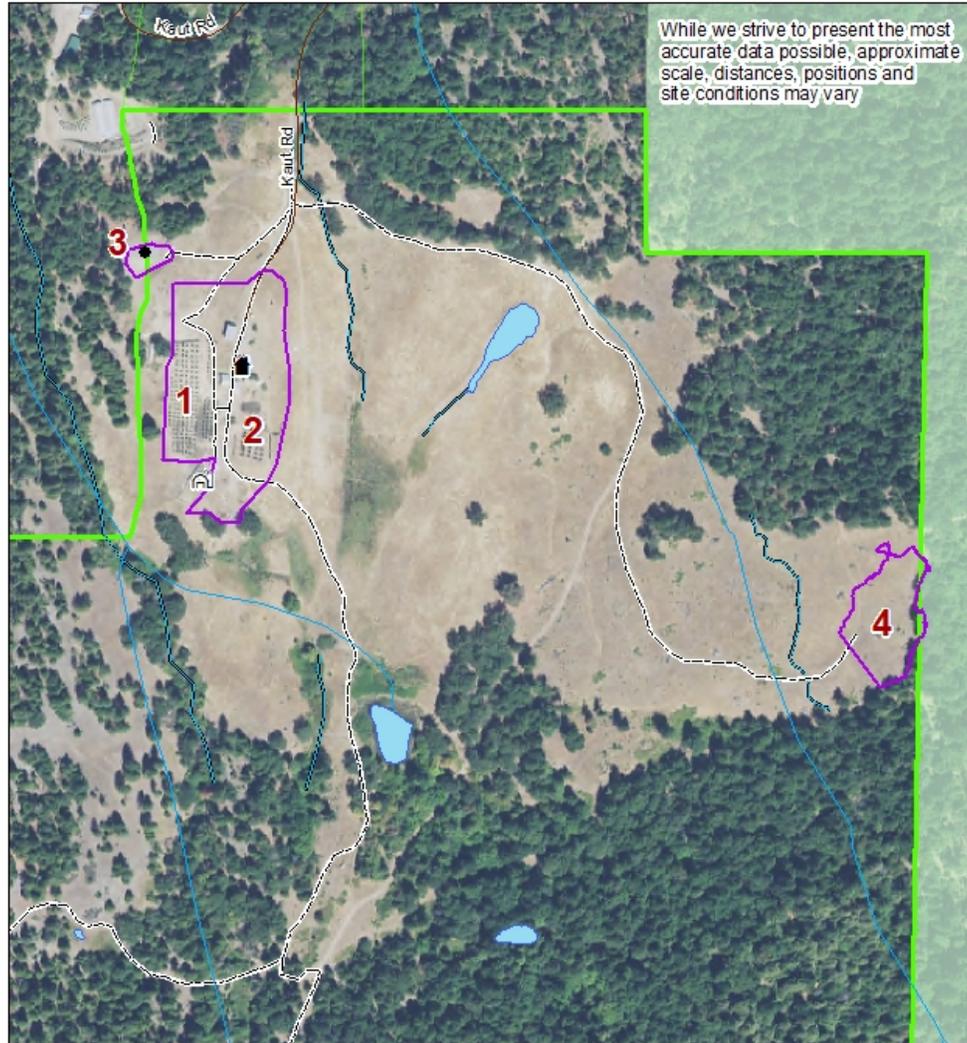
#### 4. Proposed Pond

An undeveloped meadow is the proposed site for an off-stream irrigation water storage pond. The pond will be designed to hold more than an entire growing season's irrigation water supply.



Figure 5: Proposed Pond Site

# Trinity Sungrown Farm Project Areas



Map By: M. Petersen  
 Map Date: 09/14/2018  
 Scale = 1:4,200

## Legend

- |                   |                |                   |
|-------------------|----------------|-------------------|
| Project Areas     | Streams        | Roads             |
| Farm Features     | Intermittent   | Dirt              |
| Property Boundary | Ephemeral      | Access Roads      |
| Barn              | Mapped Streams | Ownership         |
| Residence         | Ponds          | Private / Other   |
| Shop              |                | US Forest Service |



Figure 6: Trinity Sungrown Project Detail Map

## Regulatory Setting

### Federal Regulations

#### Endangered Species Act

The (federal) Endangered Species Act (ESA) was passed in 1973. ESA provides a framework to list plant and animal species as threatened or endangered. The law makes it a crime to take (kill) threatened or endangered species. It also focuses on protection and recovery. There are a number of strategies that can help achieve these conservation goals including safe harbor agreements, habitat conservation plans, candidate conservation agreements, and conservation banks. The northern spotted owl, steelhead trout, and Coho salmon are found in Trinity County; they are all listed as threatened. Farming practices in this area should focus on conservation of the habitat and the environmental conditions needed for recovery of these species. (US Fish and Wildlife Service, 1973)

### State Regulations

#### California Environmental Quality Act

The California Environmental Quality Act (CEQA), is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, when feasible.

CEQA applies to certain activities and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a “project”. A “project” is an activity undertaken by a public agency or a private activity that must receive discretionary approval, meaning that the agency has the authority to deny or approve the requested permit from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

(California Natural Resources Agency, 2014)

#### California Endangered Species Act

The California Endangered Species Act (CESA) was adopted in 1970. CESA defines the terms used to describe threatened, endangered, and sensitive (TES) species, and makes it a crime to take (kill) them. In addition, it provides incentives for conservation of TES species and a

framework for landscape-scale promotion of unfragmented habitat corridors. If a project will result in the take of a TES animal(s) and/or plant(s), an exception can be made only if an incidental take permit is issued and mitigation efforts reduce the overall project impact to less than significant. Trinity County is within the southern extent of the Klamath Range and provides habitat to a high density of TES flora and fauna, many of which have a very limited range (endemic). (Habitat Conservation Planning Branch, 2018)

#### Noxious Weed Management

California Food and Agriculture Code Article 1.7 Section 7270-7276 defines the impacts of noxious weeds on wildlands and agricultural lands. It establishes the authority of the Department of Food and Agriculture in noxious weed funding to be distributed to Weed Management Associations and establishes guidelines for Weed Management Association membership. Important definitions are included in the regulations such as “integrated pest management”.

(CDFA Article 1.7 §7270-7276)

#### Pesticides are Toxic to Bees

California Food and Agriculture Code Article 3 Section 6650 defines the impacts of pesticides on bees. It defines the diurnal time period and temperature conditions when bees are considered to be resting. It also defines residual toxicity conditions for pesticides.

(FAC 3 CCR § 6650)

#### California Forest Practices Act

The Forest Practices Act regulates timber operations in California and provides protective measures for watercourses, late-successional forests, wildlife habitat, sensitive watersheds, archeological sites, sensitive soils, and forest yield sustainability. It also provides rules for timber harvest plans and authority for enforcement. This law is meant to ensure that the land can support multifaceted anthropogenic uses, while providing timber resources and meeting the needs of flora and fauna.

(CDF 14 CCR § 939.1)

#### Lake and Streambed Alteration Agreement CDFW Code Section 1602

In order to receive an annual California state cannabis cultivation license, each applicant must provide either a finalized Agreement with the Department of Fish and Wildlife or written verification that an agreement is not required.

The California Fish and Wildlife Code Section 1602 went into effect on January 1, 2004. Section 1602 makes it illegal for an individual or entity to substantially modify the bed, bank, or channel of a hydrologically connected lake, stream, or river, unless the California Department of Fish and Wildlife (CDFW) has either been notified or has determined that the property does not contain jurisdictional features. A framework for timelines and legal responsibilities for each party are set up in the text of this regulation. In order to receive an annual California state cannabis cultivation license, each farm must either have a signed final agreement with CDFW or demonstrate that they do not need one. Jurisdictional features include road crossings of surface water, surface water diversions, and modification(s) of riparian vegetation (State of California, Fish and Game Code Section 1602, 2017).

#### Nesting and Migratory Bird Rule code 3503

The Nesting and Migratory Bird Rule was adopted in 1957. Fish and Wildlife Code Section 3503 makes it a crime to destroy, take, or possess the nest or eggs of any bird. This includes activities that could cause nest abandonment or mortality of young. Cannabis cultivators who have received a final agreement with CDFW under the general agreement program are required to have nest and den surveys completed by a qualified biologist within seven days prior to starting any activity covered under the agreement. In the event that a nest or den is found, the biologist will need to recommend mitigations to reduce the project impacts to less than significant.

(State of California, Fish and Game Code 3503, 1957)

#### Medicinal and Adult Use Cannabis Regulation and Safety Act California Senate Bill No. 94

The Medicinal and Adult Use Cannabis Regulation and Safety Act (MAUCRSA) was adopted in June of 2017. MAUCRSA creates the general framework for the regulation of commercial medical and adult use cannabis in California. Until July 1, 2019, the bill exempts from the California Environmental Quality Act the adoption of a specified ordinance, rule, or regulation by a local jurisdiction that requires discretionary review and approval of permits, licenses, or other authorizations to engage in commercial cannabis activity.

(State of California, 2017)

#### NCRWQCB Discharge Waiver

The California Regional Water Quality Control Board North Coast Region adopted Order No. 2015-0023 in August of 2015. The Order is entitled *Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharge of Waste Resulting from Cannabis*

*Cultivation and Associated Activities or Operations with Similar Environmental Effects* in the North Coast Region. The purpose of this Order was to provide a water quality structure to prevent and/or address poor water quality conditions and the adverse impacts to water resources associated with cannabis cultivation on private land.

(California North Coast Regional Water Quality Control Board, 2015)

## State Water Resources Control Board Cannabis Cultivation Policy

In October 2017, the SWRCB adopted its *Cannabis Cultivation Policy: Principles and Guidelines for Cannabis Cultivation*. The Policy created a Waste Discharge Regulatory program for cannabis cultivators and supersedes all regional orders for cannabis discharge waivers. The Policy applies to the entire state and enrollment is required for anyone cultivating cannabis in an area of 1,000 square feet or greater. Enrollment fees are tiered depending on the total disturbed area, proximity to waterways, and the slope of the property. Best practical treatment or control (BTPCs) measures are established to ensure protection of waterways. They address road maintenance, erosion control, refuse and human waste, irrigation runoff, stream and wetland buffers, petroleum products, pesticide use, etc.

(State Water Resource Control Board, 2017)

## Local Regulations

### Trinity County Ordinance 315-823

The Trinity County Board of Supervisors adopted Urgency Ordinance No. 315-816 to create Commercial Marijuana Cultivation Regulations in October of 2016. A permanent ordinance (no. 315-823) was adopted in October of 2017. The ordinance states that Trinity County is exempt from the California Environmental Quality Act (CEQA) until July of 2019, pursuant to the Business and Professions Code, section 26055(h).

The ordinance allows select cultivators to apply for a license to cultivate up to 1 acre of cannabis canopy (Type 3, Medium). To qualify for a Type 3 license, the applicant must have been enrolled with the North Coast Regional Water Board in 2016, held a 2016-2017 and 2017-2018 Trinity County Cultivation License, and the licensed property must be at least 50 acres in size.

(Trinity County, 2016)

(Trinity County, 2017)

## Regulatory Bibliography

- California Code of Regulations, t. 1. (2018). *General Lake and Streambed Alteration Agreement for Activities Related to Cannabis Cultivation*. Retrieved from California Department of Fish and Wildlife: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=155627&inline>
- California Food and Agriculture. (2005). Noxious Weeds Management. Article 1.7. Sections 7270-7276. <https://law.justia.com/codes/california/2005/fac/7270-7276.html>
- California Forest Practices Act. The California Department of Forestry and Fire Protection Resource Management, Forest Practice Program. California Forest Practice Rules 2017. Sacramento.  
[http://calfire.ca.gov/resource\\_mgt/downloads/2017%20Forest%20Practice%20Rules%20and%20Act.pdf](http://calfire.ca.gov/resource_mgt/downloads/2017%20Forest%20Practice%20Rules%20and%20Act.pdf)
- California Natural Resources Agency. (2014). [resources.ca.gov/ceqa/more/faq.html](http://resources.ca.gov/ceqa/more/faq.html). Retrieved from California Natural Resources Agency - FAQ:  
<http://resources.ca.gov/ceqa/more/faq.html>
- California North Coast Regional Water Quality Control Board. (2015, August). Order 2015-0023 Waiver of Waste Discharge. California: State of California.
- Habitat Conservation Planning Branch. (2018). *CESA to Federal Endangered Species Act*. Retrieved from California Department of Fish and Wildlife:  
<https://www.wildlife.ca.gov/Conservation/CESA/FESA>
- State of California. (2017, June 27). *California Senate Bill No. 94*. California: California State Legislature.
- State of California. (2017, June 27). *Fish and Game Code Section 1602*. Retrieved from California Legislative Information:  
[https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=FGC&sectionNum=1602](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=FGC&sectionNum=1602).
- State of California. (1957). *Fish and Game Code 3503*. Retrieved from California Legislative Information:  
[https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=FGC&sectionNum=3503](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=FGC&sectionNum=3503).
- State Water Resource Control Board. (2017, October 17). Cannabis Cultivation Policy: Principles and Guidelines for Cannabis Cultivation. California.
- Trinity County. (2016, October). *Urgency Ordinance No. 315-816*. Trinity County.
- US Fish and Wildlife Service. (1973). *Endangered Species Act of 1973*. Retrieved from International Affairs: <https://www.fws.gov/international/pdf/esa.pdf>

## Environmental Setting

The property is located on the south side of Ironside Mountain, on a backslope of Hennessy Ridge and Underwood Mountain. Surface hydrology at the property reflects a shallow water table recharged along the Hennessy Ridge uplands. The property sits on a swale in the hillside that intersects the water table, allowing for several springs and intermittent streams to exist on the property. Soils at this site are a well-drained gravelly loam. Soils here are the resultant residuum weathered from serpentinite parent material. Geologically, the property is located on non-marine argillite and chert with localized units of serpentinite. To the north, the property is close to highlands of diorite and quartz diorite that have minor areas of metamorphism, which account for some schist and gneissic formations. These soils have a hydrological class of C. This property receives an annual average of 47 to 49 precipitation inches, with most of it falling in the winter and spring months.

USDA Forest Service spatial data shows that ultramafic soils may exist throughout the property. The ultramafic soils, derived from weathered serpentinite, provide habitat for many CNPS listed plants. Serpentinite is present, on the soil surface, near the metal shop. The shop is already in place and there is not expected to be any new ground-breaking disturbance in this area.

There are extensive meadows on site with gentle undulating topography, surrounded by stands of Klamath mixed conifer on north facing slopes. A majority of the 210 acres is forested. Aerial imagery shows that there are two small ponds within the meadows. An unnamed perennial tributary to the Trinity River flows from south to north through the property. Several other ephemeral streams flow through the property. The diversity of habitat types, coupled with the perennial water sources, likely provides habitat for many different faunas. The property is surrounded on three sides by late successional reserve forest lands. The forested areas on the property are not part of the project and were not surveyed. They are expected to provide habitat for many old growth-dependent species.

## Methodology

The literary review and initial survey took place in late May and early June of 2018.

For the purposes of this evaluation, ‘special-status plant species’ include vascular plants that are:

- Designated as Species of Greatest Conservation Concern by the California Department of Fish and Wildlife (CDFW, formerly known as California Department of Fish and Game [CDFG]), or the U.S. Fish and Wildlife Service (USFWS), or are listed as threatened or endangered under the California Endangered Species Act (CESA) or the federal Endangered Species Act (ESA); and
- vascular plants and non-vascular plants on the California Native Plant Society (CNPS) Lists 1, 2, 3, or 4; and
- although special status non-vascular plants were not surveyed, a list of previously recorded occurrences of these plants are listed in Table 1.

For the purposes of this evaluation, ‘special-status animal species’ include animals that are:

- Designated as Species of Greatest Conservation Concern by the California Department of Fish and Wildlife (CDFW, formerly known as California Department of Fish and Game [CDFG]), or the U.S. Fish and Wildlife Service (USFWS), or are listed as threatened or endangered under the California Endangered Species Act (CESA) or the federal Endangered Species Act (ESA); and
- animals on the CNDDDB Species of Greatest Conservation Concern, Special Animals List; and
- animals that occur within Trinity County and are ranked as G1 or G2 but have not yet been ranked in the State of California; and
- animals with population dynamics that fit the criteria of S1, S2, or S3 and have not yet been ranked in the state of California or globally.

The biological resources that were reviewed prior to the field survey were the:

1. CNDDDB May 2018 dataset
2. FS TES, Wildlife, serpentine, and limestone Data (USDA Forest Service, 2018)
3. USGS Geology Spatial Data
4. NRCS Soil Survey
5. NSO nest data created for the Trinity County Land Assessment Project (Combined USFS and CNDDDB nest data) (Sheen, 2018)
6. USFWS Ray Davis NSO Habitat Suitability Data (United States Fish and Wildlife Service, 2011-2012)
7. NMFS Data KMZ and Spreadsheet (National Marine Fisheries Service, 2016)
8. CalFlora What Grows Here 3 (CalFlora, 2018)
9. CalFlora CNPS (CalFlora, 2018)
10. Jepson Manual 2<sup>nd</sup> Edition (Baldwin, 2012)

## 11. California Herps (Nafis, A Guide to the Amphibians and Reptiles of California, 2000-2016)

A nine quad search was performed to determine which TES species may occur within the study area. Using the 'select by location' tool, all CNDDDB and USFS TES observation data was selected within the following USGS 7.5 quadrangles: Hayfork, Big Bar, Hayfork Bally, Junction City, Halfway Ridge, Hayfork Summit, Naufus Creek, Dubakella Mountain, and Wildwood. The selected attribute table data was exported using the 'summary' tool. The resultant tabular data was converted to an excel file for use throughout the study. The likelihood and/or presence of each species occurring within the project location(s) was analyzed using the following criteria:

- Not Suitable: The project area and vicinity are obviously unsuitable for the target species.
- Unlikely: Most of the habitat conditions are not found on or adjacent to the project, or this site is outside of the known range. Most of the area is not suitable to provide habitat. The species is unlikely to be observed on site.
- Moderately Suitable: Some of the known habitat conditions are found on or adjacent to the project areas. The species is moderately likely to be found using the site.
- Very Suitable: All known habitat conditions exist on or adjacent to the site. The species is highly likely to be found using the site.
- Observed on Site: The species was observed during a survey or there is a known occurrence onsite.

### Element Ranking

The global (G-rank) and state (S-rank) ranks reflect the overall status of an element (species, subspecies, variety, or natural community) throughout its global or state range. Both global and state ranks represent a letter and number score that reflects a combination of Rarity, Threat, and Trend factors, with weighting being heavier on Rarity than the other two.

- G1/S1 = Critically Imperiled- At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2/S2 = Imperiled- At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3/S3 = Vulnerable- Vulnerable to extinction because of declines, restricted range, relatively few documented populations, or other issues that contribute to vulnerability.
- G4/S4 = Apparently Secure- Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5/S5 = Secure- Common; widespread and abundant.

Uncertainty about the rank of an element is expressed in two major ways:

- By expressing the ranks as a range of values: S2S3 means the rank is somewhere between S2 and S3.
- By adding a “?” to the rank: S2? represents more certainty than S2S3 but less certainty than S2.

Other symbols include:

- Q = There are taxonomic questions associated with the rarity level.
- T = Rank applies to a subspecies or variety.

California Department of Fish and Wildlife Listing Codes:

- FP- Fully Protected: Species protected under §§3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code.
- WL- Watch List: Taxa that don’t meet SSC criteria but about which there is concern and additional information is needed to clarify status.
- CSSC- California Species of Special Concern.

California Native Plant Society (CNPS) Designation Codes:

- List 1- Plants of highest priority.
- List 1A- Plants presumed extinct in CA.
- List 1B- Plants rare and endangered in CA and elsewhere.
- List 2A- Plants presumed extirpated in CA but common elsewhere.
- List 2B- Plants rare, threatened or endangered in CA but common elsewhere.
- List 3- Plants for which additional data are needed – Review List.
- List 4- Plants of limited distribution – Watch List.

CNPS Threat Code Extensions:

- .1- Seriously endangered in CA
- .2- Fairly endangered in CA
- .3- Not very endangered in CA

(California Department of Fish and Wildlife, 2018)

Family Name	Scientific Name	Common Name	Habitat Description	Habitat Suitability/	Ranking		
					G	S	R
<i>Apiaceae</i>	<i>Sanicula tracyi</i>	Tracy's sanicle	Openings in conifer forest, woodland; cismontane woodland. Elevation range 130 – 5,085 ft (40 – 1,770 m)	Moderately Suitable	G4	S4	4.2
<i>Brassicaceae</i>	<i>Streptanthus ob lanceolatus</i>	Trinity River jewel flower	Cliffs, canyon walls, in conifer forests. Expected elevation range may be up to 1,312 ft (400 m)	Not Suitable	G1	S1	1B.2
<i>Crassulaceae</i>	<i>Sedum laxum ssp. flavidum</i>	pale yellow stonecrop	Serpentine or volcanic, broad leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest, Six Rivers National Forest. Elevation range 2,624 – 6,561 ft (800 – 2,000 m)	Marginally Suitable/Unlikely	G5T4Q	S4	4.3
<i>Dicranaceae</i>	<i>Campylo podiella stenocarpa</i>	flagella-like atractylocarpus	Cismontane woodland. Elevation range 382 – 1,640 ft (100 - 500 m)	Marginally Suitable/Unlikely	G5	S1?	2B.2
<i>Fabaceae</i>	<i>Hosackia yollaboliensis</i>	Yolla Bolly bird's-foot trefoil	Dry, barren, exposed slopes, often gravelly. Concave (ridgetop) openings in red fir dominated stands where snowmelt lingers. Elevation range 6,890 – 7,217 ft (2,100 -2,200 m)	Not Suitable	G2	S2	1B.2
<i>Fabaceae</i>	<i>Lupinus elmeri</i>	South Fork Mountain lupine	Open areas in lower montane coniferous forests. Only known occurrences are on South Fork and	Not Suitable	G2	S2	1B.2

			Pelletreau Ridges. Elevation range 3,996 – 6,560 ft (1,218 – 2,000 m)				
<i>Juncaceae</i>	<i>Juncus regelii</i>	Regel's rush	Montane meadows, mesic, seeps, and upper montane coniferous forest. Elevation range 2,620 – 6,235 ft (800 – 1,900 m)	Not Suitable	G4	S1	2B.3
<i>Liliaceae</i>	<i>Erythronium oregonum</i>	giant fawn lily	Openings in woodland, cismontane woodland, meadows, and seeps. Elevation range 328 – 3,772 ft (100 – 1,150 m)	Very suitable	G4G5	S2	2B.2
<i>Malvaceae</i>	<i>Iliamna latibracteata</i>	California globe mallow	Burned areas, chaparral (montane), lower montane coniferous forest, North Coast coniferous forest (mesic), and riparian scrub (streambanks). Elevation range 1,640 – 6,565 ft (500 – 2,000 m)	Marginally Suitable/Unlikely	G2G3	S2	1B.2
<i>Mielichhoferiaceae</i>	<i>Mielichhoferia elongata</i>	elongate copper moss	Metamorphic rock, usually acidic, usually vernal mesic, often roadsides, sometimes carbonate. Broad leafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows, seeps, subalpine coniferous forest. Elevation range 300	Moderately Suitable	G5	S4	4.3

			- 3,280 ft (90 - 1,000 m)				
Montiaceae	<i>Lewisia cotyledon ssp. heckneri</i>	Heckner's lewisia	Rocky, lower montane coniferous forests. Elevation range 738 - 6,890 ft (225 - 2,100 m)	Not Suitable	G4T3	S3	1B.2
Montiaceae	<i>Montia howellii</i>	Howell's montia	Vernally mesic, sometimes roadsides, meadows, seeps, North Coast coniferous forest, and vernal pools. Elevation range < 1,300 ft (<400 m)	Marginally Suitable/Unlikely	G3G4	S2	2B.2
Onagraceae	<i>Epilobium oregonum</i>	Oregon fireweed	Bogs, small streams, lower montane coniferous forest, meadows, seeps, and upper montane coniferous forest. Affinity to ultramafic soils. Elevation range 1,804 - 5905 ft (550 - 1,800 m)	Very suitable	G2	S2	1B.2
Ophioglossaceae	<i>Botrypus virginianus</i>	rattlesnake fern	Moist shaded valleys along small streams, bogs and fen, lower montane coniferous forest (mesic), riparian forests, meadows, seeps. Elevation range 2,295 - 3,940 ft (700 - 1,065 m)	Very suitable	G5	S2	2B.2
Orchidaceae	<i>Piperia candida</i>	white-flowered rein orchid	Open to shady sites, conifer and mixed evergreen forest, sometimes serpentinite. Elevations below 4,920 ft (1,500 m)	Very suitable	G3	S3	1B.2
Orobanchaceae	<i>Kopsiopsis hookeri</i>	small groundcone	Open woodland, mixed conifer forest, generally on <i>Gaultheria shallon</i> , occasionally on	Moderately Suitable	G4?	S1S2	2B.3

			<i>Arbutus menziesii</i> , <i>Arctostaphylos uva-ursi</i> . Elevations <2,295 ft (700 m)				
<i>Phrymaceae</i>	<i>Erythranthe trinitiensis</i>	pink-margined monkeyflower	Serpentine, often roadsides, cismontane woodland, lower montane coniferous forest, meadows, seeps, and upper montane coniferous forest. Elevation range 4,850 – 5,577 ft (1,480 – 1,700 m)	Moderately Suitable	G3	S3	1B.3
<i>Ptilidiaceae</i>	<i>Ptilidium californicum</i>	Pacific fuzzwort	Epiphytic on trees, decaying logs and stumps, rarely on humus over boulders, lower and upper montane coniferous forests. Elevation range 3,740 – 5,905 ft (1,140 – 1,800 m)	Marginally Suitable/Unlikely	G4G5	S3S4	4.3

Table 2: Nine Quadrangle Threatened, Endangered & Sensitive Plant Occurrences

Family	Scientific Name	Common Name	Habitat Description	Likelihood of Occurrence	Likelihood of Occurrence Justification
<i>Accipitridae</i>	<i>Accipiter gentilis</i>	northern goshawk	Coniferous forests with high DBH trees and low sloping hillsides. They prefer to hunt on or near low traffic or decommissioned unpaved roads that run through forests.	Very Suitable	Forest access roads veining through the property with high DBH coniferous forest.
<i>Accipitridae</i>	<i>Haliaeetus leucocephalus</i>	bald eagle	Near lakes, reservoirs, rivers, marshes, and coasts. Can be found near fish processing plants.	Moderately Suitable	Several streams on the property are shaded by riparian hardwoods on the property.
<i>Ardeidae</i>	<i>Ardea herodias</i>	great blue heron	Saline and fresh emergent wetlands. Less often found along river shores and rocky beaches, mountains pastures and croplands. Nests in (the tallest) live or dead trees, less often in shrubs, tule mats, sea cliffs, or rock ledges. Human disturbance causes nest abandonment.	Marginally Suitable/Unlikely	Ideal habitat does not exist on the property but does exist nearby on the Trinity River.
<i>Ascaphidae</i>	<i>Ascaphus truei</i>	Pacific tailed frog	Cold, clear, permanent rocky streams in wet forests. They do not inhabit ponds or lakes. A rocky streambed is necessary for protective cover for adults, eggs, and larvae.	Moderately Suitable	High velocity flowing stream on the property with a rocky bed.
<i>Emydidae</i>	<i>Emys marmorata</i>	western pond turtle	Pond, lakes, rivers, streams, creeks, marshes, and irrigation ditches with abundant vegetation, & either rocky or muddy bottoms, in woodlands, forests, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, & exposed banks are required for basking. May enter brackish water and seawater.	Observed	Observed on site
<i>Haplotrematidae</i>	<i>Ancotrema voyanum</i>	hooded lancetooth	Near streams or intermittent stream channels where substrate is	Moderately Suitable	Most habitat types exist

			permanently damp. Late successional conditions such as coarse woody debris, riparian hardwood trees, deep leaf mold, and a relatively closed forest canopy. Associated with limestone substrates mostly within an elevation range of 650 - 3,150 ft (198 - 960 m).		on the property; however, limestone was not detected.
<i>Margaritiferidae</i>	<i>Margaritifera falcata</i>	western pearlshell	Found in stable substrate with low shear stress and a gradient of low velocity in perennial creeks and rivers with clean water at depths generally of 1.5 – 5.0 ft. Often in eddies and areas with cobble and boulders that protect the animals from high flows and scour events. Requires a fish host for reproduction.	Marginally Suitable/Unlikely	Nesting trees exist and the property is near the Trinity River.
<i>Monadeniidae</i>	<i>Monadenia infumata setosa</i>	Trinity bristle snail	Riparian corridors and uplands or the Klamath/Trinity mixed-conifer forests that have a deciduous hardwood understory. This species is primarily found in moist but well-drained, well-shaded canyons or on streamside benches covered with a layer of leaf mold at least 4” deep. Sometimes observed in dry sites not considered typical habitat.	Very Suitable	Habitat exists on the property but not in large amounts.
<i>Mustelidae</i>	<i>Gulo gulo</i>	California wolverine	Alpine, tundra, taiga, and boreal forest zones, including coniferous, mixed, and deciduous woodlands, bogs, and open mountain, as well as tundra habitats with dense spring snow pack.	Not Suitable	Habitat does not exist on site.
<i>Mustelidae</i>	<i>Martes caurina humboldtensis</i>	Humboldt marten	Humid coastal old-growth redwood forests.	Marginally Suitable/Unlikely	Habitat does not exist on site.
<i>Mustelidae</i>	<i>Pekania pennanti</i>	fisher - West Coast DPS	Coniferous forests, also found in mixed and deciduous forests. High canopy closure with many hollow trees for dens. Tree species typically found in fisher habitat are spruce, fir, white cedar, and some hardwoods.	Observed	Observation occurrence
<i>Pandionidae</i>	<i>Pandion haliaetus</i>	osprey	Nearly any body of water: salt marshes, rivers, ponds, reservoirs, estuaries, and even coral reefs. Their conspicuous stick nests are	Moderately Suitable	The Trinity River is nearby as well as

			placed in the open on poles, channel markers, and dead trees, often over water.		several ponds
<i>Plethodontidae</i>	<i>Plethodon elongatus</i>	Del Norte salamander	Terrestrial, strongly associated with moist talus in humid shaded and closed-canopy coastal forests of mixed hardwoods and conifers, but also found in rock rubble of old riverbeds, and under bark and logs on forest floor, usually in rocky areas. Especially attracted to older forests.	Moderately Suitable	Habitat does not exist on site.
<i>Polygyridae</i>	<i>Vespericola pressleyi</i>	Big Bar hesperian	Any available cover, including decaying hardwood leaves, woody debris, and loose rocks near active streams. Active on damp moss and fallen bigleaf maple leaves around a perennial spring seep. Shaded by a dense canopy of red alder and bigleaf maple. Can be associated with springs in a relatively open stand of Douglas-fir.	Marginally Suitable/Unlikely	Only known site is adjacent to this site.
<i>Ranidae</i>	<i>Rana boylei</i>	foothill yellow-legged frog	Rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	Moderately Suitable	Some habitat exists on site. Rocky streams in forest but no open sunny banks present.
<i>Rhyacotritonidae</i>	<i>Rhyacotriton variegatus</i>	southern torrent salamander	Found in shallow, cold, clear, well-shaded streams, waterfalls, and seepages, particularly those running through talus and under rocks all year, in mature to old-growth forests. Occasionally found in riparian vegetation adjacent to water, but usually found in contact with water. Primarily in water on north-facing slopes in the southern part of their range where forests are warmer and drier. Aquatic larvae live in clear, shallow water and still, turbid water in creeks with accumulated leaves.	Very Suitable	Habitat exists on the property.
<i>Vespertilionidae</i>	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas, and	Very Suitable	Habitat exists on the property.

			coastal habitat types. Distribution is strongly correlated with the availability of caves and cave-like roosting habitat, with population centers occurring in areas dominated by exposed, cavity forming rock and/or historic mining districts.		
<i>Vespertilionidae</i>	<i>Lasionycteris noctivagans</i>	silver-haired bat	Forested coniferous areas adjacent to lakes, ponds, and streams are the preferred roosting sites. Summer roosts and nursery sites are in tree foliage, cavities, or under loose bark, sometimes in buildings. They hibernate in small tree hollows, beneath sections of tree bark, in buildings, rock crevices, in wood piles, and on cliff faces.	Very Suitable	Habitat exists on the property.
<i>Vespertilionidae</i>	<i>Lasiurus cinereus</i>	hoary bat	Forests and woodlands with dense foliage and medium to large trees. Roosting Habitat: Foliage of large trees, covered from above, with lots of cover at the ground level.	Moderately Suitable	Habitat exists on the property but it might not be high enough in elevation.
<i>Vespertilionidae</i>	<i>Myotis evotis</i>	long-eared myotis	Roosting Habitat: Crevices, snags, spaces under bark, buildings. Night roosting usually occurs in caves. Foraging Habitat: Over water, open habitats, and among trees.	Very Suitable	Habitat exists on the property.
<i>Vespertilionidae</i>	<i>Myotis thysanodes</i>	fringed myotis	Roosting Habitat: Crevices, mines, caves, buildings. Maternal colonies April-September. Foraging Habitat: Over water, open habitats, and around dense vegetation.	Moderately Suitable	Some habitat exists on the site. Few rocky crevices and no mines for roosting.
<i>Vespertilionidae</i>	<i>Myotis volans</i>	long-legged myotis	Roosting Habitat: Crevices, snags, spaces under bark, buildings, mines, and caves. Trees are most important for day roosting. Night roosting usually occurs in caves. Foraging Habitat: Close to ground (3 - 5 m), over surface water, openings in early successional forests, woodlands, chaparral, cliffs.	Very Suitable	Habitat exists on the property.
<i>Vespertilionidae</i>	<i>Myotis yumanensis</i>	Yuma myotis	Roosting Habitat: Crevices, buildings, mines, and caves. Trees	Moderately Suitable	Most habitat exists on site

			are most important for day roosting. Night roosting usually occurs in caves. Foraging Habitat: Over streams and ponds, openings in forests and woodlands.		but there are no known mines or caves for roosting.
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Table 3: Nine Quadrangle Threatened, Endangered & Sensitive Animals Occurrences

A reference site for Heckner's lewisia (*Lewisia cotyledon* var. *heckneri*) was visited on August, 9, 2018. The site is located approximately 6 miles from State Highway 299, adjacent to Hobo Gulch Road. The Heckner's lewisia was observed growing on an open rock outcrop and in crevices, on a north facing 65% slope. Found thriving at the site were 81 fruiting plants. There may have been additional plants that were not counted due to the inaccessibility of portions of the outcrop. The surrounding area supports a coniferous forest. *Dudleya* spp. and assorted bryophytes are the two co-dominant species in the immediate area.

There is one small rock outcrop adjacent to the current cultivation and the proposed canopy expansion areas. The rock outcrop has poison oak (*Toxicodendron diversilobum*) growing on it. Heckner's lewisia is not present on the outcrop.



Figures 7 & 8: Heckner's Lewisia in Fruit



Figure 9: Poison Oak on Rock Outcrop

A reference site for Big Bar hesperian (*vespericola pressleyi*), hooded lancetooth (*Ancotrema voyanum*), and Trinity bristle snail (*Monadenia setosa*), was visited on August 9<sup>th</sup>, 2018. The site is located at -123.244049 Longitude and 40.738907 Latitude, at a distance of approximately 12.7 aerial miles from the project. The reference population was cited as being found on or near Manzanita Creek, a tributary of the Trinity River, near the confluence of the two bodies of water. An immature *Trilobopsis loricata sonomaensis* was found on the highwater bank edge on top of moss but underneath leaf litter from bigleaf maple, Oregon white oak, canyon live oak, and ferns. The species identification was confirmed by Barry Roth, PhD. He described the species as having one or more additional whorls (turns of the shell around its coiling axis), and an expanded flange around the aperture, with two or three "teeth" extending into the aperture. This species is

common in this area and there are two other unnamed species within the *Trilobopsis* genus that range from the North Coast to Junction City (CA).

The forest here is dominated by Douglas fir (*Pseudotsuga menziesii*) and ponderosa pine (*Pinus ponderosa*), with a diverse, multilayered understory of Oregon white oak (*Quercus garryana*), pacific madrone (*Arbutus menziesii*), big leaf maple (*Acer macrophyllum*), poison oak (*Toxicodendron diversilobum*), red alder (*Alnus rubra*) and pacific yew (*Taxus brevifolia*). Although no mollusks were discovered on the property, similar habitat to the habitat found at Manzanita Creek exists on the property. Presence should be assumed for all sensitive mollusk species found in the survey area of Manzanita Creek.



Figures 10 & 11: Juvenile *Trilobopsis* Shell

During the field surveys, the vegetation communities were defined using the alliances from *A Manual of California Vegetation*, 2<sup>nd</sup> Edition (Sawyer, 2009). The botanical survey areas were defined using a combination of the EVT vegetation map, aerial imagery, and field reconnaissance. The biological data was collected by performing a visual encounter survey. Herbarium specimens were not collected during the initial study due to the urgent nature of the reports. The study was conducted by Marie Petersen, Emily Bowes, and Ashleigh Kilgore on May 3 and June 14, 2018. Approximately 33 total hours were spent in the field by the biologists.



Figure 12: Area Where Snail Specimen was Found



Figure 13: Manzanita Creek

Results

Subproject Name	Vegetation Alliance	CNDDDB Rank	Acres Observed
Current Garden	Ruderal vegetation	Not Rare	1
Proposed Expansion Area	No dominant life form	Not Rare	0.4
Metal Shop (Processing)	No dominant life form	Not Rare	0.1
Proposed Pond	Undefined alliance	N/A	1
Total			2.5

Table 4: Habitat Types Observed

The 10,000 ft<sup>2</sup> project area mostly supports non-native and invasive plants. Only 4 of the 16 identified plant species growing in this area are native. Two of the invasive species (jointed goatgrass [*Aegilops cylindrica*] and Italian thistle [*Carduus pycnocephalus*]) found have a very limited known distribution in the county and are considered highest priority for treatment by the natural resource management professionals in the Trinity County Weed Management Association.

The proposed expansion area did not have established flowering plants growing on it at the time of the site visits. Furthermore, the grasses and forbs that were growing in June had been either recently mowed or had recently sprouted. Due to these conditions, it was not possible to identify plants beyond their basic type.

The metal shop area currently does not host a dominant plant community. Native plants far outnumber the non-natives, and the invasive plant population here is present in sparse patches between thick gravel. Serpentine was observed on a cutbank near the shop, indicating that plants with an ultramafic affinity populate this area. Invasive and non-native plant management should be prioritized around the metal shop.

The proposed pond area is suspected to have historically hosted a manna grass meadow (*Glyceria elata* G4 S3?), based on the site conditions and the abundance of manna grass persisting on the landscape. While the meadow is still dominated by tall manna grass, it does not meet the alliance’s membership requirements for codominant species. Currently, cheat grass

(*Bromus tectorum*) is the codominant species. Proliferation of invasive species coupled with climate change has created an undefined (alliance) vegetative community.

## Vascular Plants

A total of 13 grasses, 28 forbs, 4 shrubs, and 7 trees were identified during the cursory assessment. One CNPS listed species, the Salmon Mountains wakerobin (*Trillium ovatum ssp. oettingeri*), was found during a property tour. It is not in the CUP project area. All habitat descriptions are from a combination of information from the Jepson Manual (Baldwin, 2012) and the CNPS Inventory of Rare and Endangered Plants website (California Native Plant Society, 2018).

**Tracy's sanicle** (*Sanicula tracyi*) is a perennial herb in the *Apiaceae* family. It is listed as G4/S4 4.2. The bloom period is from April to July. The typical habitat for this species is openings in conifer forest, woodland, and cismontane woodland. Its bioregional distribution includes the Klamath Ranges. It is found at elevations generally between 328 and 5,200 ft (100 - 1,585 m). This habitat type was observed in the project area. During the study, Tracy's sanicle was not found in the project areas.

**Trinity River jewelflower** (*Streptanthus oblancheolatus*) is a perennial herb in the *Brassicaceae* family. It is listed as G4T5G3 S3 1B.3. The bloom period is from April to June. The typical habitat for this species is cliffs, canyon walls, and in conifer forests. Its bioregional distribution includes the Klamath Ranges. It is found at elevations between 66 and 1,378 ft (20 - 420 m). There were no cliffs or canyon walls observed in the project area. During the study, Trinity River jewelflower was not found in the project areas.

**Pale yellow stonecrop** (*Sedum laxum ssp. flavidum*) is a perennial herb in the *Crassulaceae* family. It is listed as G5T4Q S4 4.3. The bloom period is from May to July. The typical habitat for this species is serpentinite or volcanic rocky outcrops, broad leafed upland forests, chaparral, cismontane woodland, lower montane coniferous forests, and upper montane coniferous forests. Its bioregional distribution includes the Klamath Ranges and the High North Coast Ranges. It is found at elevations generally between 1,493 - 6,562 ft (455 - 2,000 m). Rocky outcrops were not observed in the project areas. During the study, pale-yellow stonecrop was not found in the project areas.

**Flagella-like atractylocarpus** (*Campylopodiella stenocarpa*) is a liverwort in the *Dicranaceae* family. It is listed as G5S1 2B.2. The bloom period is N/A. The typical habitat for this species is cismontane woodland. It is found at elevation ranges between 328 and 1,640 ft (100 - 500 m). The project areas are located at a higher elevation than that of the known elevation ranges for this species. During the study, flagella-like atractylocarpus was not found in the study areas.

**Yolla Bolly Mountains birds-foot trefoil** (*Hosackia yollabolliensis*) is a perennial herb in the *Fabaceae* family. It is listed as G2 S2 1B.2. The bloom period is from June to

August. The typical habitat for this species is described as dry barren exposed slopes that are often gravelly, meadows and seeps, and upper montane coniferous forests (in the openings). All populations observed by Down River Consulting staff have been on ridgetop depressions where snowmelt lingers in openings in red fir forests. Pussy paws (*Calyptridium umbellatum*) are the codominant species in the depressions. Its bioregional distribution includes the High North Coast Ranges. It is found at elevations generally between 5,397 and 7,005 ft (1,645 – 2,135 m). This habitat type was not observed in the project area. During the study, Yolla Bolly Mountains birds-foot trefoil was not found in the study areas.

**South Fork Mountain lupine** (*Lupinus elmeri*) is a perennial herb in the *Fabaceae* family. It is listed as G2/S2 1B.2. The bloom period is from June to July/August. The typical habitat for this species is open areas in conifer forest. Its bioregional distribution includes the High North Coast Ranges. It is found at elevations generally between 3,996 and 6,565 ft (1,218 – 2,000 m). All known occurrences are located on South Fork Mountain and Pelletreau Ridges. Red fir (*Abies magnifica*) generally dominates these sites. This habitat type was not observed in the project area. During the study, South Fork Mountain lupine was not found in the study areas.

**Regel's rush** (*Juncus regelii*) is a perennial rhizomatous herb in the *Juncaceae* family. It is listed as G4/S1 2B.3. The bloom period is in August. The typical habitat for this species is montane meadows, mesic, seeps, and upper montane coniferous forests. Its bioregional distribution includes the Klamath Ranges. It is found at elevations generally between 2,493 and 6,235 ft (760 – 1,900 m). The project area is located at a lower elevation than that of the known elevation ranges for this species. During the study, Regel's rush was not found in the study areas.

**Giant fawn lily** (*Erythronium oregonum*) is a perennial herb in the *Liliaceae* family. It is listed as G5 S2.2, 2B.2. The bloom period is from March to June/July. The typical habitat for this species is openings in woodland, cismontane woodland, meadows, and seeps. Habitat observations by Down River Consulting staff have always been in shaded woodlands, often with ultramafic substrates. Its bioregional distribution includes the outer North Coast Ranges. It is found at elevations generally between 328 and 3,773 ft (100 – 1,150 m). The habitat in the project areas is not shaded enough to support this species. During the study, giant fawn lily was not found in the study areas.

**California wild hollyhock** (*Iliamna latibracteata*) is a perennial herb in the *Malvaceae* family. It is listed as G2G3 S2 1B.2. The bloom period is from June to August. The typical habitat for this species is often in burned areas, chaparral (montane), lower montane coniferous forest, North Coast coniferous forest (mesic) and riparian scrub (streambanks). This elusive plant is very sensitive to grazing impacts and seems to be an “ice cream” plant to herbivorous mammals. Populations occur on drier, rockier sites that support chaparral communities. Its bioregional distributions include the North Coast, Klamath Ranges, and the High Cascade Ranges. It is found at elevations generally between 196 and 6,565 ft (60 – 2,000 m). This habitat type was not observed in the project area. During the study, California wild hollyhock was not found in the study area.

**Elongate copper moss** (*Mielichhoferia elongata*) is a bryophyte in the *Mniaceae* family. It is listed as G5 S4 4.3. The bloom period is from N/A. The typical habitat for this species is metamorphic rock, usually acidic, usually vernal mesic, often roadsides, and sometimes carbonate. It may also live in broad leafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forests, meadows and seeps, and subalpine coniferous forests. Its bioregional distributions include the Klamath Ranges, high North Coast Ranges, and outer North Coast Ranges. It is found at elevations generally between 0 and 6,430 ft (0 – 1,960 m). Many of these habitat features were observed in the project area. During the study, elongate copper moss was not found in the study areas.

**Heckner's lewisia** (*Lewisia cotyledon* var. *heckneri*) is a perennial herb in the *Montiaceae* family. It is listed as G4T3 S3 1B.2. The bloom period is from May to July. The typical habitat for this species is crevices in cliffs, rocky slopes of granite or basalt, and conifer forests. Its bioregional distribution includes the Klamath Ranges. It is found at elevations generally between 734 and 7,220 ft (223 – 2,200 m). Rocky habitat was not observed in the project area. During the study, Heckner's lewisia was not found in the study areas.

**Howell's montia** (*Montia howellii*) is an annual herb in the *Montiaceae* family. It is listed as G3G4 S2 2B.2. The bloom period is from March to May. The typical habitat for this species is vernal mesic, sometimes roadsides, meadows and seeps, North Coast coniferous forests, and vernal pools. Its bioregional distributions include the North Coast, Klamath Ranges, High North Coast Ranges, Inner North Coast Ranges, and Outer North Coast Ranges. It is found at elevations generally at < 1,300 ft (<400 m). The project areas are located at a higher elevation than that of the known elevation ranges for this species. During the study, Howell's montia was not found in the study areas.

**Oregon fire herb** (*Epilobium oreganum*) is a perennial herb in the *Onagraceae* family. It is listed as G2 S2 1B.2. The bloom period is from June to September. The typical habitat for this species is mesic. It may or may not be found in boggy areas and shaded streambanks. This plant is also found in the Klamath Ranges. This habitat type was observed in and around the project area. It is found at elevations generally between 1,640 and 7,349 ft (500 – 2,240 m). There are streambanks and boggy areas adjacent to the project areas, but not within the study areas. During the study, Oregon fire herb was not found within the study areas.

**Rattlesnake fern** (*Botrypus virginianus*) is a perennial herb in the *Ophioglossaceae* family. It is listed as G5/S2 2B.2. The bloom period is in June, August, and September. The typical habitat for this species is moist shaded valleys along small streams, bogs and fen, lower montane coniferous forest (mesic), riparian forests, and meadows and seeps. Its bioregional distributions include the Klamath Ranges, Cascade Range Foothills, and the High Cascade Range. It is found at elevations generally between 2,346 and 4,446 ft (715 – 1,355 m). This habitat type was observed adjacent to the project areas. During the study, rattlesnake fern was not found in the study area.

**White-flowered rein orchid** (*Piperia candida*) is a perennial herb in the *Orchidaceae* family. It is listed as G3 S3 1B.2. The bloom period is from March/May through September. The typical habitat for this species is open to shady sites, conifer and mixed-evergreen forest, and sometimes serpentinite. Its bioregional distribution includes the North Coast, Klamath Ranges, High North Coast Ranges, Inner North Coast Ranges, Outer North Coast Ranges, and the San Francisco Bay Area. It is found at elevations generally between 427 and 4,298 ft (30 – 1,310 m). Suitable habitat was found in the project area. During the study, white-flowered rein orchid was not found in the study area.

**Small groundcone** (*Kopsiopsis hookeri*) is a perennial rhizomatous herb (parasitic) in the *Orobanchaceae* family. It is listed as G4? S1S2 2B.3. The bloom period is from April to August. The typical habitat for this species is open woodland, mixed conifer forest, generally on *Gaultheria shallon*, and occasionally on *Arbutus menziesii*, and *Arctostaphylos uva-ursi*. Its bioregional distribution includes the high North Coast Ranges, inner North Coast Ranges, and outer North Coast Ranges. It is found at elevations generally between 295 and 2,904 ft (90 - 885 m). This habitat type was observed in the proposed pond and metal shop project areas. During the study, small groundcone was not found in the study areas.

**Pink margined monkeyflower** (*Erythranthe trinitensis*) is an annual herb in the *Phrymaceae* family. It is listed as G3/S3 1B.3. The bloom period is from June to July/August. The typical habitat for this species is often serpentinite, roadsides, cismontane woodland, lower montane coniferous forests, meadows and seeps, and upper montane coniferous forests. Its bioregional distribution includes Trinity County, Humboldt County, and Siskiyou County. It is found at elevations generally between 1,312 and 7,497 ft (400 – 2,285 m). This habitat type was observed in the project area. During the study, pink margined monkeyflower was not found in the study areas.

**Pacific fuzzwort** (*Ptilidium californicum*) is a leafy liverwort in the *Ptilidiaceae* family. It is listed as 4.3. The bloom period is from May to August. This plant is an epiphyte. The typical habitat is trees, decaying logs and stumps, and rarely on humus over boulders within lower and upper montane coniferous forests. It is found at elevations generally between 3,740 and 5,906 ft (1,140 – 1,800 m). The project areas are located at a lower elevation than that of the known elevation ranges for this species. During the study, Pacific fuzzwort was not found in the study areas.

# Trinity Sungrown Farm Survey Results

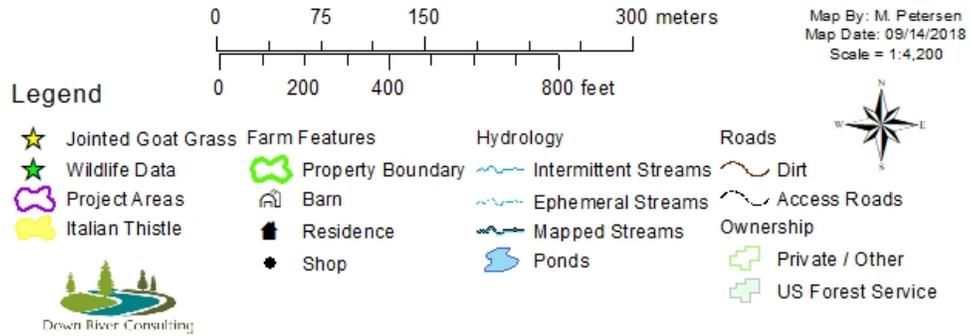
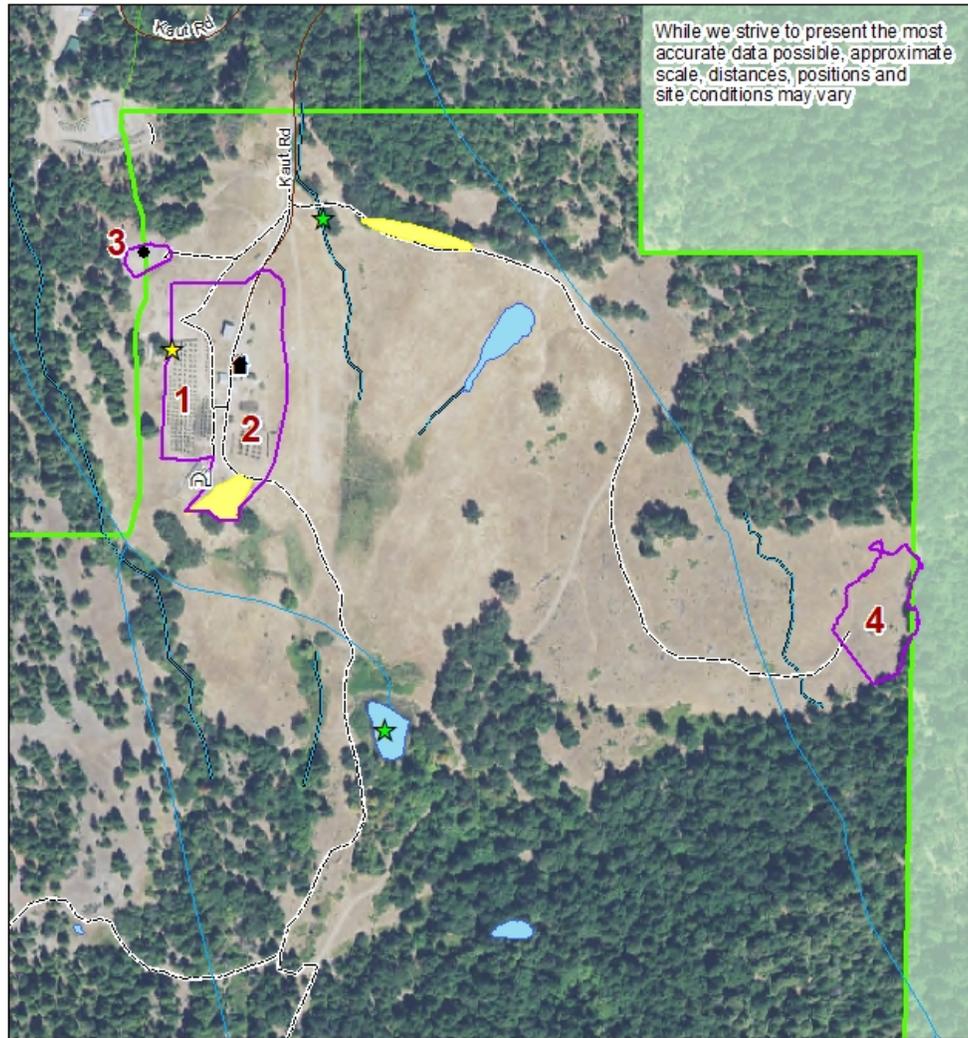


Figure 14: Survey Results Map

## Invertebrates

### Insects

Numerous butterflies, bees, and flies were foraging on Erodium and Chamomile, in the 10,000 ft<sup>2</sup> project location. Swallowtail butterflies were observed near the metal shop. The proposed pond area supports a plethora of pollinator species, including at least three species of bees, a bee fly (*Bombus major*), and a yucca moth (*Greya spp.*). The yucca moth was found feeding exclusively on woodland star (*Lithophragma parviflorum ssp.*) plants.

There are two ponds currently located on the property and several wetland areas that are seasonally inundated. The small southernmost one is used for water storage and the other is used exclusively for wildlife preservation. The latter houses many species of wildlife including the western pond turtle (*Emys marmorata*), which is a listed CDFW special species of concern. The property owner plans to construct a third pond to be used for water storage for cannabis cultivation. This proposed pond, along with the other existing water storage on the property, will provide all necessary water for cannabis cultivation during the upcoming diversion forbearance period.

The proposed site for the new pond is in a meadow located higher than the garden, which is ideal for gravity feeding. This meadow supports several species of flowering plants that are used for foraging by several species of insects. Specific plants providing a majority of the foraging habitat are in the genus *Rubus*. All of the species of bumble bees that were identified are listed as ‘common with populations not in decline’. The European honey bee (*Apis mellifera*) is an introduced species from Europe that is found throughout the United States. It exists in high numbers in this meadow. This species can provide dangerous amounts of competition to native species of bees, especially to bumble bees (*Bumbus spp.*). If introduced, this species can spread diseases to native species and it should not be raised near native bee habitat. (Ellis, Mortensen, & Schmehl, 2017)

The California carpenter bee (*Xylocopa californica*) was seen foraging in the meadow at the peak heat of the day. This is typical of this genus, because they are able to thermoregulate, which allows them to cool themselves while flying at high speeds in high temperatures. They fly at different altitudes depending on the temperature, which allows them to thrive in a variety of environments. (Buchman, n.d.)

The red belted bumble bee (*Bumbus rufocinctus*) was also observed foraging in this meadow and can be commonly found in wooded areas, gardens, and agricultural areas.

Two female worker fuzzy-horned bumble bees (*Bumbus mixtus*) were observed foraging in the meadow. Their primary habitat is mountain meadows. This species is only located in 50% of its historical range, but appears to be increasing in population in its current range. Like most of the bumble species listed above, they sometimes or always nest in holes in the ground created by other animals, mainly ground squirrels. Ground squirrel holes provide habitat for many species of animals including, but not limited to, snakes, salamander, bees, and birds.



Figure 15: European Honey Bee (*Apis mellifera*)

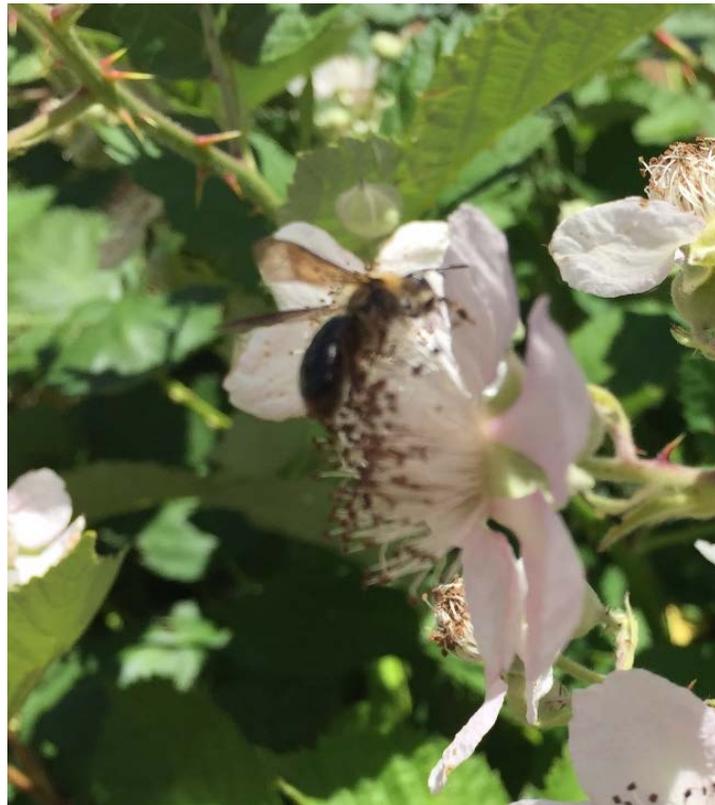


Figure 16: Carpenter Bee (*Xylocopa spp.*)



Figure 17: Red Belted Bumble Bee (*Bombus rufocinctus*)



Figure 18: Fuzzy Horned Bumble Bee (*Bombus mixtus*)

**Franklin's bumble bee** (*Bombus franklini*) is a bumble bee in the *Apidae* family. It is listed as G1 S1. The typical habitat for this species is restricted to the Klamath Mountains of southern Oregon and northern California. They make their homes in abandoned animal burrows or in grassy tussocks, and feed on both the nectar and pollen rewards offered by the flowers of the plants they pollinate such as *Lupinus*, *Eschscholzia*, *Agastache*, *Monardella*, and *Vicia*. Plants from these genera were not observed in the project areas. Franklin's bumble bee was not found in the study area. (Koch, Strange, & Williams, 2012)

**Obscure bumble bee** (*Bombus caliginosus*) is a bumble bee in the *Apidae* family. It is listed as G4? S1S2. The typical habitat for this species is open grassy coastal prairies and coast range meadows. Nesting occurs underground, as well as above ground in abandoned bird nests. Food plants include *Ceanothus*, *Cirsium*, *Clarkia*, *Keckiella*, *Lathyrus*, *Lotus*, *Lupinus*, *Rhododendron*, *Rubus*, *Trifolium*, and *Vaccinium*. *Rubus* was observed in the project area. For the purposes of this document, we can assume the presence of obscure bumble bee. (Koch, Strange, & Williams, 2012)

**Western bumble bee** (*Bombus occidentalis*) is a bumble bee in the *Apidae* family. It is listed as G2G3 S1. The typical habitat for this species is open grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows filled with a wide variety of flowering plants that bloom for the entirety of the colony's lifecycle (February to November). The western bumble bee tends to establish colonies in abandoned rodent holes, so rodent presence can be a factor in suitable habitat. *B. occidentalis* is primarily associated with plants in the *Fabaceae*, *Asteraceae*, *Rhamnaceae*, and *Rosaceae* families. Plants in the *Fabaceae*, *Asteraceae*, and *Rosaceae* families were observed in the project area. For the purposes of this document, we can assume the presence of western bumble bee. (Koch, Strange, & Williams, 2012)

**Monarch butterfly** (*Danatus plexippus plexippus*) is a migratory butterfly in the *Nymphalidae* family. It is listed as G4 T2T3 S2S3. Larvae of this species feed exclusively on 27 different milkweed species from the genus *Asclepias*, in the subfamily *Asclepiadoideae*. Milkweed grows in rangelands, agricultural and roadside areas, riparian, wetland, desert, prairie, meadow, open forests, and woodland habitats. To be used for breeding, stands of milkweed need to be large enough for migrating monarchs to see from the sky. Mature monarchs forage on a wide variety of plant species for nectar and primarily follow river corridors when migrating. Foraging, migrating, and nursery habitat were observed throughout the study area. For the purposes of this document, we can assume the presence of monarch butterflies.

## Mollusks

This study was requested after climatic conditions were conducive for mollusks surveys. All of the project areas, except the proposed pond area, are already developed. The proposed pond area is currently a meadow. There are several large woody features in the meadow that could serve as habitat features.

**Hooded lancetooth** (*Ancotrema voyanum*) is an air-breathing terrestrial snail in the *Haplotrematidae* family. It is listed as G1G2 S1S2. The typical habitat for this species is near

streams or intermittent stream channels where substrate is permanently damp, including late successional conditions such as coarse woody debris, riparian hardwood trees, deep leaf mold, and a relatively closed forest canopy. This species is associated with limestone substrates, mostly within an elevation range of 650 - 3,150 ft. (Burke, Applegarth, & Weasma, Management Recommendations for Survey and Manage Terrestrial Mollusks Version 2, 1999) Late successional conditions were not observed in the project areas; however, the property is surrounded by late seral reserve and Landfire data supports the occurrence of late successional conditions throughout the undeveloped southern portion of the property. The study was not conducted at a time when climatic conditions were conducive for terrestrial mollusk activity. In the absence of seasonally appropriate terrestrial mollusk surveys, the presence of hooded lancetooth should be assumed. (Bureau of Land Management, 2009)

**Trinity bristle snail** (*Monadenia infumata*) is an air-breathing terrestrial snail in the *Helminthoglyptidae* family. It is listed as G2T2 S2. The typical habitat for this species is riparian corridors and uplands and the Klamath/Trinity mixed-conifer forests with a deciduous, hardwood understory. This species is primarily found in moist but well-drained, well-shaded canyons or streamside benches covered with a layer of leaf mold at least 4 inches deep. The project sites are open and lack tree cover; they do not provide typical habitat; however, sometimes this species is observed in dry sites not considered typical habitat. This study was not conducted at a time when climatic conditions were conducive for terrestrial mollusk activity. In the absence of seasonally appropriate terrestrial mollusk surveys, the presence of Trinity bristle snail should be assumed. (Bureau of Land Management, 2009)

**Trinity shoulderband** (*Helminthoglypta talmadgei*) is a terrestrial air-breathing mollusk in the *Helminthoglyptidae* family. It is listed as G2 S2. The typical habitat for this species consists of rocks or limestone talus, with proximity to a stream or spring, and partial shading by a conifer forest. Although the project areas were proximal to ephemeral and intermittent streams, rock talus and shading were largely absent. This study was not conducted at a time when climatic conditions were conducive for terrestrial mollusk activity. In the absence of seasonally appropriate terrestrial mollusk surveys, the presence of Trinity shoulderband should be assumed. (Bureau of Land Management, 2009)

**Big Bar hesperian** (*Vespericola pressleyi*) is a terrestrial air-breathing snail in the *Polygyridae* family. It is listed as G1 S1. The typical habitat for this species is beneath decaying hardwood leaves, woody debris, and loose rocks near active streams. It is active on damp moss and fallen bigleaf maple leaves around a perennial spring seep shaded by a dense canopy of red alder and bigleaf maple. It can be associated with springs in a relatively open stand of Douglas-fir. This habitat type was observed in the project area. This study was not conducted at a time when climatic conditions were conducive for terrestrial mollusk activity. In the absence of seasonally appropriate terrestrial mollusk surveys, the presence of Big Bar Hesperian should be assumed. (Burke, Applegarth, & Weasma, Management Recommendations for Survey and Manage Terrestrial Mollusks Version 2, 1999)

**Western pearlshell** (*Margaritifera falcata*) is a bivalve mollusk in the *Margaritiferidae* family. It is listed as G4G5 S1S2. The typical habitat for this species is the substrate of perennial creeks and rivers with clean water at depths generally of 1.5 – 5.0 feet. This habitat type was observed

near the diversion site, which is not listed as a project area, for the purposes of this study. During the study, western pearlshell was not found in the study area. (Wagschal, Blevins, & Embree, 2017)

## Vertebrates

### Fish

The Pisces fish extent data shows that the project and seven fish species (Table 5) are known to occur in the McDonald Creek - Trinity River watershed (HUC 12- 180102111106). Four of these species are considered sensitive fish species. The diversion is on a stream that is likely to provide habitat for these fish. It is not considered a project, for the purposes of this document.

Scientific Name	Common Name	PISCES Code	Watershed	G Rank	S Rank	CDFW
<i>Rhinichthys osculus Klmathensis</i>	Klamath Speckled Dace	CRO03	McDonald Creek-Trinity River			
<i>Oncorhynchus tshawytscha</i>	Upper Klamath-Trinity Spring Chinook Salmon	SOT02	McDonald Creek-Trinity River	G5	S1S2	SSC
<i>Oncorhynchus tshawytscha</i>	Upper Klamath-Trinity Fall Chinook Salmon	SOT01	McDonald Creek-Trinity River	G5	S1S2	SSC
<i>Oncorhynchus mykiss</i>	Klamath Mountains Province Winter Steelhead	SOM03	McDonald Creek-Trinity River	G5T1Q	S2	SSC
<i>Oncorhynchus mykiss irideus</i>	Coastal Rainbow Trout	SOM09	McDonald Creek-Trinity River	G5T4Q	S2	SSC
<i>Ententospheusus tridentata</i>	Pacific Lamprey	PET01	McDonald Creek-Trinity River	G4	S4	SSC
<i>Catostomus rimiculus</i>	Klamath Small Scale Sucker	CCR01	McDonald Creek-Trinity River			

Table 5: Fish Known to Occur in the McDonald Creek-Trinity River Watershed

### Reptiles & Amphibians

The land owner recently found a coastal giant salamander (*Dicamptodon tenebrosus*) near a natural wet area, with intermittent streams, not associated with a defined project. There are many of these areas interspersed between the project areas. Western pond turtles were observed on two separate occasions within a wildlife habitat pond on the property. The wildlife habitat pond is not associated with any of the projects defined in this document.

The wildlife habitat pond is not currently impacted by anthropogenic activities and is not related to any of the CUP projects. The pond is currently lacking raft features. In addition, invasive cattail proliferation has reduced the pond entrance and exit locations on the banks. There are future plans to modify the Lake and Streambed Alteration Agreement to include Western pond turtle habitat enhancement. Proposed activities will include removal of cattails and insertion of large woody debris to be used as a raft or exit ramp.



Figure 19: Wetland Riparian Habitat

**Foothill yellow-legged frog** (*Rana boylei*) is an amphibian in the *Ranidae* family. It is listed as G3 S3. The typical habitat for this species is rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. It is sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools. This habitat type was observed near the diversion, which is not a project focus for the purposes of this study. During the study, foothill yellow-legged frog was not found in the study area. (Nafis, Foothill Yellow-legged Frog - *Rana boylei*, 2000-2018)

**Pacific tailed frog** (*Ascaphus truei*) is a tailed frog in the *Ascaphidae* family. It is listed as G4 S3S4. The typical habitat for this species is cold, clear, permanent rocky streams in wet forests. They do not inhabit ponds or lakes. A rocky streambed is necessary for protective cover for adults, eggs, and larvae. This habitat type was observed near the diversion point, but not in the project areas defined for this project. During the study, Pacific tailed frog was not found in the study area. (Nafis, Pacific Tailed Frog, 2000-2018)

**Del Norte salamander** (*Plethodon elongatus*) is a lungless salamander in the *Plethodontidae* family. It is listed as G4 S3. The typical habitat for this species is moist talus in humid, shaded, and closed-canopy coastal forests of mixed hardwoods and conifers; it also found in rock rubble of old riverbeds, and under bark and logs on forest floors, usually in rocky areas. It is especially attracted to older forests. This habitat type was observed in the project area. During the study, Del Norte salamander was not found in the study area. (Zeiner, Laudenslayer Jr., Mayer, & White, 1988-1990)

**Southern torrent salamander** (*Rhyacotriton variegatus*) is a medium-sized salamander in the *Rhyacotritonidae* family. It is listed as G3G4 S2S3. The typical habitat for this species is shallow, cold, clear, well-shaded streams and waterfalls and seepages, particularly those running through talus and under rocks year-round, in mature to old-growth forests. This species is occasionally found in riparian vegetation adjacent to water, but is usually found in contact with water, primarily in water on north-facing slopes in the southern part of their range where forests are warmer and drier. The aquatic larvae live in clear, shallow water and still, turbid water in creeks with accumulated leaves. This habitat type was observed in the project area. During the study, Southern torrent salamander was not found in the study area. (Zeiner, Laudenslayer Jr., Mayer, & White, 1988-1990)

**Western pond turtle** (*Emys marmorata*) is an aquatic turtle in the *Emydidae* family. It is listed as G3G4 S3. Typical habitat for this species is ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodlands, forests, and grasslands. In streams, they prefer pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. They may enter brackish water and seawater. This habitat type was observed adjacent to the project area. During the study, Western pond turtle was found on the property. (Nafis, Northwestern Pond Turtle - *Actinemys marmorata*, 2000-2018)

## Mammals

In 2011, USDA Forest Service staff used a game camera to document the following species 1/3 of a mile southwest of the closest project area: Columbian black tailed deer (*Odocoileus hemionus columbianus*), ringtail cat (*Bassariscus astutus*), grey fox (*Urocyon cinereoargenteus*), mountain lion (*Puma concolor*), American black bear (*Ursus americanus*), and striped skunk (*Mephitis mephitis*). We can assume these mammals all use the diverse habitats that the Holliday property provides. Two fishers were observed fighting on the property in 1991. We can assume that they have continued to use this property as habitat.

**Fisher West Coast DPS** (*Pekania pennanti*) is an omnivorous mammal in the *Mustelidae* family. It is listed as G5 T2T3Q S2S3. The typical habitat for this species is coniferous forests, but it is also found in mixed and deciduous forests with a high canopy closure and many hollow trees for dens. Tree species typically found in fisher habitat are spruce, fir, white cedar, and some hardwoods. This habitat type was observed in the project area. Fishers have been historically observed in the study area. (Meyer, 2018)

The nine quad CNNDDB search for sensitive species lists several bat species. None of these species were directly observed during site visits, but the property owner has observed a variety of unidentified species flying around the property at dusk. Presence of all sensitive bats listed below should be assumed.

**Silver haired bat** (*Lasionycteris noctivagans*) is an animal in the *Vespertilionidae* family. It is listed as G5 S3S4. Forested coniferous areas adjacent to lakes, ponds, and streams are their preferred roosting sites. Summer roosts and nursery sites are in tree foliage, cavities, or under

loose bark, and sometimes in buildings. They hibernate in small tree hollows, beneath sections of tree bark, in buildings, rock crevices, wood piles, and on cliff faces. The silver-haired bat (*Lasiorycteris noctivagans*) is one of the slowest flying bats; slow flying bats will not forage in illuminated areas because they are sensitive to artificial nocturnal lights. This species roosts in forests, but can also be found roosting in wood piles and on fence posts, so its presence should be expected on site. The silver-haired bat is almost certainly present on this property because they feed on moths and mosquitoes over bodies of water, such as the pond located on the property. (Silver-Haired Bat, 2017)

**Hoary bat** (*Lasiurus cinereus*) is a vesper bat in the *Vespertilionidae* family. It is listed as G5 S4. The typical roosting habitat for this species is in the foliage of trees near the ends of branches. It blends with the bark of trees and is commonly associated with forested habitats. It can also be found in suburbs with old, large trees.

The hoary bat (*Lasiurus cinereus*) is almost certainly found on this property because it roosts in wooded habitats on the edges of residential areas. Unlike some other bat species, it can be found foraging around artificial lighting late at night. This species is preyed upon by snakes and nocturnal raptors, such as owls. Artificial lighting could make them more sensitive to predators. (Hoary Bat, 2017)

**Long-eared myotis** (*Myotis evotis*) is a vesper bat in the *Vespertilionidae* family. It is listed as G5 S3. The typical roosting habitat for this species is crevices, snags, spaces under bark, and buildings. Night roosting usually occurs in caves. Foraging habitat is over water, open spaces, and among trees. (Zeiner, Laudenslayer Jr., Mayer, & White, 1988-1990). The long-eared myotis (*Myotis evotis*) is another low flying bat that is averse to artificial lighting at night. This species is sensitive to construction activities because it roosts in rocky crevices and abandoned buildings which tend to be sites for building construction. There are a few historical unkempt buildings on the property that are more than likely habitat for this species of bat. (Nor Cal Bats, 2017)

**Yuma myotis** (*Myotis yumanensis*) is an animal in the *Vespertilionidae* family. It is listed as G5 S4. The typical habitat for this species is crevices, buildings, mines, and caves. Trees are most important for day roosting. Night roosting usually occurs in caves. Foraging habitat is over streams and ponds, openings in forests, and woodlands (Zeiner, Laudenslayer Jr., Mayer, & White, 1988-1990). The Yuma myotis (*Myotis yumanensis*) forages over water on emerging aquatic insects, so it could be found on this property. It usually exists within large groups of up to 5,000 bats. Since there is not a huge number of bats on this property, they most likely are not prevalent; however, their presence should be assumed because they tend to roost in manmade buildings. They are very sensitive to human activity and chemicals. (Yuma Myotis, 2017)

**Long-legged myotis** (*Myotis volans*) is a vesper bat in the *Vespertilionidae* family. It is listed as G5 S3. The typical habitat for this species is crevices, snags, spaces under bark, buildings mines, and caves. Trees are most important for day roosting. Night roosting usually occurs in caves. Foraging habitat is low to the ground (3 - 5 m), over surface water, and openings in early successional forests, woodlands, chaparral, and cliffs (Zeiner, Laudenslayer Jr., Mayer, & White, 1988-1990). The long-legged myotis is likely prevalent on the property, even though they are

uncommon throughout their range. They are primarily found at the confluence of coniferous forests and agricultural areas. They roost in abandoned buildings, hollow trees, and other crevices. They are slow flying bats that are sensitive to nocturnal artificial light. They are also sensitive to construction activities that remove roosting trees, rocky areas, and older buildings. (Long-Legged Myotis, 2017)

**Townsend's big eared bat** (*Corynorhinus townsendii*) is a mammal in the *Vespertilionidae* family. It is listed as G3G4 S2. The typical habitat for this species is coniferous forest, mixed mesophytic forest, deserts, native prairie, riparian communities, active agricultural areas, and coastal habitats. Its distribution is strongly correlated with the availability of caves and cave-like roosting habitat, with population centers occurring in areas dominated by exposed, cavity-forming rock and/or historic mining districts. Foraging habitat type was observed in the project area; however, it is unknown whether there is adequate roosting habitat nearby. They roost in abandoned buildings, under tree bark, and in rock crevices (National Park Service, 2018). Townsend's big eared bat is very sensitive to human presence, but it is known to roost in old barns such as the one located on the property. They only forage during complete darkness, so reducing nocturnal artificial lighting is important to the presence of this species. They are beneficial to humans because Townsend's big eared bats prey on moths that can cause damage to property especially by the invasive and destructive gypsy moth (*Lymantria dispar dispar*) which has found its way to California from the east coast where it entered from shipments from Europe and Asia. (Townsend's Long-Eared Bat, 2017)

**Fringed myotis** (*Myotis thysanodes*) is a vesper bat in the *Vespertilionidae* family. It is listed as G4 S3. The typical roosting habitat for this species is crevices, mines, caves, and buildings. Maternal colonies tend to seek out roosting habitat within ¼ mile of a permanent surface water source and with afternoon shade. Foraging habitat is over water, in open habitats, and around dense foliage (Zeiner, Laudenslayer Jr., Mayer, & White, 1988-1990). The fringed myotis has a patchy distribution and it is uncommon throughout its range. It lives in drier scrub oak woodland and juniper woodland and can be found in warmer, lower elevations during the winter. Its presence is assumed on the property and special considerations should be taken when removing dead trees or old buildings from the property. (Fringe Tailed Bat, 2017)



Figure 20: Historic Barn Suspected to Provide Bat Roosting Habitat

**Wolverine** (*Gulo gulo*) is an omnivorous mammal in the *Mustelidae* family. It is listed as G4 S1. The typical habitat for this species is alpine, tundra, taiga, and boreal forest zones, including coniferous, mixed, and deciduous woodlands, bogs, and open mountains, as well as tundra habitats with dense spring snow pack. This habitat type was not observed in the project area. Wolverines are commonly misidentified in this area and it is possible that this occurrence was a result of misidentification. During the study, wolverines were not found in the project areas. (Patsy, 2009)

**Humboldt marten** (*Martes caurina humboldtensis*) is a carnivorous mammal in the *Mustelidae* family. It is listed as G5 T1 S1. The typical habitat for this species is humid, coastal old-growth redwood forests. Old growth redwood forest habitat was not observed in the project area. Furthermore, the known extent of this species is limited to four small populations in coastal redwood forests. During the study, the Humboldt marten was not found in the study area. (Arcata Fish and Wildlife Office, 2017)

# Wildlife Observations on Trinity Sungrown Farm

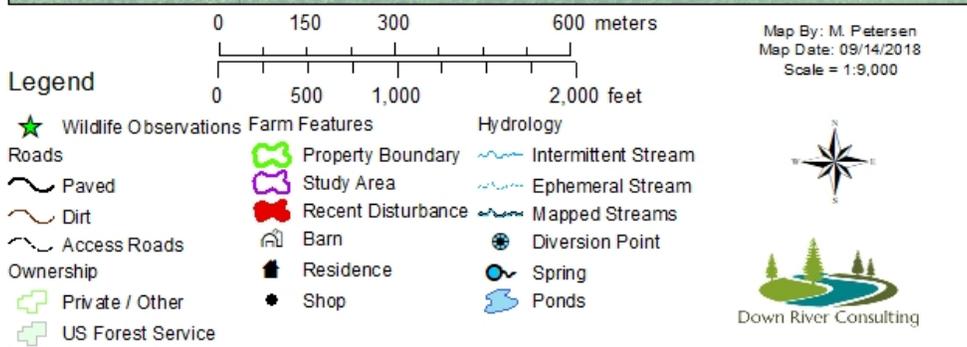
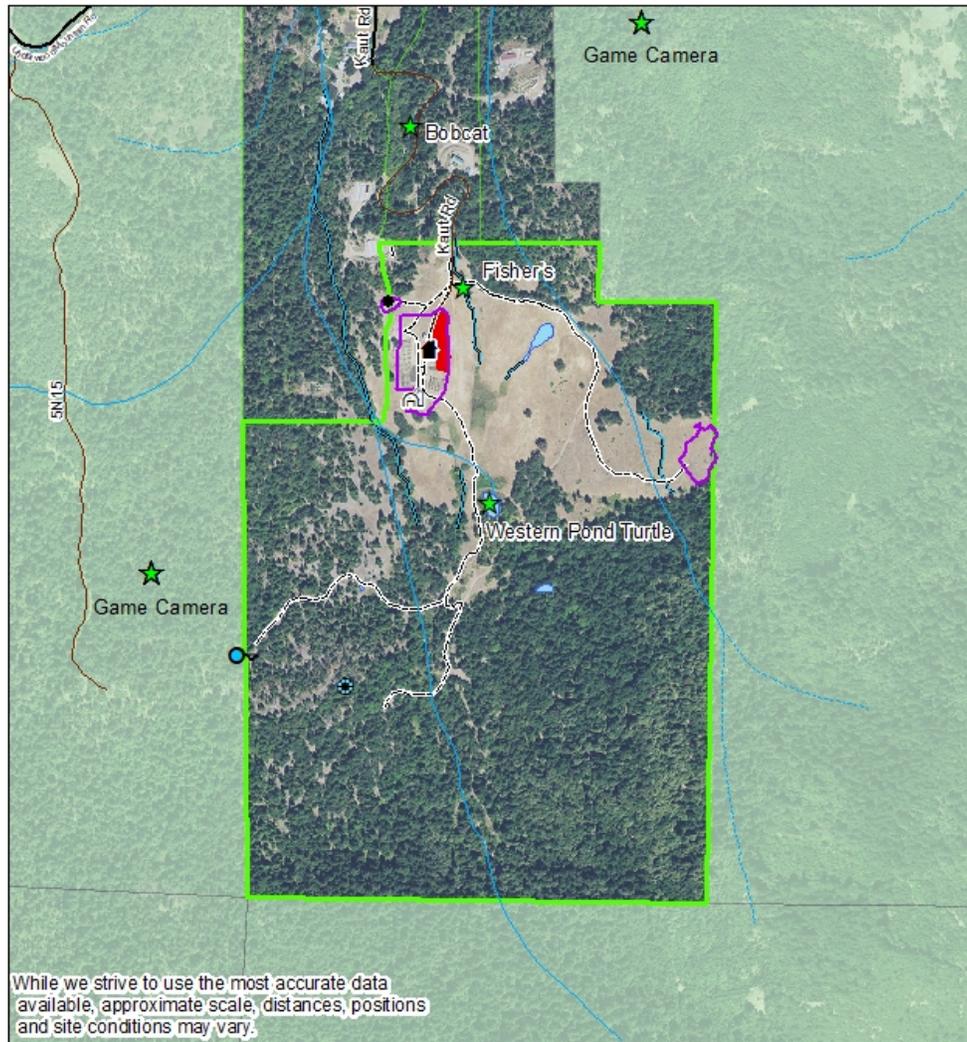
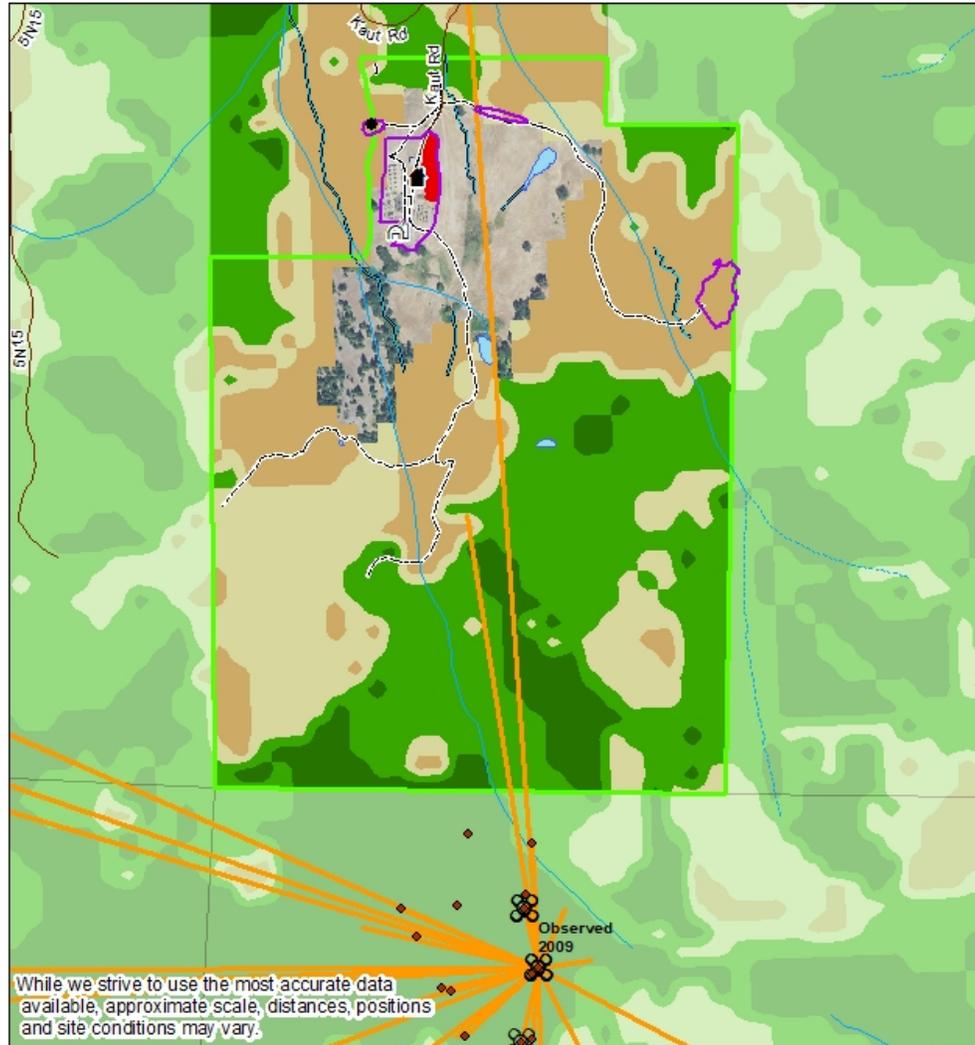


Figure 21: Wildlife Map

## Birds

**Northern Spotted Owl (*Strix occidentalis caurina*):** The property is bordered to the west, east, and north by Late Successional Reserve (LSR) National Forest Lands and it is surrounded by national forests lands that are designated as northern spotted owl (NSO) critical habitat. The developed areas on the property are not considered nesting/roosting and dispersal habitat; however, much of the property likely provides habitat for NSO. In addition, the open areas are expected to provide foraging habitat. There have been many NSO observations in the immediate vicinity of the property. Furthermore, there is documented activity through the center of the property. The USDA Forest Service currently has hooting crews completing surveys in the LSR surrounding the property. These surveys are for the Burnt Ranch Community Protection project NEPA. Hooting surveys have not been completed within the property.

# Trinity Sungrown Farm Northern Spotted Owl Habitat



Map By: M. Petersen  
Map Date: 09/14/2018  
Scale = 1:9,000

0 150 300 600 meters

0 500 1,000 2,000 feet

<b>Legend</b>			
<b>Wildlife Data</b>	Not Suitable	Barn	<b>Ownership</b>
◆ NSO Observation	Marginal	Residence	Private / Other
⊗ Documented NSO nests	Suitable	Shop	US Forest Service
— Documented NSO Activity	Highly Suitable	<b>Streams</b>	
<b>Roads</b>	<b>Farm Features</b>	Intermittent	
— Dirt	Property Boundary	Ephemeral	
— Access Roads	Study Area	Mapped Streams	
	Recent Disturbance	Ponds	

Down River Consulting

Figure 22: NSO Map

## Other Birds

Positively identified birds at the proposed pond site (NE) were red winged black birds (*Agelaius phoeniceus*) and barn swallows (*Hirundo rustica*). Neither are species of concern.



Figure 23: Barn Swallow (*Hirundo rustica*) Nest

**Bald eagle** (*Haliaeetus leucocephalus*) is a raptor in the *Accipitridae* family. It is listed as G5 S3. The typical habitat for this species is lakes and reservoirs with lots of fish and surrounding forests. In the winter, bald eagles can be seen around unfrozen lakes and hunting along coastlines, reservoirs, and rivers. During their migration, bald eagles are seen near all types of water habitats. This habitat type was observed in the project area. During the study, bald eagles were not found in the study area. (Bald Eagle, 2018)

**Great blue heron** (*Ardea herodias*) is a large wading bird in the *Ardeidae* family. It is listed as G5 S4. Typical habitat for this species is marshes, swamps, shores, and tide flats. It forages in any kind of calm, fresh waters or slow-moving rivers, as well as in shallow coastal bays. They

nest in trees or shrubs near water, sometimes on ground in areas free of predators. This habitat type was observed in the project area. During the study, the great blue heron was not found in the study area. (Cornell University, 2017)

**Northern goshawk** (*Accipiter gentilis*) is a raptor in the *Accipitridae* family. It is listed as G5 S3. The typical habitat for this species is coniferous forests with high DBH trees and low sloping hillsides. They prefer to hunt on or near low traffic areas or by decommissioned unpaved roads that run through forests. All of these habitat elements were observed in or adjacent to the project area. During the study, the Northern goshawk was not found in the study area. (Kaufmen, 2018)

## Impacts and Mitigations Discussion

The project areas are dominated by ruderal vegetation, resulting from a long history of agricultural use and other anthropogenic disturbance. The paramount environmental concern for this property is vegetation management. Italian thistle (*Carduus pycnocephalus*) is growing on the property as well as jointed goatgrass (*Aegilops cylindrical*). These invasive species are rated as moderate and “to watch” respectively, by the California Invasive Plant Council (Cal-IPC). They are both high priority for treatment in Trinity County because there are very few known populations in the county. Only one jointed goatgrass plant was found flowering onsite. It was removed, bagged, and taken to the Weaverville Solid Waste Facility.



Figure 24: Jointed Goatgrass (*Aegilops cylindrical*)  
*pycnocephalus*)



Figure 25: Italian Thistle (*Carduus*

Milk thistle (*Silybum marianum*) was also found in the 10,000 ft<sup>2</sup> cultivation area. It is rated as limited concern by Cal-IPC; however, it was not known to historically have grown in Trinity County. Aggressive treatment measures should be taken to extirpate this plant from the site.



Figure 26: Milk Thistle (*Silybum marianum*)

Proliferation of untreated noxious weeds causes wildlife habitat degradation and has been found to cause enormous agricultural losses. These impacts are considered significant (FAC Article 1.7, 7270). To mitigate these impacts, monthly monitoring of the project areas should be conducted throughout the growing season, together with rapid (treatment) response to new weed populations and an integrated pest management plan which addresses the biological considerations of the target species. Implementation of the mitigation measures would reduce these impacts to a less than significant level.

All species of bees are sensitive to pesticides and habitat loss and degradation. It is important to restrict pesticide use near suitable habitat and especially during the time of year when foraging plants are flowering. Integrated pest management plans should ensure that application of chemicals (if used) only occurs when absolutely necessary and at the time of day when the native bees on site are resting. (FAC 3 CCR § 6650) Planting nitrogen-fixing fallow and other pollinator-friendly plants along the field margins can increase habitat for bee species (Hatfield, Jepsen, Thorp, Richardson, & Colla, 2014).

The pond development will locally reduce the quantity and quality of pollinator habitat in the meadow. The meadow chosen for the proposed pond site provides some of the best bee foraging habitat in the area. While the pollinators discussed on page 34 are not protected under CESA, they are listed as critically imperiled by CDFW. Additional actions could be taken to counteract the immediate impacts of pollinator foraging and nesting habitat removal, by creating and preserving high-quality habitats that include suitable foraging and nesting sites. Planting native

nectar plants adjacent to the areas slated for development will help support the native pollinator species, thus mitigating the localized impacts that could intensify the decline of these critically impaired pollinator species.

Loss of roosting habitat for sensitive bats could occur as a result of historic barn and snag removal. Snags are recognized in the Forest Practices Act as habitat elements needed by over 160 species of wildlife. (Laird & Pimlott, 2017) A high diversity of sensitive bats is assumed to use the property for roosting and foraging habitat. Loss of roosting habitat is considered significant. Leaving the historic barn intact, as well as snags larger than 16" DBH to serve as habitat features, would mitigate the potential impacts to these sensitive species.

A recent Humboldt County study found the cause of death for 60% of northern spotted owl carcasses sampled was a result of anticoagulant rodenticides (Gabriel, 2018). Northern spotted owls are protected under the Endangered Species Act, thus any NSO take would be considered significant (US Fish and Wildlife Service, 1973). TES species data shows that northern spotted owls and fishers frequent this property. In order to mitigate for unintended harm to northern spotted owls and fishers, the farm will use preventative and non-chemical strategies to control rodents. The rodent prevention strategy will focus on reducing the rodent carrying capacity of the site by removing food access and items/features that could provide habitat to rodents. The farm manager will erect owl boxes and use domestic predators such as cats or dogs bred to hunt rodents, if needed. In the event that an infestation is detected, traps and EradiBait, a non-anti-coagulant powder corn cob, will be used to extirpate the pests. The use of this pest management strategy, rather than anticoagulant rodenticides, reduces the rodent management impacts to less than significant.

Overall, the 210-acre property that these proposed projects are within provides habitat for a plethora of species, many of which are on the list of species of greatest conservation concern. In response to a comment about the amount of responsibility that comes with ownership of a property this size, the land owner replied, "I do not own this land, it owns me. I am just lucky enough to be able to take care of it for a while." Based on the environmental stewardship witnessed on site, it is evident that the land owner has the drive and ethics to implement this project utilizing a sustainable, low impact method. The parcel is zoned as Agricultural Preserve. In order to keep its Williamson Act status, the land owner is required to implement agricultural projects on the parcel. A 1-acre agricultural crop is an excellent way to begin to meet that requirement.

## Appendix A

<i>Plant Species Present Within Current 10,000 Ft<sup>2</sup> Cultivation Area</i>			
<b>Family Name</b>	<b>Scientific Name</b>	<b>Common name</b>	<b>Status</b>
<i>Asteraceae</i>	<i>Carduus pycnocephalus</i>	Italian thistle	Invasive Cal-IPC Rating Moderate
<i>Asteraceae</i>	<i>Centaurea solstitialis</i>	yellow star-thistle	Invasive Cal-IPC Rating-High
<i>Asteraceae</i>	<i>Matricaria chamomilla</i>	German chamomile	Non-native
<i>Brassicaceae</i>	<i>Capsella bursa-pastoris</i>	shepherd's purse	Non-native
<i>Brassicaceae</i>	<i>Diplotaxis muralis</i>	annual wallrocket	Non-native
<i>Caryophyllaceae</i>	<i>Stellaria media</i>	chickweed	Non-native
<i>Chenopodeaceae</i>	<i>Chenopodium album</i>	lambs quarters	Non-native
<i>Fabaceae</i>	<i>Acemispion nevadensis ssp nevadensis</i>	Sierra lotus	
<i>Fabaceae</i>	<i>Lotus corniculatus</i>	Yolla Bolly bird's foot trefoil	
<i>Malvaceae</i>	<i>Malva neglecta</i>	dwarf mallow	Non-native
<i>Pinaceae</i>	<i>Pinus ponderosa</i>	ponderosa pine	
<i>Plantaganaceae</i>	<i>Plantago lanceolata</i>	plantain	Invasive Cal-IPC Rating Limited
<i>Poaceae</i>	<i>Aegilops cylindrical</i>	jointed goatgrass	Watchlist
<i>Poaceae</i>	<i>Elymus repens</i>	quack grass	Non-native
<i>Poaceae</i>	<i>Hordeum marinum ssp. gussoneanum</i>	barley	Invasive Cal-IPC Rating Moderate
<i>Polygonaceae</i>	<i>Polygonum avicular ssp. depressum</i>	common knotweed	Non-native
<i>Ranunculaceae</i>	<i>Ranunculus sardous</i>	hairy buttercup	
<i>Scrophulariaceae</i>	<i>Verbascum blattaria</i>	moth mullein	Non-native

<i>Plant Species Present Near Metal Shop</i>			
<b>Family Name</b>	<b>Scientific Name</b>	<b>Common name</b>	<b>Status</b>
<i>Asteraceae</i>	<i>Cichorium intybus</i>	chicory	Non-native

<i>Asteraceae</i>	<i>Matricaria chamomilla</i>	German chamomile	Non-native
Brassicaceae	<i>Hirschfeldia incana</i>	Mustard	Invasive Cal-IPC Rating Moderate
<i>Cupressaceae</i>	<i>Calocedrus decurrens</i>	incense cedar	
Ericaceae	<i>Arbutus menziesii</i>	madrone	
<i>Fabaceae</i>	<i>Acmisipon nevadensis ssp nevadensis</i>	Sierra lotus	
Fabaceae	<i>Medicago lupulina</i>	black medick	Non-native
Fagaceae	<i>Quercus garryana</i>	white oak	
Fagaceae	<i>Quercus Kelloggii</i>	black oak	
<i>Pinaceae</i>	<i>Pinus ponderosa</i>	ponderosa pine	
Pinaceae	<i>Pseudotsuga menziesii</i>	Douglas fir	
Plantagiaceae	<i>Plantago lanceolata</i>	narrow leaf plantain	Invasive Cal-IPC Rating Limited
<i>Poaceae</i>	<i>Avena fatua</i>	common wild oat	Invasive Cal-IPC Rating Moderate
<i>Poaceae</i>	<i>Cynosurus echinatus</i>	dogtail grass	Invasive Cal-IPC Rating Moderate
<i>Poaceae</i>	<i>Festuca microstachys</i>	small fescue	
<i>Poaceae</i>	<i>Phleum pratense</i>	common timothy	
Polygonaceae	<i>Rumex acetosella</i>	common sheep sorrel	Invasive Cal-IPC Rating Moderate
Scrophulariaceae	<i>Verbascum virgatum</i>	wand mullein	Non-native
<i>Themidaceae</i>	<i>Brodiaea coronaria</i>	crown brodiaea	
<i>Themidaceae</i>	<i>Dichelostemma multiflorum</i>	many flowered brodiaea	

<b><i>Plant Species Present Near Proposed Pond</i></b>			
<b>Family Name</b>	<b>Scientific Name</b>	<b>Common name</b>	<b>Status</b>
<i>Alliaceae</i>	<i>Allium peninsulare</i> var. <i>peninsulare</i>	Mexicali onion	
<i>Anacardaceae</i>	<i>Toxidendron diversifolium</i>	poison oak	
<i>Apocynaceae</i>	<i>Apocynum androsaemifolium</i>	bitter dogbane	

<i>Asteraceae</i>	<i>Anisocarpus maliodes</i>	woodland madia	
<i>Asteraceae</i>	<i>Centaurea sositialis</i>	yellow star-thistle	Invasive Cal-IPC Rating-High
<i>Asteraceae</i>	<i>Cichorium intybus</i>	chicory	Non-native
<i>Asteraceae</i>	<i>Hemizonia congesta ssp. clevelandii</i>	Cleveland's tarweed	
<i>Asteraceae</i>	<i>Matricaria discoidea</i>	pineapple weed	
<i>Asteraceae</i>	<i>Silybum marianum</i>	milk thistle	Invasive Cal-IPC Rating-Limited
<i>Caryophyllaceae</i>	<i>Silene bolander</i>	Bolander's silene	
<i>Convolvulaceae</i>	<i>Calystegia occidentalis ssp. occidentalis</i>	Modoc morning glory	
<i>Cupressaceae</i>	<i>Calocedrus decurrens</i>	incense cedar	
<i>Dennstaedtiaceae</i>	<i>Pteridium aquilinum ssp.</i>	bracken fern	
<i>Ericaceae</i>	<i>Arbutus menziesii</i>	madrone	
<i>Fabaceae</i>	<i>Acmispon nevadensis</i>	Sierra lotus	
<i>Fagaceae</i>	<i>Quercus garryana</i>	Oregon white oak	
<i>Geranniaceae</i>	<i>Erodium cicutarium</i>	red stem fillerie	Invasive Cal-IPC Rating-Limited
<i>Hypericaceae</i>	<i>Hypericum perforatum</i>	Klamathweed	Invasive Cal-IPC Rating Moderate
<i>Lamiaceae</i>	<i>Clinopodium douglasii</i>	yerba buena	
<i>Pinaceae</i>	<i>Pseudotsuga menziesii</i>	Douglas fir	
<i>Plantaginaceae</i>	<i>Plantago lanceolata</i>	narrow leaf plantain	Invasive Cal-IPC Rating-Limited
<i>Plantaginaceae</i>	<i>Veronica arvensis</i>	speedwell	

<i>Poaceae</i>	<i>Bromus diandrus</i>	ripgut brome	Invasive Cal-IPC Rating Moderate
<i>Poaceae</i>	<i>Bromus tectorum</i>	cheat grass	Invasive Cal-IPC Rating-High
<i>Poaceae</i>	<i>Dactylis glomerata</i>	orchard grass	Invasive Cal-IPC Rating-Limited
<i>Poaceae</i>	<i>Elymus caput-medusae</i>	medusa-head grass	Invasive Cal-IPC Rating-High
<i>Poaceae</i>	<i>Elymus glaucus</i>	blue wild rye	
<i>Poaceae</i>	<i>Festuca microstachys</i>	small fescue	
<i>Poaceae</i>	<i>Glyceria elata</i>	fowl mannagrass	
<i>Poaceae</i>	<i>Phleum alpinum</i>	alpine Timothy	
<i>Poaceae</i>	<i>Phleum pratense</i>	common timothy	
<i>Polemoniaceae</i>	<i>Navarretia intertexta</i>	interwoven navarretia	
<i>Polygonaceae</i>	<i>Rumex acetosella</i>	sheep sorrel	Invasive Cal-IPC Rating Moderate
<i>Polymoniaceae</i>	<i>Navarretia intertexta ssp. intertext</i>	needleleaf naverritia	
<i>Rosaceae</i>	<i>Rubus ameniacus</i>	Armenian blackberry	Invasive Cal-IPC Rating-High
<i>Saxifraceae</i>	<i>Lithophragma parviflorum ssp</i>	woodland star	
<i>Themidaceae</i>	<i>Dichelostemma ida-maia</i>	firecracker brodeiaea	

Appendix B

*Animal Species Present On Site*

<b>Family name</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Status</b>	<b>Location</b>
<i>Apidae</i>	<i>Apis mellifera</i>	European honey bee	Non-native	All project areas
<i>Bombyliidae</i>	<i>Bombylius major</i>	bee fly		Future pond
<i>Corvidae</i>	<i>Cyanocitta stelleri</i>	Stellar's jay		Metal shop
<i>Dicamptodontidae</i>	<i>Dicamptodon tenebrosus</i>	giant coastal salamander		10,000 ft <sup>2</sup> canopy
<i>Emydidae</i>	<i>Actinemys marmorata</i>	western pond turtle	G3G4 S3	Future pond
<a href="#"><u>Hirundinidae</u></a>	<i>Hirundo rustica</i>	barn swallow		Barn
<a href="#"><u>Hirundinidae</u></a>	<i>Tachycineta bicolor</i>	tree swallow		10,000 ft <sup>2</sup> canopy
<i>Icteridae</i>	<i>Agelaius phoeniceus</i>	red wing black bird		Pond
<i>Papilionidae</i>	<u><i>Papilio polyxenes</i></u>	swallow tail butterfly		Metal shop
Prodoxidae	<u><i>Greya spp.</i></u>	Yucca moth		Future pond

## References

- Arcata Fish and Wildlife Office. (2017, April 10). *Humboldt Marten Martes caurina humboldtensis*. Retrieved June 2018, from US Fish and Wildlife Service: <https://www.fws.gov/arcata/es/mammals/HumboldtMarten/humbMarten.html>
- Arnold, R. A. (1987). *A Review On Six Known Candidate Insects*. Pleasant Hills, CA: Ethnological Consulting Services.
- Bald Eagle*. (2018). Retrieved from The National Wildlife Federation: <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Birds/Bald-Eagle>
- Baldwin, B. D. (2012). *The Jepson Manual Vascular Plants of California*. Berkeley: University of California Press.
- Buchman, S. (n.d.). *Carpenter Bees (Xylocopa spp.)*. Retrieved from United States Department of Agriculture Forest Service: [https://www.fs.fed.us/wildflowers/pollinators/pollinator-of-the-month/carpenter\\_bees.shtml](https://www.fs.fed.us/wildflowers/pollinators/pollinator-of-the-month/carpenter_bees.shtml)
- Bureau of Land Management. (2009). *Field Guide to Survey and Manage Terrestrial Mollusks from the North West Forest Plan*. BLM Oregon State Office.
- Bureau of Land Management. (2009). *Field Guide to Survey and Manage Terrestrial Mollusks from the North West Forest Plan*. BLM Oregon State Office.
- Burke, T. E., Applegarth, J. s., & Weasma, T. R. (1999). *Management Recommendations for Survey and Manage Terrestrial Mollusks Version 2*. Unknown City: Unknown Publisher. Retrieved May 2018
- Burke, T. E., Applegarth, J. s., & Weasma, T. R. (1999). *Management Recommendations for Survey and Manage Terrestrial Mollusks Version 2*. Unknown City: Unknown Publisher. Retrieved May 2018
- CalFlora. (2018, June). *Calflora*. Retrieved from Information on California Plants for Education, Research and Conservation: <http://www.calflora.org>
- CalFlora. (2018, June). *What Grows Here*. Retrieved from <http://www.calflora.org/entry/wgh.html>
- California Code of Regulations, t. 1. (2018). *General Lake and Streambed Alteration Agreement for Activities Related to Cannabis Cultivation*. Retrieved from California Department of Fish and Wildlife: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=155627&inline>
- California Department of Fish and Wildlife, N. D. (2018, April). Special Animals List. Periodic publication. Page 6.
- California Native Plant Society. (2018). (online edition, v08-03 0.39). Retrieved May 30, 2018, from Inventory of Rare and Endangered Plants : <http://www.rareplants.cnps.org>

- California Natural Resources Agency. (2014). *resources.ca.gov/ceqa/more/faq.html*. Retrieved from California Natural Resources Agency - FAQ: <http://resources.ca.gov/ceqa/more/faq.html>
- California North Coast Regional Water Quality Control Board. (2015, August). Order 2015-0023 Waiver of Waste Discharge. California: State of California.
- Cornell University. (2017). *All About Birds*. Retrieved from The Cornell Lab of Ornithology: [https://www.allaboutbirds.org/guide/Great\\_Blue\\_Heron/id](https://www.allaboutbirds.org/guide/Great_Blue_Heron/id)
- Ellis, J., Mortensen, A., & Schmehl, D. (2017, December). *Featured Creatures: Apis mellifera*. Retrieved from Entomology and Nematology Department, University of Florida: [http://entnemdept.ufl.edu/creatures/MISC/BEES/euro\\_honey\\_bee.htm](http://entnemdept.ufl.edu/creatures/MISC/BEES/euro_honey_bee.htm)
- Fringe Tailed Bat*. (2017, Decemeber 1). Retrieved from Northern California Bats Rescue and Education: <http://norcalbats.org/2017/12/01/fringe-tailed-bat/>
- Gabriel, M. W. (2018). Exposure to rodenticides in Northern Spotted and Barred Owls on remote forest lands in northwestern California: evidence of food web contamination. *Avian Conservation and Ecology*, 13(1):2.
- Habitat Conservation Planning Branch. (2018). *CESA to Federal Endangered Species Act*. Retrieved from California Department of Fish and Wildlife: <https://www.wildlife.ca.gov/Conservation/CESA/FESA>
- Hatfield, R., Jepsen, S., Thorp, R., Richardson, L., & Colla, S. (2014). *Bombus mixtus*. Retrieved from The IUCN Red List of Threatened Species 2014: e.T44937898A69004061: <http://www.iucnredlist.org/details/44937898/0>
- Hoary Bat*. (2017, December 1). Retrieved from Northern California Bats Rescue and Education: <http://norcalbats.org/2017/12/01/hoary-bat/>
- Kaufman, K. (2018). *Golden Eagle*. Retrieved June 2018, from Audabon: <https://www.audubon.org/field-guide/bird/golden-eagle>
- Kaufman, K. (2018). *Osprey*. Retrieved June 2018, from Audobon: <https://www.audubon.org/field-guide/bird/osprey>
- Kaufmen, K. (2018). *Audubon*. Retrieved from Northern Goshawk: <https://www.audubon.org/field-guide/bird/northern-goshawk>
- Koch, J., Strange, J., & Williams, P. (2012). *Bumblebees of the Western United States*. Logan, Utah: USDA Agricultural Research Service.
- Laird, J., & Pimlott, K. (2017). California Forest Practice Rules . CalFire.
- Long-Legged Myotis*. (2017, Decemeber 1). Retrieved from Northern California Bats Rescue and Education: <http://norcalbats.org/2017/12/01/long-eared-myotis/>

- Meyer, R. (2018, July 13). *Pekania pennanti*. (F. S. U.S. Department of Agriculture, Producer) Retrieved July 2018, from Fire Effects Information System: <https://www.fs.fed.us/database/feis/animals/mammal/pepe/all.html>
- Nafis, G. (2000-2016). Retrieved June 2018, from A Guide to the Amphibians and Reptiles of California: <http://www.californiaherps.com/>
- Nafis, G. (2000-2018). *Foothill Yellow-legged Frog - Rana boylei*. Retrieved June 2018, from A Guide to the Amphibians and Reptiles of California: <http://www.californiaherps.com/frogs/pages/r.boylei.html>
- Nafis, G. (2000-2018). *Northwestern Pond Turtle - Actinemys marmorata*. Retrieved June 2018, from A Guide to the Amphibians and Reptiles of California: <http://www.californiaherps.com/turtles/pages/a.marmorata.html>
- Nafis, G. (2000-2018). *Pacific Tailed Frog*. Retrieved June 2018, from A Guide to the Amphibians and Reptiles of California: <http://www.californiaherps.com/frogs/pages/a.truei.html>
- National Marine Fisheries Service. (2016, November). NMFS California Species List. Retrieved July 5, 2018
- National Park Service. (2018, January 31). *Townsend's Big-eared bats*. Retrieved June 2018, from Channel Islands: <https://www.nps.gov/chis/learn/nature/townsend-bats.htm>
- Nor Cal Bats. (2017, December 1). *Long-Eared Myotis*. Retrieved from Northern California Bats Rescue and Education: <http://norcalbats.org/2017/12/01/long-eared-myotis/>
- NRCS. (2000, May). *Rainbow Trout*. Retrieved June 2018, from US Fish and Wildlife Service: <https://www.fws.gov/northeast/wssnfh/pdfs/rainbow1.pdf>
- Patsy, V. a. (2009). *Gulo gulo*. Retrieved June 2018, from Animal Diversity Web: [https://animaldiversity.org/accounts/Gulo\\_gulo/](https://animaldiversity.org/accounts/Gulo_gulo/)
- Sawyer, J. T.-W. (2009). A Manual of California Vegetation, Second Edition. Sacramento, CA. Retrieved June 5, 2018
- Sheen, K. &. (2018, May 30). Trinity County Collaborative Group Land Assessment Project Data. Weaverville , CA, USA.
- Silver-Haired Bat*. (2017, December 1). Retrieved from Northern California Bats Rescue and Education: <http://norcalbats.org/2017/12/01/silver-haired-bat/>
- Staley, K., & Mueller, J. (2000, May). Rainbow Trout. *Wildlife Habitat Management Institute*.
- State of California. (1957). *Fish and Game Code 3503*. Retrieved from California Legislative Information: [https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=FGC&sectionNum=3503](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=FGC&sectionNum=3503).

- State of California. (2017, June 27). *California Senate Bill No. 94*. California: California State Legislature.
- State of California. (2017, June 27). *Fish and Game Code Section 1602*. Retrieved from California Legislative Information: [https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=FGC&sectionNum=1602](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=FGC&sectionNum=1602).
- State Water Resource Control Board. (2017, October 17). *Cannabis Cultivation Policy: Principles and Guidelines for Cannabis Cultivation*. California.
- Townsend's Long-Eared Bat*. (2017, December 1). Retrieved from Northern California Bats Rescue and Education: <http://norcalbats.org/2017/12/01/townsend-long-eared-bat/>
- Trinity County. (2016, October). *Urgency Ordinance No. 315-816*. Trinity County.
- United States Fish and Wildlife Service. (2011-2012). *Northern Spotted Owl Habitat Spatial Data*. Retrieved June 2018
- US Fish and Wildlife Service. (1973). *Endangered Species Act of 1973*. Retrieved from International Affairs: <https://www.fws.gov/international/pdf/esa.pdf>
- USDA Forest Service. (2018). *Spatial Data*. Retrieved June 2018
- Wagschal, A., Blevins, E., & Embree, L. (2017). *Dr. Fine Bridge Replacement Project: Western Pearlshell Mussel Impact Assessment*. Sacramento: California Department of Transportation.
- Yuma Myotis*. (2017, December 1). Retrieved from Northern California Bat Rescue and Education: <http://norcalbats.org/2017/12/01/yuma-myotis/>
- Zeiner, D., Laudenslayer Jr., W., Mayer, K., & White, M. (1988-1990). *California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California*.