ENVIRONMENTAL INITIAL STUDY

INITIAL STUDY CHECKLIST
PROPOSED MITIGATED NEGATIVE DECLARATION

Caccavo Cannabis Cultivation Conditional Use Permit and Variance
Cannabis Cultivation Use Permit No.: CCUPT3-2018-001

Prepared by:

Trinity County
Department of Planning
61 Airport Road
Weaverville, California 96093
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October 2020

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Trinity County
Environmental Checklist Form

1. **Project Title:** Caccavo Cannabis Cultivation Conditional Use Permit and Variance (CCUPT3-2018-001)

2. **Lead Agency Name and Address**:

   Trinity County
   Department of Planning
   61 Airport Road
   Weaverville,
   CA 96093

3. **Contact Person and Phone Number:** Kim Hunter, Director of Building and Planning (530) 623-1351 Ext. 2

4. **Project Location:** The proposed project is located at in an unincorporated part of Trinity County, approximately 6 miles northeast of the unincorporated community of Hayfork, California. The project is located at 3800 Barker Creek Road, Hayfork, California on Trinity County Assessor Parcel Number (APN) 015-030-01, approximately 640 acres in size. Refer to Figure 1 (Project Location) and Figure 2 (Project Plans) for specific information on the project location and activities.

5. **Applicant's Name and Address:**
   Olivia Caccavo
   PO Box 1420
   Hayfork, CA 96041

6. **General Plan Designation:** Resource (RE)

7. **Zoning:** Unclassified (U)

8. **Description of Project:** The purpose of this project is to expand cannabis cultivation operations on the project site as a permitted use under the County's cannabis ordinances. The applicant is currently licensed to cultivate up to 10,000 square feet (sq ft) of cannabis canopy area (Type 2, Mixed-Light – Small) on the project site and the applicant is applying for an expansion to allow up to one-acre (43,560 sq ft) of outdoor and/or mixed-light cannabis canopy area. To allow the expansion of up to one-acre of outdoor and/or mixed-light canopy, the applicant is applying for a Type 3 (Outdoor - Medium) license or multiple Type 2 (Mixed-Light - Small) licenses. The mixed-light cultivation activity would not require artificial lighting or additional electricity use. It is proposed to occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season.

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 zoned as Unclassified (U). Each of the surrounding parcels is 640 acres and is vacant public land managed by the US Forest Service (USFS). Access to the site is provided via a USFS road. 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:

    - California Department of Fish & Wildlife (Region 1)
    - California Department of Food and Agriculture
    - CALFIRE
    - North Coast Regional Water Quality Control Board
    - State Division of Water Rights
    - State Water Resources Control Board

- Trinity County Department of Environmental Health
- Trinity County Solid Waste

11. **Tribal Consultation:** Tribal consultation pursuant to AB 52 was initiated on July 9, 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 the development of the proposed use of Cannabis Cultivation of up to one-acre and makes appropriate findings in accordance with Section 15070 of the State CEQA Guidelines. In addition, this document has been prepared to the degree of specificity appropriate to the current proposed action, as required by Section 15146 of the State CEQA Guidelines. The analysis considers the actions associated with the proposed project to determine the short-term and long-term effects associated with their implementation.

Section 1 – Introduction and Purpose

1.1 Introduction

This document is an Initial Study that summarizes the technical studies prepared for the proposed Caccavo Cannabis Cultivation Conditional Use Permit (CUP) and Variance 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 Caccavo Cannabis Cultivation 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, Trinity County (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

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, which 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. As of 2018, there were approximately 310 active licensed sites and another 25 in the licensing process. It is estimated by Trinity County 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.

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.

Hayfork Community Plan

The Hayfork Community Plan provides a framework to guide development of public and private projects in the Hayfork area which encompasses 41.6 square miles and approximately 26,628 acres. The plan was adopted in 1996 and is designed to guide future growth and development in the community by balancing the need for housing, protecting lands with good soils for agricultural uses, avoiding development in areas subject to flooding, protecting water quality and encouraging actions that will lead to economic diversification. The plan addresses eight (8) key issues including Housing and Population, Transportation, Public Services and Facilities, Parks and Recreation, Natural Resources, Hazards, Economic Development, and Land Use and Community Design. The plan was designed to implement the County General Plan while updating the General Plan relative to the community goals and objectives.

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 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 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.

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 5 – Technical Appendix, were prepared or utilized to develop baseline information and project-related impact discussions. These studies are available for review on the Trinity County website at the following address: https://www.trinitycounty.org/

- Pinecrest Environmental Consulting (PEC). 2020. *Biological Assessment & Special-Status Species Surveys*. *3800 Barker Creek Road (APN 015-030-01-00), Trinity County, California.* April 2020.
- Down River Consulting. 2018. *Biological Report. Farms of Trinity Forests 3800 Barker Creek Road, Hayfork, California*. 2018.
- Natural Investigations Company. 2018. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 3800 Barker Creek Road, Hayfork, Trinity County, California*. November 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 5 – Technical 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 Environmental 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, the Initial Study will be available on the following websites:

Governor's Office of Planning and Research: CEQAnet Web Portal
https://ceqanet.opr.ca.gov/

County of Trinity Website: Community Development Services – Planning Department
https://www.trinitycounty.org/Planning

During the review period, written comments may be submitted to:

Trinity County
Department of Planning
61 Airport Road
Weaverville, CA 96093

Kim Hunter, Director of Building & Planning
khunter@trinitycounty.org
(530) 623-1351 ext. 2

Section 2 – 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 Barker Creek- Hayfork Creek watershed, a sub-watershed of the South Fork Trinity River watershed. The proposed project parcel is approximately 6 miles northeast of the unincorporated community of Hayfork, and is surrounded by Shasta-Trinity National Forest. The proposed project property does not fall within a Federal Emergency Management Agency (FEMA) floodplain. Historical onsite activities have included timber harvest log landings and a limestone mine.

Project Location

The proposed Caccavo Cannabis Cultivation Conditional Use Permit Project (CCUPT3-2018-001) is located within unincorporated Trinity County, north of town of Hayfork. 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 zoned as Unclassified (U). Each of the surrounding parcels is 640 acres and is vacant public land managed by the US Forest Service (USFS). The project site is located at 3800 Barker Creek Road, Hayfork, California. The 640-acre site is identified as Assessor Parcel Number (APN) 015-030-01. Primary site access is provided via USFS roads, the applicant is currently developing an agreement with the USFS allowing the applicant to use and maintain the road. The site is also identified on the Hayfork Summit California 7.5-minute USGS quadrangle map, Township 32N North, Range 11 West, Section 16, Mount Diablo Base Meridian (MDBM). The location of the proposed project is shown on Figure 1 (Project Location) and Figure 2 (Project Plans).

Existing Conditions

The project site has been historically used for logging and there is evidence of limestone mining. As noted above, the project site falls under the Resource (RE) General Plan designation, with an Unclassified (U) zoning designation. The project site currently has a Type 2 cultivation license (up to 10,000 sq ft of mixed-light canopy), as well as a 220 ft deep groundwater well and septic system. The site is surrounded by US Forest Service (USFS) land that also has a RE General Plan designation and U zoning.

2.2 Proposed Uses

The purpose of this project is to expand cannabis cultivation operations 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 and is consistent with the Unclassified (U) zoning. The applicant proposes to use a combination of full-sun outdoor and light deprivation cultivation techniques. The proposed project includes expansion of cultivation to up to one-acre (43,560 sq ft) of outdoor and/or mixed-light cannabis canopy under a Type 3 (Outdoor – Medium) or multiple Type 2 (Mixed-Light – Small) licenses. The mixed-light cultivation activity would not require artificial lighting or additional electricity use. It is proposed to occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season.

Related Zoning and Uses

The subject property has been zoned by the County as Unclassified (U). U zoning allows for single family dwellings, Christmas tree farms, forestry, orchards, or row and field crops without requiring a use permit (i.e., principally permitted). The surrounding properties all have U zoning as well. The properties that surround the project site to the north, 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 U zoned lands.

One of the proposed cultivation areas (Area 4) does not comply with the Trinity County Ordinance 315-823, which requires a 500 ft setback from the property lines for a medium (up to one acre of canopy) cannabis cultivation site (see Figure 2 – Project Plans). To allow cultivation in this area, the applicant is preparing an application for a variance. As a condition of approval of the use permit, the variance must be approved before the applicant can proceed with cultivation in the proposed cultivation area requiring the variance.

Proposed Operations

The applicant is currently licensed to cultivate up to 10,000 square feet (sq ft) of cannabis canopy area on the project site and the applicant is applying for an expansion to allow up to one-acre (43,560 sq ft) of outdoor and/or mixed-light cannabis canopy area. To allow the expansion of up to one-acre of outdoor and/or mixed-light canopy, the applicant is applying for a Type 3 (Outdoor - Medium) license or multiple Type 2 (Mixed-Light - Small) licenses. The mixed-light cultivation activity would not require artificial lighting or additional electricity use. It is proposed to occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season.

The proposed expansion would employ four (4) full-time employees. The applicant proposes to utilize the local labor force within the County. Employees will not live on the subject property. All processing activity will occur at a licensed, off-site facility that has yet to be identified. When cannabis flowers are cut, they will be processed onsite by using a fresh-frozen technique, eliminating the need for drying and trimming buildings.

Cannabis cultivation would occur in outdoor raised beds and within greenhouses that would be developed on portions of the Applicant's parcel on previously disturbed sites. The applicant's cannabis cultivation activities would occur on four previously disturbed and previously graded sites that were historically used as timber harvest log landings. These sites have had vegetation removed, have been graded to provide generally flat terrain, and have existing road access. Additionally, the applicant has a less-than 3-acre conversion permit pending with CALFIRE. The applicant's four proposed cultivation areas will total 40,400 sq ft of canopy area and consist of the following (see Figure 2 – Project Plans):

- Area 1: Area 1 is the most northern site and the proposed location for three (3) 2,500-gallon water storage tanks and outdoor cannabis cultivation. The outdoor cultivation would be in fourteen (14) raised cultivation beds of 600 sq ft (6 ft by 100 ft), which will total 8,400 sq ft in canopy area. There will be a 25-watt generator located in a 4 ft by 8 ft concrete basin with a depth of 2.2 inches; the generator has a fuel storage capacity of 55 gallons and will be filled off-site at a permitted fuel dispensing facility.

- Area 2: This site is the proposed location of four (4) 2,500-gallon water storage tanks and eleven greenhouses. The applicant has proposed five (5) 1,600 sq ft (20 ft by 80 ft) greenhouses and six (6) 2,000 sq ft (20 ft by 100 ft) greenhouses. The proposed 1,600 sq ft greenhouses will each contain a canopy area of 1,360 sq ft. The proposed 2,000 sq ft greenhouses will each contain a canopy area of 1,700 sq ft. The total canopy area for Area 2 will be 17,000 sq ft. The greenhouses will be used for light deprivation cultivation. There will be a 25-watt generator located in a 4 ft by 8 ft concrete basin with a depth of 2.2 inches; the generator has a fuel storage capacity of 55 gallons and will be filled off-site at a permitted fuel dispensing facility.

- Area 3: This site is the proposed location of ten (10) 600 sq ft (6 ft by 100 ft) raised outdoor cultivation beds and two (2) 2,500-gallon water storage tanks. The total canopy area for Area 3 will be 6,000 sq ft. There will be a 25-watt generator located in a 4 ft by 8 ft concrete basin with a depth of 2.2 inches; the generator has a fuel storage capacity of 55 gallons and will be filled off-site at a permitted fuel dispensing facility.

- Area 4: This site is the proposed location for fifteen (15) 600 sq ft (6 ft by 100 ft) raised outdoor cultivation beds and four (4) 2,500-gallon water storage tanks. The total canopy area for Area 4 will be 9,000 sq ft. There will be a

25-watt generator located in a 4 ft by 8 ft concrete basin with a depth of 2.2 inches; the generator has a fuel storage capacity of 55 gallons and will be filled off-site at a permitted fuel dispensing facility. As noted above, Area 4 does not comply with the Trinity County Ordinance 315-823, which requires a 500 ft setback from the property lines (see Figure 2 – Project Plans). As a condition of approval of the use permit, a variance must be approved before the applicant can proceed with cultivation in Area 4.

As discussed in greater detail below, the project site currently has an existing groundwater well and septic system. Adjacent to the existing infrastructure, the applicant has proposed a 576 sq ft dwelling that has a pending building permit. The applicant also proposes a 900 sq ft (30 ft by 30 ft) cannabis waste compost area that will be located near the proposed dwelling (see Figure 2 – Project Plans).

Fertilizers and soil amendments would be used during cultivation operations and are purchased and transported to the site as needed, these will be stored within a shed adjacent to the proposed dwelling. 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 large quantities.

Site Access

The subject property's main access is provided through an existing USFS road (Forest Route 32N03) via Barker Creek Road, which intersects with SR-3 (see Figure 1 – Project Location). The applicant is developing an agreement with the USFS to be able to use and maintain the road. No new roadway encroachments are required for the implementation of the proposed project. The existing bridge along the onsite access road is required to be replaced since it does not currently meet CDFW standards. In addition, three culvert crossings onsite are proposed along the access road to meet CDFW standards.

Trip Generation

As noted above, four (4) full-time employees are anticipated for the expanded cultivation activity. The employees would not live onsite and would commute to work each day. The proposed project is estimated to generate up to 20 vehicle/truck trips per day. This will include 16 employee vehicles trips (conservative estimate of 4 trips per day per employee; 2 trips for commuting to work and 2 trips during lunch hour), 2 trips for the import of agricultural materials and supplies needed for the cultivation operation (1 in/1 out), and 2 trips for the export of unprocessed cannabis plants/flower (1 in/1 out).

Water Availability

Water is provided to the project site from an existing, permitted 220 ft deep groundwater well that produces water at 24 gallons per minute. Water from the groundwater well is pumped from the well to tanks existing near the well. From there, water is pumped through a pipeline to the water tanks at Area 1. The water is then gravity fed through the pipeline down to the remaining water tanks at cultivation areas 2-4. From the water storage tanks at each cultivation area, water is applied to the plants through a drip irrigation system. The water line for the water system is above ground and consists of painted 1.5-inch PVC pipe.

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. As discussed above, the proposed project includes a total of thirteen (13) 2,500-gallon water tanks distributed at each cultivation area, which can be utilized for fire suppression purposes. 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. As noted above, four (4) full-time employees are anticipated for the expanded cultivation activity.

Water Quality

Impacts to water quality associated with the existing cannabis cultivation activities at the project site were initially regulated by the North Coast Regional Water Quality Control Board (RWQCB) under Order No. 2015-0023 and were required to transition to regulations of the State Water Resources Control Board (SWRCB) Order No. WQ 2019-0001-DWQ (previously WQ 2017-0023-DWQ) by July 1, 2019. Additionally, the Cannabis Ordinances developed by the County identifies specific requirements for water use and water quality, including compliance with Senate Bill 94 (SB 94) and any applicable NCRWQCB or SWRCB regulations. These existing regulatory requirements address implementation of all applicable best practicable treatment or control (BPTC) measures and submittal of a Site Management Plan (SMP) that includes a time schedule and scope of work for use by the Regional Water Board in developing a compliance schedule as described in *Attachment A: Cannabis Policy*, as well as technical reports that must be submitted to the Regional Water Board as described in *Attachment B: Monitoring and Reporting Program* (MRP).

Lighting

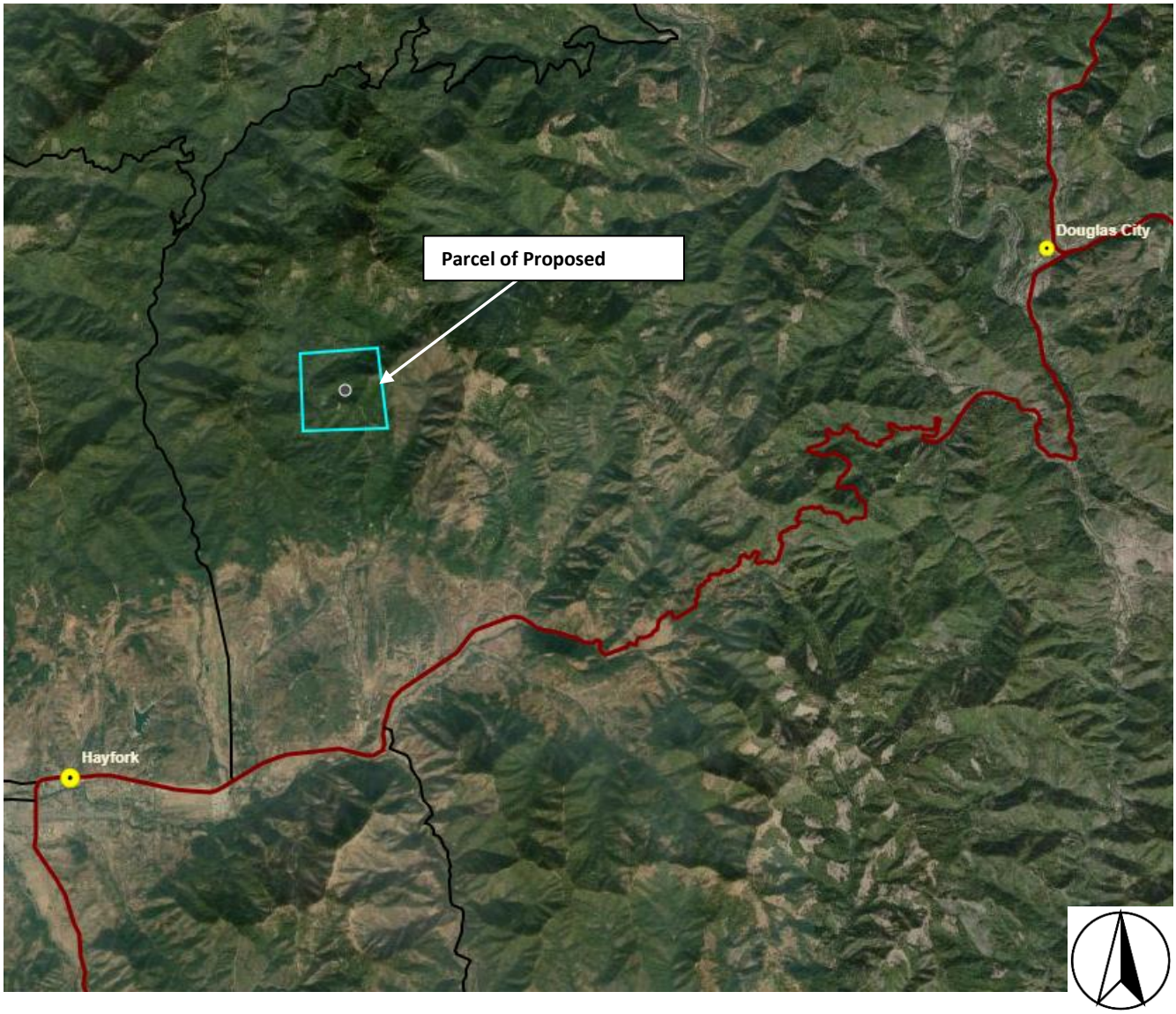
The proposed project site currently has outdoor lighting that is used for security purposes. These sources of light are limited and do not generate large amounts of light either on or offsite. Similar lighting would be used in the additional areas proposed for cultivation by this application. In addition, there would be limited lighting associated with the proposed dwelling. The County Cannabis Cultivation ordinance (Ordinance No. 315-823 and amendments) requires that the light generated by the proposed project meet the following requirement: 1) lighting shall be downcast, shielded and/or screened to keep light from emanating offsite or into the sky, and (2) lighting in greenhouses shall be 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 activity because the applicant is not proposing to use artificial lighting for cultivation. As discussed above, the proposed mixed-light cultivation would occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season.

Biological Resources

The project site comprises 640 acres of steeply sloped coniferous forest that comprises the headwaters of Barker Creek. The site consists almost entirely of mixed pine and fir secondary forest, with several chaparral-covered rock outcrops, and hardwood riparian forest species along Barker Creek. The maximum elevation of the project site is 4,466 feet above sea level at the top of a ridge along the center of the eastern boundary of the site, and the minimum elevation is 3,099 feet above sea level at the southwest corner of the site where Barker Creek exits the property. The entire site drains towards Barker Creek, a Class I perennial tributary of Hayfork Creek. A series of Class II and III watercourses feed into Barker Creek. The only drainage that does not drain into Barker Creek is a portion of a Class II tributary of Little Barker Creek in the southeast corner of the site. After exiting the project site, Barker Creek continues south for 4 miles before the confluence with Hayfork Creek, which flows west for another 27 miles before the confluence with the South Fork Trinity River in Hyampom (PEC, 2020). As indicated in Figure 2 (Project Plans), the footprint of the proposed cultivation areas would be over 100-feet from the streams on the property.

No jurisdictional wetlands meeting the Army Corps three-parameter criteria have been observed in the areas proposed for development on the project site. Due to the location of the project site at the top of a ridge, and the well and excessively drained nature of the soils onsite, there are limited opportunities for wetland formation. Although, some of the habitat along the bank of Barker Creek and its tributaries may meet the Army Corps three-parameter criteria (PEC, 2020). As noted above, the footprint of the proposed cultivation areas would be over 100-feet from the streams on the property (see Figure 2 – Project Plans).

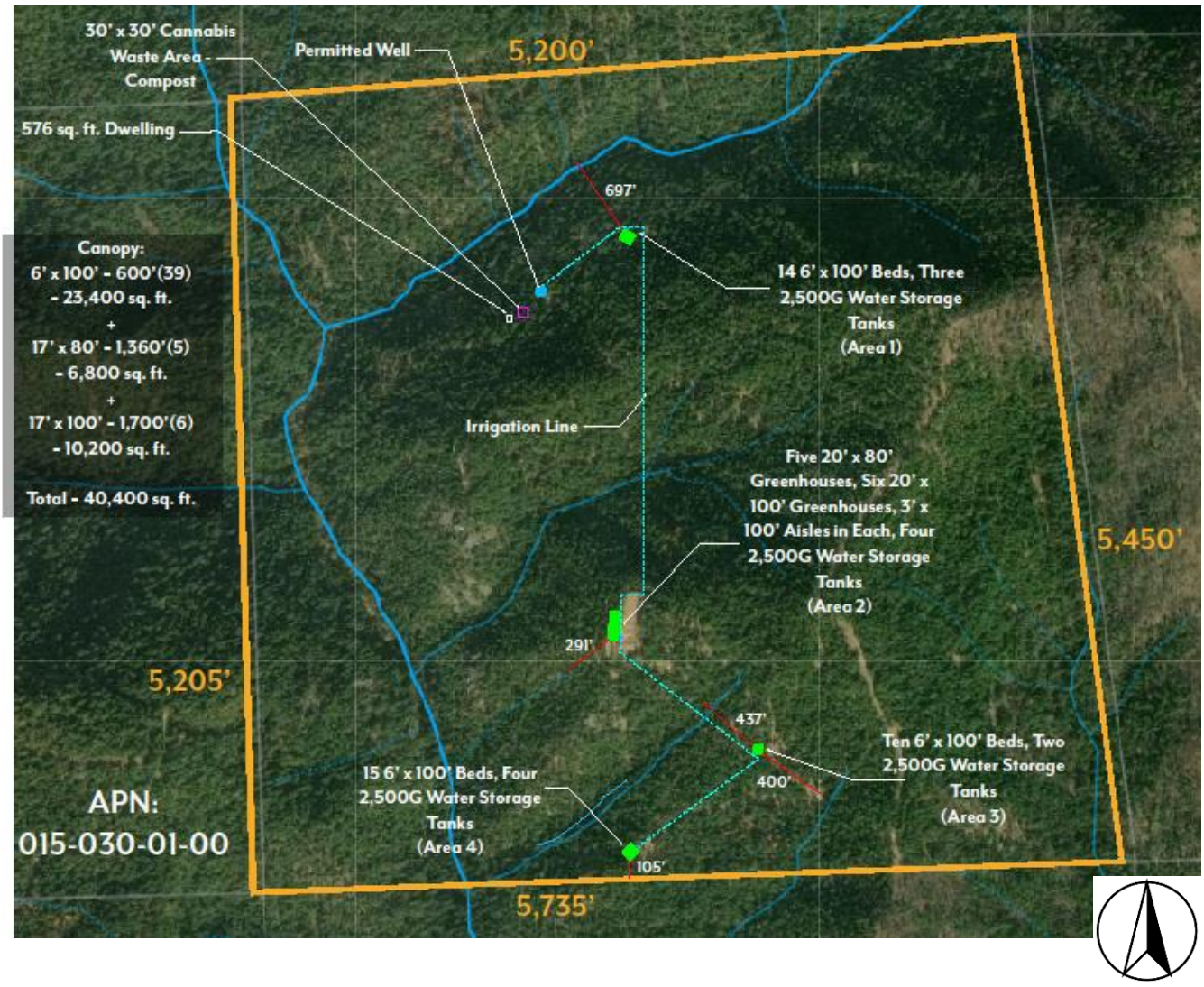
A Biological Assessment (BA) was prepared for the project by Pinecrest Environmental Consulting (see Section 5 – Technical Appendix; PEC, 2020), which analyzes the potential impacts to special-status animal and plant species from the proposed expansion of cannabis cultivation on the site, the replacement of the bridge on the site's access road, and the continued use of the site access road. The BA concludes that with the implementation of the Avoidance & Minimization Measures in Appendix H of the report, impacts to special-status plant and animal species would be reduced to less than significant.



Source: Project Application CCUPT3-2018-001

Caccavo Type 3 Cannabis Conditional Use Permit and Variance (CCUPT3-2018-001)
APN 015-030-01
Hayfork, Trinity County, California

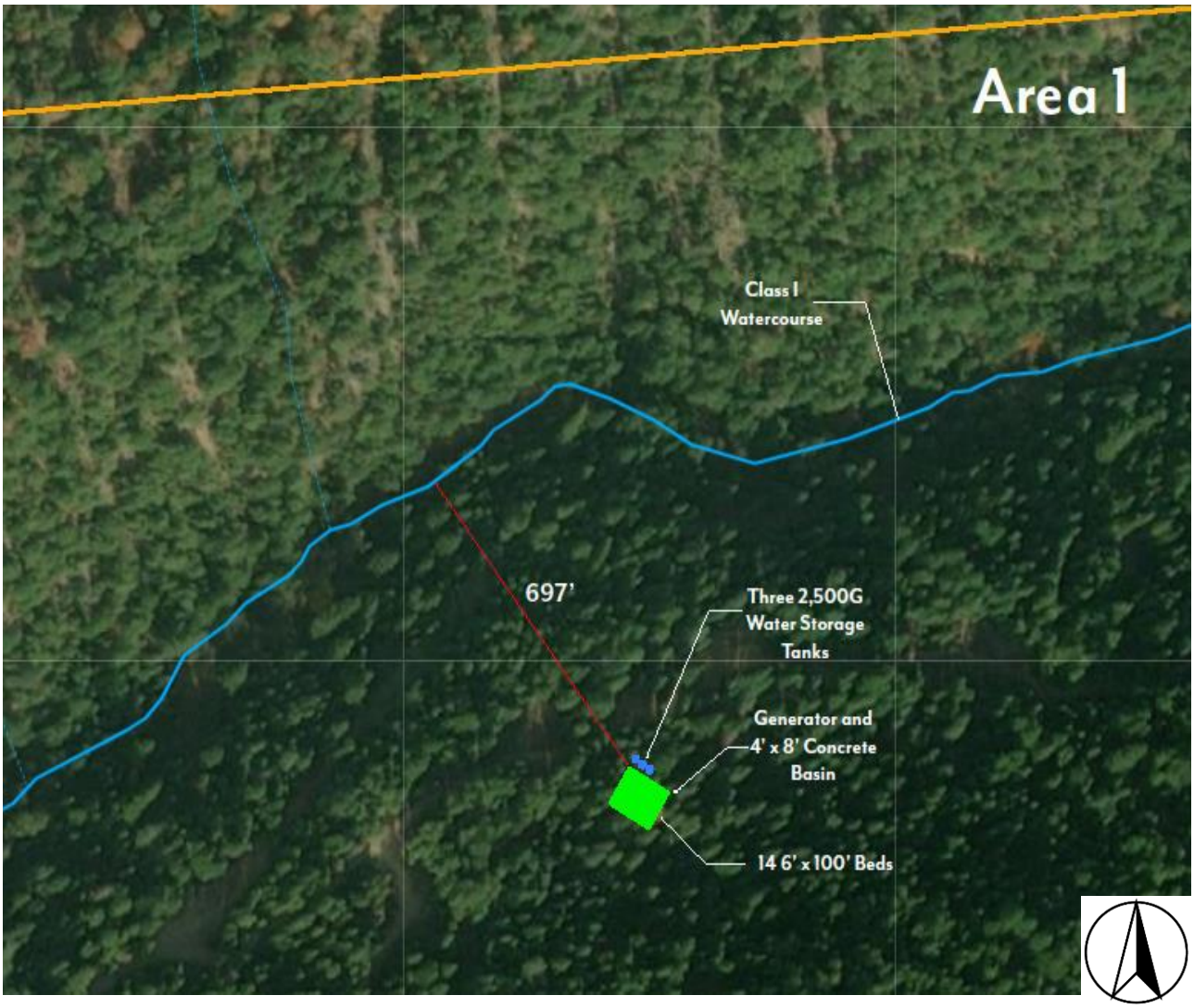
September 2020	**Project Location**	**Figure 1**



Source: Project Application CCUPT3-2018-001

Caccavo Type 3 Cannabis Conditional Use Permit and Variance (CCUPT3-2018-001)
APN 015-030-01
Hayfork, Trinity County, California

September 2020	**Site Plan**	**Figure 2**



Source: Project Application CCUPT3-2018-001

Caccavo Type 3 Cannabis Conditional Use Permit and Variance (CCUPT3-2018-001)
APN 015-030-01
Hayfork, Trinity County, California

September 2020	**Site Plan - Area 1**	**Figure 2a**

Source: Project Application CCUPT3-2018-001

Caccavo Type 3 Cannabis Conditional Use Permit and Variance (CCUPT3-2018-001)
APN 015-030-01
Hayfork, Trinity County, California

September 2020	**Site Plan - Area 2**	**Figure 2b**

Source: Project Application CCUPT3-2018-001

Caccavo Type 3 Cannabis Conditional Use Permit and Variance (CCUPT3-2018-001)
APN 015-030-01
Hayfork, Trinity County, California

September 2020	**Site Plan - Area 3**	**Figure 2c**

Source: Project Application CCUPT3-2018-001

Caccavo Type 3 Cannabis Conditional Use Permit and Variance (CCUPT3-2018-001)
APN 015-030-01
Hayfork, Trinity County, California

September 2020	**Site Plan - Area 4**	**Figure 2d**

Section 3 – Environmental Impacts and Mitigation Measures

This chapter provides an evaluation of the potential environmental impacts of the proposed cannabis cultivation for the Caccavo Cannabis Cultivation Conditional Use Permit and Variance project, 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. AESTHETICS: *Would the project:*	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

Environmental Setting: The project site is surrounded by resource lands that have significant vegetative screening and topographic relief that screen the site from most offsite views (Trinity County, 2020). The existing built environment in the vicinity of the proposed project includes primarily USFS maintained access roads (see Figure 2 – Project Plans). Highway 3 runs through the Hayfork area and is approximately 1.8 miles south of the project site. The project area is characterized by forested mountainous terrain with remnants of historic logging and timber storage activities (e.g., logging roads, log landings, culverts, etc.).

The County has not designated specific scenic vistas in the immediate project area as a part of the General Plan (Trinity County, 1973) and there are no designated State or federal scenic highways or scenic highway corridors in the vicinity of the project (Caltrans, 2020; National Scenic Byways Program, 2019).

The Trinity River, part of the National Wild and Scenic River System is located approximately 6.5 miles to the northeast of the project site (National and Wild Scenic Rivers System, 2020). Due to the distance from the project site and surrounding topography, there are no views of the project from the river and no views of the river from the project site.

Impact Analysis: The following includes an analysis of environmental parameters related to *Aesthetics* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Aesthetics*.

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. The proposed project is on previously disturbed timber land and is surrounded by USFS land. Due to the intervening topography and vegetation, the project site will not obstruct views or be visible from any significant roadways. There are no designated scenic vistas in the project vicinity; therefore, there would be no impact. 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 project proposes expansion of an existing cannabis cultivation operation and would not change the visual character of the area. Therefore, no impact would result from the proposed project.

c) The existing visual setting of the project site includes former timberlands and associated improvements (e.g., access roads, culverts, graded areas, log landings, etc.) that are currently being used for up to 10,000 sq ft of cannabis cultivation. The areas proposed for development for expansion of the cannabis operation would occur on previously disturbed areas that were used historically as log landings. The project does not propose to add significant new above ground structures, and those that are proposed would be consistent with the existing structures on the project site. Due to the intervening topography and vegetation on the project site, the proposed improvements will not be visible from public roadways or other public vantage points. Considering the historic disturbance of the project site, the existing cultivation activity, and the lack of public views of the project site, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. 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 use 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 a project.

The proposed project site currently has outdoor lighting that is used for security purposes. These sources of light are limited and do not generate large amounts of light either on or offsite. Similar lighting would be used in the additional areas proposed for cultivation by this application. In addition, there would be limited lighting associated with the proposed dwelling. The County Cannabis Cultivation ordinance (Ordinance No. 315-823 and amendments) requires that the light generated by the proposed project meet the following requirement: 1) lighting shall be downcast, shielded and/or screened to keep light from emanating offsite or into the sky, and (2) lighting in greenhouses shall be 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 (Trinity County, 2017). No light will be generated from the proposed cultivation activity because the applicant is not proposing to use artificial lighting for cultivation. As discussed elsewhere in this document, the proposed mixed-light cultivation would occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season.

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 would be reduced to less than significant.

Mitigation Measures: No mitigation measures are required.

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

References:

California Department of Transportation (Caltrans). 2020. *California Scenic Highway System*. [Online]: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed: April 27, 2020.

National Scenic Byways Program. 2020. [Online]: https://www.fhwa.dot.gov/byways/states/CA. Accessed: April 27, 2020.

National Wild and Scenic Rivers System. 2020. [Online]: https://www.rivers.gov/california.php. Accessed July 21, 2020.

Trinity County. 1973. *General Plan Open Space and Conservation Element*.

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

_____. 2020. *Trinity County Parcel Viewer.* [Online]: http://trinitycounty.maps.arcgis.com/apps/Viewer/index.html?appid=320cf1c1558c43c8b1f2f70c23d35026. Accessed: July

29, 2020.

II. AGRICULTURE AND FORESTRY RESOURCES: *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural, Land Evaluation and Site Assessment 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:*	**Potentially Significant Impact**	**Potentially Significant Impact Unless Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
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?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?			**X**	
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?			**X**	

Environmental Setting: The project site is located on forest lands that have been historically logged for commercial timber. Roads on the parcel have been developed to facilitate this historical timber harvesting, including stream crossings, log landings, haul roads and forest skid roads. Other openings have been created along existing roads for a variety of past forestry related uses. The project site has a County General Plan designation of Resource (RE), which promotes natural resource and agricultural uses, and a Zoning designation of Unclassified (U), which allows forestry and agricultural uses, as well as other related uses under a County Use Permit. The current use of the project site includes up to 10,000 sq ft of cannabis cultivation and related infrastructure (e.g., groundwater well, water storage and distribution system, septic system, etc.).

Impact Analysis: The following includes an analysis of environmental parameters related to *Agricultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Agricultural 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) Prime Farmland within Trinity County has not yet been mapped by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program (DOC, 2020). In addition, according to NRCS, soils contained within the project site are not considered Prime Farmland (NRCS, 2020). The project site has been historically used for resource extraction (timber harvest) and is currently used for cannabis cultivation. The County has designated the area as Resource (RE), which allows for agricultural production. Based on the above, development Impacts related to the conversion of prime, unique, or important farmland would not occur. Therefore, the proposed project would result in no impact.

b) The proposed project site is not currently zoned for agricultural uses or under a Williamson Act contract. Therefore, project implementation would not result in conflicts with existing agricultural zoning. Therefore, no impacts would occur from the proposed project.

c) The project site is not zoned forest land or timberland and is not under a current Timberland Production contract. Although the project site was historically used as timberland, it is zoned Unclassified. As such, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Therefore, the proposed project would result in no impact on this resource category.

d) The project site was used for timber production in the past and is currently being used for cannabis cultivation. Although the proposed project would expand the cannabis operation on the project site, it would not result in the loss of forest land and would only develop a small portion of the site for agricultural-related uses and a dwelling. The expanded cannabis operation is proposed to occur on areas previously disturbed by past logging activities (i.e., log landings), and would not convert the project site to non-forest use. In addition, the project will convert less than 3-acres of forest land to non-forest uses, which is authorized by CALFIRE under a permit. The resultant conversion will not change the overall character of the parcel (approximately 640 acres) and will not change the overall land use of the parcel which is forest land. Therefore, the proposed project would result in a less than significant impact on this resource category.

e) As discussed above, implementation of the proposed project would not result in a conversion of farmland to non-agricultural use or forest land to non-forest use. Although the proposed project would expand the cannabis operation on the project site, it would not result in the loss of farmland or forest land, since it would only develop a small portion of the site for agricultural-related uses and a dwelling. The County has designated the area as Resource (RE), which allows for agricultural production. Developing the property for uses consistent with the County General Plan would not result in the conversion of Farmland to non-agricultural use or forest land to a non-forest use. Therefore, the proposed project would result in a less than significant impact on this resource category.

Mitigation Measures: No mitigation measures are required.

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

References:

California Department of Conservation (DOC). 2020. Farmland Mapping and Monitoring Program. [Online]: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: July 21, 2020.

Natural Resource Conservation Service (NRCS). 2020. *Web Soil Survey.* [Online]: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed: April 27, 2020.

III. AIR QUALITY: *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:*	**Potentially Significant Impact**	**Potentially Significant Impact Unless Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those leading to odors) affecting a substantial number of people?			**X**	

Environmental 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 standards 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) (NCUAQMD, 2020). 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 adopted CEQA significance thresholds for land use projects, 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, 2020).

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 project site is surrounded by USFS land and there are no structures or sensitive receptors on any of the surrounding properties. The nearest sensitive receptor (residence) is located over 1 mile from the project site.

Criteria air pollutants and toxic air contaminants are regulated by the NCUAQMD, CARB, and the Environmental Protection Agency (EPA). Exposure to criteria air pollutants and toxic air contaminants can cause a myriad of adverse health effects in humans. Human health effects of criteria air pollutants are summarized below in Table 1.

The U.S. Geological Survey (USGS, 2011) has published mapping identifying areas that are known to contain naturally occurring asbestos (NOA). The California Department of Conservation (DOC, 2000) has also published mapping of area more likely to contain naturally occurring asbestos. These mapping sources indicate that there are several locations within Trinity County that are known to contain NOA. The project site is located north of SR-3 and the community of Hayfork, and is not identified as an area that is known to contain or likely to contain NOA. The closest areas containing NOA are located over 1 mile from the project site (USGS, 2011; DOC, 2000).

Table 1.
Criteria Air Pollutants - Summary of Common Sources and Effects

Pollutant	Major Sources	Human Health Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust (CAPCOA, 2011).	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death (CAPCOA, 2011).
Nitrogen Dioxide (NO_2)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel (CAPCOA, 2011).	A respiratory irritant; aggravates lung and heart problems. A precursor to ozone. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere (CAPCOA, 2011).
Ozone (O_3)	A colorless or bluish gas (smog) formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (NO_x) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, solvents, paints, and landfills (CAPCOA, 2011).	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield (CAPCOA, 2011).
Particulate Matter (PM_{10} & $PM_{2.5}$)	Produced by power plants, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others (CAPCOA, 2011).	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; non-fatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (CAPCOA, 2011).
Sulfur Dioxide (SO_2)	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships (CAPCOA, 2011).	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain (CAPCOA, 2011).
Hydrogen Sulfide (H_2S)	A colorless gas with the odor of rotten eggs. The most common sources of H_2S emissions are oil and natural gas extraction and processing, and natural emissions from geothermal fields. It is also formed during bacterial decomposition of human and animal wastes and is present in emissions from sewage treatment facilities and landfills. Industrial sources include petrochemical plants, coke oven plants, and kraft paper mills (CARB, 2020a).	Can induce tearing of the eyes and symptoms related to overstimulation of the sense of smell, including headache, nausea, or vomiting. A few studies suggest that asthmatics may be at increased risk of exacerbation of their asthma symptoms (CARB, 2020a).
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries (CARB, 2020b).	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems (CARB, 2020b).
Sulfate	A sub-fraction of ambient particulate matter. Emissions of sulfur-containing compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. A small amount of sulfate is directly emitted from combustion of sulfur-containing fuels, but most ambient sulfate is formed in the atmosphere (CARB, 2020c).	Much like health effects of $PM_{2.5}$, sulfate can cause reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency department visits, hospitalizations, and death in people who have chronic heart or lung diseases (CARB, 2020c).
Vinyl Chloride	A colorless gas with a mild, sweet odor. Most vinyl chloride is used in the process of making polyvinyl chloride (PVC) plastic and vinyl products, thus may be emitted from industrial processes. Vinyl chloride has been detected near landfills, sewage treatment plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents (CARB, 2020d).	Short-term exposure to high levels (10 ppm or above) of vinyl chloride in air causes central nervous system effects, such as dizziness, drowsiness, and headaches. The primary non-cancer health effect of long-term exposure to vinyl chloride through inhalation or oral exposure is liver damage. Inhalation exposure to vinyl chloride has been shown to increase the risk of angiosarcoma, a rare form of liver cancer in humans (CARB, 2020d).
Visibility Reducing Particles	These particles vary greatly in shape, size and chemical composition, and come from a variety of natural and manmade sources. Some haze-causing particles are directly emitted to the air such as windblown dust and soot. Others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of fine PM. These fine particles, caused largely by combustion of fuel, can travel hundreds of miles causing visibility impairment (CARB, 2020e).	Haze not only impacts visibility, but some haze-causing pollutants have been linked to serious health problems and environmental damage as well. Exposure to particles up to 2.5 ($PM_{2.5}$) and 10 microns (PM_{10}) in diameter in the ambient air can contribute to a broad range of adverse health effects, including premature death, hospitalizations and emergency department visits for worsened heart and lung diseases (CARB, 2020e).

Impact Analysis: The following includes an analysis of environmental parameters related to *Air Quality* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Air Quality.*

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) Since Trinity County is designated as "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_{10} (e.g., Humboldt County).

Construction activities proposed by the project may create minor amounts of fugitive dust from construction of greenhouses, raised garden beds, and the proposed dwelling, but these activities are considered minor activities and would not create dust emissions that would require specialized abatement practices. Vehicle use in the vicinity of the project, as well as at the cultivation areas, would be on unpaved roads that can generate dust emissions. Vehicle/truck trips during operation of the project are estimated to be approximately 20 trips daily. Vehicle traffic associated with the project is not expected to generate dust emissions that would cause a substantial increase in PM_{10} within the surrounding area, Trinity County, or the NCUAQMD. Expansion of an existing cannabis cultivation operation within the community of Hayfork is not anticipated to result in a significant increase in vehicle miles traveled (see Section XVII – Transportation and Traffic) and associated vehicular exhaust emissions. The project proposes to use four (4) 25-watt generators for electricity. These generators are below the California Air Resources Board threshold (50 horsepower and greater) for participation in the Portable Equipment Registration Program (PERP). The purpose of the PERP program is to reduce diesel particulate matter emissions from portable diesel-fueled engines with a horsepower of 50 and greater (CARB, 2020). Generators under this threshold would not be considered to generate significant emissions.

Based on the proposed size, location, and nature of the proposed project, and the fact that Trinity County is designated as "attainment" or "unclassified" for all the federal and State ambient air quality standards, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment (i.e., PM_{10}). As such, impacts from the proposed project would be less than significant.

c) This discussion addresses whether the proposed project would expose sensitive receptors to substantial concentrations of criteria air pollutants or toxic air contaminants. As noted in the Environmental Setting, high concentrations of criteria air pollutants and toxic air contaminants can result in adverse health effects to humans. Some population groups are considered more sensitive to air pollution than others; in particular, children, elderly, and acutely or chronically ill persons, especially those with cardio-respiratory diseases such as asthma and bronchitis. Land uses that generally house more sensitive people include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. The project site is surrounded by USFS land and there are no structures or sensitive receptors on any of the surrounding properties (see Figure 2 – Project Plans). The nearest sensitive receptor (residence) is located over 1 mile from the project site.

Construction. During construction of the proposed project, there is the potential for the generation of emissions of criteria air pollutants and toxic air contaminants including, but not limited to, NOx, CO, fugitive dust, and diesel particulate matter. Due to the size and nature of the proposed project, construction activities are not expected to generate significant emissions of criteria air pollutants or toxic air contaminants. As discussed above, the project site does not contain NOA that could be released during construction activities such as site preparation and grading (USGS, 2011; DOC, 2000). Since the closest sensitive receptors are located over 1 mile from the project site, the potential to impact sensitive receptors with emissions from construction is limited, and impacts would be less than significant.

Operation. A cannabis cultivation operation is not a type of land use that would generally be considered to emit toxic emissions that would expose sensitive receptors to substantial pollutant concentrations. These types of land uses typically include combustion related power plants, gasoline dispensing facilities, asphalt batch plants, warehouse distribution centers, and quarry operations. However, the proposed project does have the potential to result in the emissions of criteria air pollutants and toxic air contaminants including fugitive dust and diesel particulate matter, which would be

primarily from vehicle/truck traffic and the use of generators. Cultivation operations also have the potential to generate emissions from pesticide use.

Due to the size, location, and nature of the proposed project, operational activities are not expected to generate significant emissions of criteria air pollutants or toxic air contaminants. State buffer zone regulations typically require pesticide applications to be administered a minimum of 300 feet from sensitive receptors (e.g. residences) (Kagan and Feldman, 2004). As noted above, the closest sensitive receptors are located over 1 mile from the project site and would not be impacted by any pesticide use that could occur from the proposed cultivation activities. Based on the analysis above, the proposed project would result in a less than significant impact.

d) During long-term operation of the project there is the potential to impact air quality due to odors that would be generated by the proposed cultivation activity. While odors from flowering cannabis plants can be strong within the immediate vicinity of cultivation sites, the distance of the proposed cultivation areas to the nearest sensitive receptors (>1 mile) will reduce any impacts to less than significant.

As discussed in Section 2 – Project Description, one of the proposed cultivation areas (Area 4) does not comply with the Trinity County Ordinance 315-823, which requires a 500 ft setback from the property lines for a medium (up to one acre of canopy) cannabis cultivation site (see Figure 2 – Project Plans). One of the purposes of setback requirements for outdoor cannabis cultivation is to reduce potential odor impacts. Once a variance is issued by the County, the variance is evaluated on an annual basis. Should odor from the project become an issue, the County could terminate the variance approval and require relocation of the cultivation activity at Area 4. Since there are no sensitive receptors within close proximity to the proposed cultivation areas, the reduced setback from the property lines for Area 4 would not expose a substantial number of people to odors. Based on the analysis above, the proposed project would result in a less than significant impact.

Mitigation Measures: No mitigation measures are required.

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

References:

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U.S. Geological Survey (USGS). 2011. *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California.*

IV. **BIOLOGICAL RESOURCES:** *Would the project:*	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 of 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

Environmental Setting: The project site is a 640-acre property consisting of forestlands that have been previously disturbed by timber harvesting activities. The current use of the project site includes up to 10,000 sq ft of cannabis cultivation and related infrastructure (e.g., groundwater well, water storage and distribution system, septic system, etc.).

The project site is comprised of steeply sloped coniferous forest that comprises the headwaters of Barker Creek. The site consists almost entirely of mixed pine and fir secondary forest, with several chaparral-covered rock outcrops, and hardwood riparian forest species along Barker Creek. The maximum elevation of the project site is 4,466 feet above sea level at the top of a ridge along the center of the eastern boundary of the site, and the minimum elevation is 3,099 feet above sea level at the southwest corner of the site where Barker Creek exits the property. The entire site drains towards Barker Creek, a Class I perennial tributary of Hayfork Creek. A series of Class II and III watercourses feed into Barker Creek. The only drainage that does not drain into Barker Creek is a portion of a Class II tributary of Little Barker Creek in the southeast corner of the site. After exiting the project site, Barker Creek continues south for 4 miles before the confluence with Hayfork Creek, which flows west for another 27 miles before the confluence with the South Fork Trinity River in Hyampom (see Section 5 – Technical Appendix; PEC, 2020).

No jurisdictional wetlands meeting the Army Corps three-parameter criteria have been observed in the areas proposed for development on the project site. Due to the location of the project site at the top of a ridge, and the well and excessively drained nature of the soils onsite, there are limited opportunities for wetland formation. Although, some of the habitat along the bank of Barker Creek and its tributaries may meet the Army Corps three-parameter criteria (PEC, 2020).

Land uses in the vicinity of the project parcel are primarily Shasta-Trinity National Forest (STNF) land managed for mixed uses including timber harvest, private timber harvest parcels, rural residential parcels, irrigated pastureland in the valley bottoms, and scattered cannabis cultivation farms on valley bottoms and south facing slopes. Farther to the south and east the terrain becomes steep and densely forested and is primarily STNF land. To the south is the Barker Creek valley that contains numerous cannabis farms and rural residences. To the north, west, and east the terrain is steep and densely forested and is primarily STNF (PEC, 2020).

Impact Analysis: The following includes an analysis of environmental parameters related to *Biological Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Biological 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) A Biological Assessment (BA) was prepared for the project by Pinecrest Environmental Consulting (see Section 5 – Technical Appendix; PEC, 2020), which analyzes the potential impacts to special-status animal and plant species from the proposed expansion of cannabis cultivation on the site, the replacement of the bridge on the access road on the site, and the continued use of the site access road. The BA included a review of literature and relevant databases to determine special status animal and plant species with the potential to occur in the project area. The BA also included review of the findings of the Biological Report prepared for the project in 2018 by Down River Consulting, in order to increase the data available for determining the animal and plant species with the potential to be impacted by the proposed project. Based on a review of this information, protocol-level surveys were conducted on the project site in October 2019.

   The BA identifies that two special status animal species have been observed on the project site, but no special status plant species are known to occur on the site. The two special status animal species known to exist on the project site include one bird species and one snail species. The bird species is the American peregrine falcon (*Falco peregrinus anatum*; APF). A breeding pair of this bird species is known to nest on a rock outcrop on the project site, as reported by U.S. Fish & Wildlife Service (USFWS) staff as recently as 2016. This species was delisted as Threatened by the federal government in response to species recovery. However, it is still considered a Special Status Species by the State of California and recovery is actively monitored by USFWS. The snail species is the Trinity shoulderband (*Helminthoglypta talmadgei*; TS), which is not listed as Threatened or Endangered by the State or Federal government. However, this species is considered a Special Status Species by the State of California. This species was observed in 2018 in the riparian zone of Barker Creek near the existing bridge on the project site (see Section 5 – Technical Appendix; PEC, 2020).

   The BA also notes that the Northern Spotted Owl (NSO) has been observed in the project vicinity. Though the proposed project site is not designated as Federal Critical Habitat (FCH), each of the surrounding parcels is designated as FCH. Based on the results of the surveys and review of relevant literature and databases, the BA concludes that these additional special status animal and plant species likely exist on the project site:

   - Northern spotted owl (*Strix occidentalis*)
   - California giant salamander (*Dicamptodon ensatus*)
   - Foothill yellow-legged frog (*Rana boylii*)
   - Pacific tailed frog (*Ascaphus truei*)
   - Lemon-colored fawn lily (*Erythronium citrinum* var. *citrinum*)

   The BA concludes that with the implementation of the Avoidance & Minimization Measures in Appendix H of the report, impacts to special-status plant and animal species would be reduced to less than significant. These measures include, but are not limited to: 1) biological surveys 24-36 hours prior to ground disturbance associated with the replacement of the bridge and any tree removal activities; 2) prohibition on tree removal during the bird nesting season (March 1 – August 31); 3) prohibition of aerial wires and upward pointed lighting; and 4) a 100-foot buffer around the rock outcrop that contains the American peregrine falcon nesting site (see Section 5 – Technical Appendix; PEC, 2020). The measures in Appendix H of the BA have been included as mitigation for the proposed project. In addition to the measures in Appendix H of the BA, the recommendations from the October 3, 2019 Incomplete Letter from CDFW for Notification no. 1600-2019-07332-R1 related to the culvert crossings and bridge replacement have also been included as mitigation for the proposed project (CDFW, 2019).

   Depending on final design, the installation of the culverts and bridge reconstruction may require regulatory permits from the Army Corps of Engineers (ACOE), California Department of Fish and Wildlife (CDFW), and the North Coast Regional Water Quality Control Board (RWQCB). Thus a Section 404 Permit would have to be obtained from the ACOE prior to construction within jurisdictional waters. Construction activities resulting in fill also require a Section 401 Water Quality Certification from the RWQCB. Potential impacts to jurisdictional waters would be reduced through compliance with the regulatory process (i.e., Section 404 Permit and 401 Certification). As noted above culvert installation and bridge reconstruction are also subject to CDFW permitting requirements. With the implementation of the proposed mitigation measures in combination with existing regulatory requirements of State and federal agencies, the project would result in less than significant impacts on this resource category.

b) According to the Biological Assessment prepared for the project, there is one Class I stream, Barker Creek, that flows west then south and is fed by several Class II and Class III tributaries. No potential wetlands or vernal pools were observed on the site during the field surveys conducted for preparation of the Biological Assessment (PES, 2020). The project does not propose any development or impacts to riparian habitat or any sensitive natural community existing on the project site. The proposed cultivation areas would occur in existing, disturbed areas that were historically used as log landings. As indicated in Figure 2 (Project Plans), the footprint of the proposed cultivation areas would be over 100-feet from the streams on the property. Therefore, the proposed project would not have a substantial adverse effect on riparian habitat or other sensitive natural communities, and impacts from the proposed project would be less than significant.

c) No jurisdictional wetlands meeting the Army Corps three-parameter criteria were observed in the areas proposed for development on the project site during the field surveys conducted for preparation of the BA (see Section 5 – Technical Appendix; PEC, 2020). The USFWS National Wetland Inventory also does not indicate the potential presence of wetland on the project site (USFWS, 2020). Due to the location of the project site at the top of a ridge, and the well and excessively drained nature of the soils onsite, there are limited opportunities for wetland formation. Although, some of the habitat along the bank of Barker Creek and its tributaries may meet the Army Corps three-parameter criteria (see Section 5 – Technical Appendix; PEC, 2020). As noted above, the footprint of the proposed cultivation areas would be over 100-feet from the streams on the property (see Figure 2 – Project Plans). Because no potential wetlands were identified in the areas that would be developed by the project, a formal delineation was deemed unnecessary. Since no known three-parameter wetlands will be disturbed by the proposed project, a less than significant impact to federally-protected wetlands would occur.

d) Due to the size, location, and design 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 disturbed by logging and mining activities and is currently used for cannabis cultivation. These historic and current activities may have altered wildlife migration or local travel patterns, but this impact is part of the baseline condition and is not an impact of the proposed project. Fencing that may be required around the cannabis cultivation areas represents a small portion of the overall historically impacted areas on the project site and is not seen as an impediment to deer migration or the migration of other animals. Based on the location of the areas that would be developed by the project, and the nature of the proposed cultivation activity, there will be limited potential for the project to impact wildlife movement.

   As discussed above, the measures in Appendix H of the BA and the recommendations from the October 3, 2019 Incomplete Letter from CDFW, have been included as mitigation for the proposed project. With the implementation of the proposed mitigation measures in combination with existing regulatory requirements of State and federal agencies, the project would result in less than significant impacts on this resource category. Therefore, the proposed project would result in less than significant impacts with mitigation incorporated.

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, tree preservation, or management that would specifically apply to the project and the lands where the project is located. Therefore, the proposed project would result in less than significant impacts on this resource category.

f) No habitat conservation plans, or other similar plans have been adopted for the project site or project area. As such, the proposed project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, no impact would result from the proposed project on this resource category.

Mitigation Measures: The following mitigation measures shall be required for the proposed project to reduce biological impacts to less than significant levels:

Mitigation Measure BIO-1. Recommendations in Appendix H of the Biological Assessment prepared by Pinecrest Environmental Consulting shall be implemented as follows (see Section 5 – Technical Appendix; PEC, 2020):

- All employees and contractors including one-time contractors and day-laborers shall be distributed cards with visual identifications of all of the aforementioned special-status species, including both male and female, and juvenile and adult forms, and be briefed on all of the following mitigation measures. Species cards may be obtained from PEC on request.

- Operator shall obtain signatures from all employees at the bottom of a copy of these mitigation measures on an annual basis to demonstrate understanding of these measures.

- Observation of any of the special status species onsite shall result in immediate stoppage of all work and notification of a qualified biologist and/or CDFW.

- All animals, whether special status species or not, shall not be molested and shall be allowed to leave the premises voluntarily.

- Vehicle speeds shall be limited to 5 mph all year, with 3 mph limit during amphibian breeding and migration season from October to June.

- No unmuffled, non-street legal, or two-stroke vehicles are allowed on the road due to proximity to American peregrine falcon (*Falco peregrinus anatum*) site.

- No loud noises including heavy machinery, hammering, discharge of firearms, or unmuffled generators are allowed during the breeding and nesting window to avoid impacts to Northern spotted owl (*Strix occidentalis*) and American peregrine falcon (*Falco peregrinus anatum*), which is generally February 1 to September 1.

- Access within 100 feet of the rock outcrops is not allowed to prevent impacts to American peregrine falcon (*Falco peregrinus anatum*) and other special status species. Signs stating there is a sensitive habitat ahead and no entry is permitted shall be posted at the bend in the road (see Figure 4 [Special-Status Species & Habitat] of the PEC BA) and other visible and accessible locations where encroachment into the 100-foot buffer area may be possible.

- Avoid ground disturbance including trenching, grading, or road scraping to a depth of greater than 10" without first having a qualified biologist clear the site to avoid disturbing estivating amphibians.

- All roadways and culverts shall be inspected once before major rain events and once after to ensure that all erosion control materials are effective and not discharging sediment to Barker Creek or other watercourses.

- All containers and other vessels left outside unattended shall be checked before use to ensure that no animals are inside.

- Vessels including buckets shall be turned over on their sides to allow animals to escape.

- No holes greater than 6" deep shall be left exposed and uncovered to avoid making "pitfall traps" into which animals can enter but cannot escape. If holes such as post holes must be left for more than 24-hours, they should be checked daily to ensure no animals are inside.

- Areas within 100 feet of any watercourse shall be cleared by a biological monitor prior to disturbing the ground more than 6".

- Only native woody species shall be planted wherever revegetation is required such as along the sides of roadcuts and bridge abutments.

- Dewatering of the creek during bridge repair is discouraged and all construction for bridge repair should occur outside the wetted channel.

- All construction for bridge footings shall occur 24-36 hours after a qualified biologist clears the site to ensure that no aquatic species or egg masses are present.

- Preconstruction breeding bird surveys for Northern spotted owl (*Strix occidentalis*) and other migratory birds are required if tree removal is to take place.

- No tree or vegetation removal is permitted during breeding bird period from February to September.

- No aerial wires or lines are permitted that may impede the flight path of nesting birds.

- No upward pointed lights are permitted during anytime during the year, and ambient outdoor night-time lights are prohibited during the breeding bird period from February to September.

- Use of rodenticides is prohibited under all circumstances due to the hazard of secondary ingestion by raptors.

Mitigation Measure BIO-2. CDFW Recommendations in the October 3, 2019 Incomplete Letter for Notification No. 1600-2019-0732-R1

- American Peregrine Falcon Surveys: Multiple years of surveys have documented a successful breeding pair of peregrine falcons (*Falco peregrinus anatum)* nesting on this parcel as recently as 2016 (USFS). The applicant shall hire a qualified biologist to conduct follow up surveys once the project is operational to ensure no project activities impact this Fully Protected species or encroach on its habitat. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

- Bridge Replacement Biological Surveys: If it is determined that Barker Creek needs to be dewatered for bridge abutment work, a biological survey must be conducted by a qualified biologist during the appropriate time of year to determine if there are special status animals inhabiting the reach of stream that will be dewatered. If foothill yellow-legged frogs (*Rana boylii*) are observed, a CESA permit shall be obtained by the project applicant.

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

References:

California Department of Fish and Wildlife (CDFW). 2019. *Incomplete Notification of Lake or Streambed Alteration, Notification no. 1600-2019-0732-R1, Trinity County APN 015-030-01-00*. October 3, 2019.

Down River Consulting. 2018. *Biological Report. Farms of Trinity Forests 3800 Barker Creek Road, Hayfork, California*. 2018.

Pinecrest Environmental Consulting (PEC). 2020. *Biological Assessment & Special-Status Species Surveys*. *3800 Barker Creek Road (APN 015-030-01-00), Trinity County, California.* April 2020.

Trinity County. 1973. *General Plan Open Space and Conservation Element.*

United States Fish and Wildlife Service (USFWS). 2020. *National Wetland Inventory*. [Online]: https://www.fws.gov/wetlands/data/Mapper.html. Accessed: July 30, 2020.

V. CULTURAL RESOURCES: *Would the project:*	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		

Environmental Setting: The project area is located within the ancestral territory of the Wintu Native Americans. Closely related to the Nomlaki and Patwin to the south, the Chimariko to the west and the Hupa to the northwest, the Wintu people lived along the Trinity River, where plentiful natural resources supported their way of life. Bark from forest trees and rushes along the streams made good roofing materials for homes. Local sedges and willows were crafted into tightly woven baskets. Villages frequently contained a scattering of bark houses, ranging from four to five in smaller groups, or several dozen in larger villages. Each house was shared by a single family that ranged in numbers of three to about seven. Larger villages, those with 12 to 15 houses, typically had an earthen lodge.

The project site has a documented history of being developed for resource extraction including logging and limestone mining. Roads on the parcel have been developed to facilitate this historical timber harvesting, including stream crossings, log landings, haul roads and forest skid roads. Other openings have been created along existing roads for a variety of past forestry related uses. Other non-historical cultural uses may have occurred at the project site and in the surrounding vicinity. Currently the project site is used for cannabis cultivation.

Impact Analysis: The analysis in this section has been prepared in accordance with Section 15064.5 of the State CEQA Guidelines, which considers the potential impacts on prehistoric, historic, and paleontological resources. This section describes the potential cultural resources within the project study area, and the applicable regulations that govern those resources.

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Section 21084.1). If it can be demonstrated that a project will cause damage to resources Eligible for or Listed in the California Register of Historic Resources (CRHR), Tribal Cultural Resources (TCRs) and other resources on local County or Local lists, or those determined by the lead agency to be significant. The lead agency may require reasonable efforts be made to permit any or all of the resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c) (1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

A historical resource is a resource listed in, or determined to be eligible for listing, in the CRHR (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

The applicant provided a Cultural Resources Assessment prepared by Natural Investigations Company (NIC) that included literature and Sacred Lands File searches as well as an intensive-level pedestrian survey over 11.6 acres of the project site. The report notes that no cultural resources have been previously recorded within the project area and concludes that no newly identified prehistoric or historic-era resources were identified during the pedestrian survey (NIC, 2018).

Tribal consultation pursuant to AB 52 was initiated on July 9, 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.

The following includes an analysis of environmental parameters related to *Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Cultural Resources*.

a) Results from the intensive-level pedestrian survey and associated record search did not identify any prehistoric or historic archaeological sites, ethnographic sites, or historic-era built environment resources on the project site (NIC, 2018). 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 from the implementation of the proposed project.

b) Results from the intensive-level pedestrian survey and associated record search did not identify any prehistoric or historic archaeological sites, ethnographic sites, or historic-era built environment resources on the project site (NIC, 2018). However, there is a possibility that unknown cultural resources, including buried archaeological materials, could exist on the project site and may be uncovered during project development. Therefore, if any resources are found during the construction of the proposed project, potential impacts will be mitigated through implementation of Mitigation Measure CR-1. Adherence to the inadvertent discovery protocols required by Mitigation Measure CR-1 would prevent impacts that would result in a substantial adverse change in the significance of an archaeological resource as defined in CEQA §15064.5. Therefore, impacts would be less than significant with mitigation incorporated.

c) There are no known burial sites on or immediately adjacent to the project site. However, there is a possibility that human remains and historic burial sites could exist in the area and may be uncovered during project development. To prevent potential impacts to unknown human remains at the project site, an inadvertent discovery protocol is included as Mitigation Measure CR-2. With the proposed mitigation measure, the project will not disturb any human remains, including those interred outside of formal cemeteries. Therefore, the proposed project would result in a less-than-significant impact 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 Measure 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 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. 2018. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 3800 Barker Creek Road, Hayfork, Trinity County, California*. November 2018.

VI. ENERGY:	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	

Environmental Setting: In Trinity County, energy is used as a transportation fuel and as electrical and heat energy in homes, businesses, industries, and agriculture. Trinity Public Utilities District (TPUD) serves most of the customers in Trinity County with 100% renewable hydroelectric energy. The majority of TPUD's customers are supplied power that is generated at Trinity Dam (TPUD, 2020).

The project site is not currently connected to any public utilities, including any utilities for electricity or natural gas. The existing cultivation operation uses natural light and does not use any artificial lighting for cultivation. Existing energy use at the project site includes gas for vehicles, equipment, and generators.

Impact Analysis: The following includes an analysis of environmental parameters related to *Energy* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Energy*.

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 following evaluates the project potential to result in significant environmental due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Construction. During construction of the proposed project, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel and delivery truck trips to and from the project site, and to operate generators to provide temporary power for lighting and electronic equipment. Construction would consist of site preparation, grading, and the construction of greenhouses, raised garden beds, a 576 sq ft dwelling, and associated infrastructure.

There are no unusual project characteristics that would need construction equipment or practices that would be less energy efficient than at comparable construction sites in the region or state. Construction activity would be temporary and fuel consumption would cease once construction ends. Further, various equipment would be supplied by onsite generators, and would not require permanent connections to or otherwise burden local utilities. Due to the temporary nature of construction activities, the fuel and energy needed during project construction would not be considered a wasteful or inefficient use of energy. Therefore, it is expected that construction energy consumption associated with the proposed project would be comparable to other similar construction projects, and would therefore not be inefficient, wasteful, or unnecessary.

Operation. During long term operation of the cultivation operation, energy would be consumed in the form of petroleum-based fuels fuel for vehicles, equipment, and generators. It is also anticipated that propane would be used for cooking and heating in the proposed dwelling. Electricity needs for the proposed project would be limited since the proposed project would use natural light for cultivation and no artificial lighting. As discussed elsewhere in this document, the proposed mixed-light cultivation would occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season. To provide electricity for equipment and security lighting, the applicant proposes the use of four (4) 25-watt generators, one at each cultivation site.

Due to the limited scope of the proposed project as an expansion of an existing agricultural use, and the use of natural sunlight for cultivation, the additional energy use from operation of the project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project operation. Energy use from operation of the project would be similar to other cultivation operations and rural dwellings in the County. Therefore, the proposed project would result in a less than significant impact on this resource category.

b) There are no local plans for renewable energy or energy efficiency. As noted above, the proposed project would not use artificial lighting for cultivation and would be similar to other cultivation operations and rural dwellings in the County. Due to the limited energy use that would result from the proposed project, it is not anticipated that the proposed expansion of an existing agricultural operation would conflict with or obstruct a state plan for renewable energy or energy efficiency. Therefore, the proposed project would result in a less than significant impact on this resource category.

Mitigation Measures: No mitigation measures are required.

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

References:

Trinity County Public Utility District (TPUD). 2020. *District History*. [Online]: https://www.trinitypud.com/about/history.aspx. Accessed: July 30, 2020.

VII. GEOLOGY AND SOILS: *Would the project:*	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: 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. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial 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		

Environmental Setting: The project is situated in the Western Paleozoic and Triassic Belt of the Klamath Mountains province and is considered to be a northern extension of the Sierra Nevada. The project is located withinin the Hayfork Valley and the Trinity River watershed. The project site consists of primarily Huntmount family, Neuns family and Neuns-Goulding family complex soils. All soils have gravelly compositions and are well drained (NRCS, 2020). The location of the proposed project consists of mostly residuum derived from weathered igneous, metamorphic and sedimentary rock.

Trinity County has historically experienced very low levels of seismicity and has a relatively low seismic risk compared to the rest of California. Trinity County was not determined to be affected by existing Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act and does not have a relatively high potential for ground rupture (Trinity County, 2002). However, the region may be subjected to low to moderate levels of ground shaking from nearby or distant earthquakes.

Impact Analysis: The following includes an analysis of environmental parameters related to *Geology and Soils* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Geology and Soils*.

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. In addition, there is no supplemental geologic data to suggest unmapped active faults in the region (USGS, 2018). As such, the proposed project will not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. Therefore, the proposed project would result in no impact on this resource category.

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 and related facilities proposed by the project. In compliance with these standards, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Therefore, the proposed project would result in a less than significant impact.

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 for buildings and related facilities proposed by the project. In compliance with these standards, the proposed project will not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, the proposed project would result in a less than significant impact on this resource category.

iv) Landslides:

The elevations at the project site range from 3,400 to 4,300 feet. The proposed project site is located on relatively flat terrain created by terracing the land, surrounded by steep slopes and mountainous terrain. Soils throughout Trinity County are susceptible to erosion and landslide. However, there are no documented landslide hazard areas identified within the immediate vicinity of the site that would have an impact on the proposed project. As such, the proposed project will not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, the proposed project would result in no impact on this resource category.

b) The project soil classifications consist mainly of gravelly loam from residumm weathered from igneous, metamorphic and sedimentary rock. These gravelly soils in the Huntmount, Neuns, Neuns-Goulding, and Rock outcrop-Gozem families have high permeability as indicated by their well drained, drainage classification (NRCS, 2020). 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. Furthermore, the operation of the proposed project will be subject to the waste discharge requirements of the State Water Board for cannabis cultivation, which requires the implementation of best practicable treatment or control measures including those intended to minimize erosion. In compliance with existing regulatory requirements, the proposed project would not result in substantial soil erosion or the loss of topsoil. Therefore, the proposed project would result in a less than significant impact.

c) See the discussion under subsection a) above.

d) Expansive soils are those that undergo a change in volume when exposed to fluctuations in moisture, causing shrinking when dry and swelling when moist. Such a change in volume can distort structural elements and damage structures. Typically, soils with high clay contents are most susceptible to these processes. There are no documented expansive soils located at the project site. The project site consists of primarily Huntmount family, Neuns family and Neuns-Goulding family complex soils. All soils have gravelly compositions and are well drained (NRCS, 2020). The location of the proposed project consists of mostly residuum derived from weathered igneous, metamorphic and sedimentary rock.

As such, the proposed project will not 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. Therefore, the proposed project would result in a less than significant impact on this resource category.

e) The proposed project is served by an existing, permitted septic system for the treatment of domestic wastewater. In order to receive approval from the Trinity County Environmental Health Department for a septic system, an analysis of the soil conditions at the site must occur to ensure they are suitable for receiving wastewater discharge. As indicated by the receipt of a permit from the County Environmental Health Department, the soils at the site have been determined to be adequate to support the use of a septic system. The existing septic system will continue to be used for the proposed project, and if determined to be necessary by the County Environmental Health Department, may need to be upgraded to handle any increase in wastewater discharge from the new dwelling and expanded cultivation operation. In compliance with existing regulatory requirements, the proposed project would result in less than significant impacts on this resource category.

f) Paleontological resources are classified as nonrenewable scientific resources, such as vertebrate, invertebrate, and plant fossils. No paleontological resources or unique geologic features have been identified on the proposed project site, and the potential for their occurrence is considered minimal.

However, ground-disturbing activities associated with the proposed project has the potential to result in the accidental damage of previously undiscovered paleontological resources if such exist at the project site. As such, if a paleontological discovery is made during construction, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery and shall immediately contact the County. A qualified paleontologist shall be retained to observe all subsequent grading and excavation activities in the area of the find and shall salvage fossils as necessary. The paleontologist shall establish procedures for paleontological resource surveillance and shall establish, in cooperation with the project developer, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. If major paleontological resources are discovered that require temporarily halting or redirecting of grading, the paleontologist shall report such findings to the County. The paleontologist shall determine appropriate actions, in cooperation with the applicant and the County, that ensure proper exploration and/or salvage. Excavated finds shall first be offered to a state-designated repository such as the Museum of Paleontology, University of California, Berkeley, or the California Academy of Sciences. Otherwise, the finds shall be offered to the County for purposes of public education and interpretive displays. The paleontologist shall submit a follow-up report to the County that shall include the period of inspection, an analysis of the fossils found, and the present repository of fossils. To prevent potential impacts to unknown paleontological resources at the project site, an inadvertent discovery protocol is included as Mitigation Measure GEO-1.

With the proposed mitigation measure, the project will not disturb any unique paleontological resource or unique geologic feature. Therefore, the proposed project would result in a less than significant impact with mitigation incorporated

Mitigation Measures: The following mitigation measures shall be required for the proposed project to reduce impacts to less than significant levels:

Mitigation Measure GEO-1. If a paleontological discovery is made during construction, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery and shall immediately contact the County. A qualified paleontologist shall be retained to observe all subsequent grading and excavation activities in the area of the find and shall salvage fossils as necessary. The paleontologist shall establish procedures for paleontological resource surveillance and shall establish, in cooperation with the project developer, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. If major paleontological resources are discovered that require temporarily halting or redirecting of grading, the paleontologist shall report such findings to the County. The paleontologist shall determine appropriate actions, in cooperation with the applicant and the County, that ensure proper exploration and/or salvage. Excavated finds shall first be offered to a state-designated repository such as the Museum of Paleontology, University of California, Berkeley, or the California Academy of Sciences. Otherwise, the finds shall be offered to the County for purposes of public education and interpretive displays. The paleontologist shall submit a follow-up report to the County that shall include the period of inspection, an analysis of the fossils found, and the present repository of fossils.

Findings: With the implementation of mitigation the proposed project will have a less than significant impact to *Geology & Soils*.

References:

California Geological Survey (CGS). 2018. *Fault-Rupture Hazard Zones in California, Special Publication 42, Interim Revision 2018*. Sacramento, California.

National Resource Conservation Service (NRCS). 2020. *WebSoil Survey.* [Online]: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.Accessed: April 27, 2020.

Trinity County. 2002. *Trinity County General Plan – Safety Element.*

United States Geological Survey (USGS). *U.S. Quaternary Faults*. [Online]: https://usgs.maps.arcgis.com/apps/webappviewer/index.html. Accessed: April 27, 2020.

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

Environmental Setting: 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 longwave (thermal) radiation, and GHGs in the upper atmosphere absorb and emit this longwave radiation into space and toward the Earth. This "trapping" of the longwave radiation emitted back toward the Earth is the underlying process of the greenhouse effect. Other than water vapor, the primary GHGs contributing to global climate change include the following gases:

- Carbon dioxide (CO_2), primarily a byproduct of fossil fuel combustion in stationary and mobile sources.
- Nitrous oxide (N_2O), a byproduct of fuel combustion and also associated with agricultural operations such as the fertilization of crops;
- Methane (CH_4), commonly created by off-gassing from agricultural practices (e.g., livestock), wastewater treatment, and landfill operations;
- Chlorofluorocarbons (CFCs), which were used as refrigerants, propellants, and cleaning solvents, although their production has been mostly prohibited by international treaty;
- Hydrofluorocarbons (HFCs), which are now widely used as a substitute for chlorofluorocarbons in refrigeration and cooling;
- Perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6) emissions, which are commonly created by industries such as aluminum production and semiconductor manufacturing.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of GHG emissions from global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

California passed Assembly Bill 32 (Global Warming Solutions Act) in 2006, mandating a reduction in greenhouse gas (GHG) emissions and Senate Bill 97 in 2007, evaluating and addressing GHG under CEQA. On April 13, 2009, the 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 emissions, 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. A lead agency is not responsible for wholly eliminating all GHG emissions from a project; the CEQA standard is to mitigate to a level that is "less-than-significant" or, in the case of cumulative impacts, less than cumulatively considerable (SMAQMD, 2018).

The Global Warming Solutions Act (AB 32) also directed CARB to develop the Climate Change Scoping Plan (Scoping Plan), which outlines a set of actions to achieve the AB 32 goal of reducing GHG emissions to 1990 levels by 2020, and to maintain such reductions thereafter. CARB approved the Scoping Plan in 2008 and first updated it in May 2014. The second update in November 2017 also address the actions necessary to achieve the further GHG emissions reduction goal of reducing GHG emissions to 40 percent below 1990 levels by 2030, as described in Senate Bill 32 (SB 32). In addition, the 2017 Scoping Plan looks forward to the reduction goal of reducing emissions 80 percent under 1990 levels by 2050, as described in Executive Order S-3-05 (EO-S-3-05).

The project site is located in the North Coast Air Basin and is under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). Neither Trinity County nor the NCUAQMD have adopted quantitative thresholds for determining the significance of greenhouse gas emissions. In addition, Trinity County does not have an adopted Climate Action Plan. In the absence of quantitative thresholds or a Climate Action Plan, the NCUAQMD recommends the use of thresholds and guidance provided by other air districts in the State.

Impact Analysis: The following includes an analysis of environmental parameters related to *Greenhouse Gas Emissions* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Greenhouse Gas Emissions*.

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) 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 expansion of an existing cannabis cultivation operation to allow up to one-acre of cultivation. The proposed project would generate both direct and indirect GHG emissions. Direct GHG emissions would include emissions from construction activities, use of generators for electricity, and mobile sources (vehicles and equipment). Typically, mobile sources make up the majority of direct emissions from land use projects. Indirect GHG emissions would be generated by waste generation. Typically, electricity and water use are considered indirect sources of emissions, but the proposed project will obtain electricity through the use of generators and water from an onsite groundwater well.

   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_2e ($MTCO_2e$) per year GHG threshold established by the BAAQMD for land use projects, other than permitted stationary sources. However, the BAAQMD has not established screening criteria for agricultural uses such as crop production. The BAAQMD screening criteria focuses on residential, commercial, industrial, and public facility projects. As noted in the CARB Scoping Plan, quantitative thresholds for the exchange of CO_2 between the atmosphere and California's natural and working lands (e.g., natural ecosystems and agricultural lands) have not been developed (CARB, 2017). Typical emission sources considered for quantitative thresholds of significance involve construction and ongoing operational emissions from stationary industrial projects with high rates of combustion emissions (e.g., refineries, power plants, other processing that uses industrial boilers) or the construction and increased power and transportation needs from newly constructed residential or commercial projects.

   Due to the size, design, location, and nature of the proposed project, it is not anticipated that it would result in the generation of substantial GHG emissions that would have a significant impact on the environment. The construction activities required for development of the greenhouses, cultivation beds, dwelling, and associated infrastructure., is not anticipated to generate a significant amount of GHG emissions. For comparison, a project proposing the construction of 100 single-family residences would fall well below the 1,100 $MTCO_2e$ annual threshold used by the BAAQMD and other air districts in the State (e.g., MCAQMD, SMAQMD, etc.) to determine whether GHG emissions would be significant. As discussed in Section XVII (Transportation), the proposed project is estimated to generate up to 20 vehicle/truck trips per day. Mobile emissions are often the greatest source of emissions from land use projects. The number of trips and VMT from the project is minimal and would not be expected to generate significant GHG emissions. For comparison, a project that generates 300 daily trips would not exceed the 1,100 $MTCO_2e$ annual threshold. Additionally, the project proposes to primarily use areas on the site for cultivation that were previously disturbed by past logging activity (e.g., log landings). As such, the project proposes to maintain the existing forestland on the project site, which would sequester carbon and has the potential to offset GHG emissions from the proposed cultivation and rural residential activity. Also, the proposed project would use natural sunlight for cultivation, instead

of artificial lighting, which significantly reduces potential GHG emissions from electricity use. Based on the discussion above, development of the project would have a less than significant impact on this resource category.

b) The proposed project involves the expansion of a cannabis cultivation operation. As a result, the proposed project could generate both direct and indirect GHG emissions. A GHG impact would be significant if GHG emissions from the proposed project would conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions. As noted in the Setting, a Climate Action Plan has not been adopted by Trinity County. For the proposed project, it is analyzed whether the emissions obstruct compliance with the GHG emission reduction goals in Assembly Bill (AB 32), Senate Bill 32 (SB 32), and Executive Order S-3-05 (EO S-3-05).

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 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.

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 (CARB, 2018a):

> *"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."*

As noted in the CARB Scoping Plan, quantitative thresholds for the exchange of CO_2 between the atmosphere and California's natural and working lands (e.g., natural ecosystems and agricultural lands) have not been developed (CARB, 2017). The CARB Scoping Plan focuses on the rehabilitation and maintenance of natural and working lands to increase and/or maintain carbon sequestration as part of the state's climate solution. The Scoping Plan notes that natural and working lands have potential for carbon sequestration. The Scoping Plan also notes that some natural and working lands may be sources of GHG emissions; however, reductions in these emissions are not part of the state's strategy for achieving the longer-term GHG reductions targets for 2030 and 2050 (CARB 2017).

As described above, dues to the size, design, location, and nature the proposed project, it is not anticipated that it would result in the generation of substantial GHG emissions during either construction or operation. The potential GHG emissions from construction activities, vehicle trips, electricity use, and solid waste would be minimal and are anticipated to fall below the 1,100 $MTCO_2e$ annual threshold used by the BAAQMD and other air districts in the State (e.g., MCAQMD, SMAQMD, etc.) to determine whether GHG emissions would be significant. In addition, the project proposes to primarily use areas on the site for cultivation that were previously disturbed by past logging activity (e.g., log landings). As such, the project proposes to maintain the existing forestland on the project site, which would sequester carbon and has the potential to offset GHG emissions from the proposed cultivation and rural residential activity. Also, the proposed project would use natural sunlight for cultivation, instead of artificial lighting, which significantly reduces potential GHG emissions from electricity use.

As designed and in compliance with existing regulatory requirements, the proposed project would not generate GHG emissions that would conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Therefore, the proposed project would result in a less than significant impact on this resource category.

Mitigation Measures: No mitigation measures are required.

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

References:

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

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

_____. 2018a. *8th Edition, California Greenhouse Gas Emissions Inventory: 2000-2016. California Greenhouse Gas Emissions for 2000 to 2016, Trends of Emissions and Other Indicators.* 2018.

_____. 2018b. *An Inventory of Ecosystem Carbon in California's Natural & Working Lands.* 2018 Edition.

Mendocino County Air Quality Management District (MCAQMD). 2010. *Adopted Air Quality CEQA Thresholds of Significance.*

North Coast Unified Air Quality Management District (NCUAQMD). 2020. Air Quality Planning & CEQA. [Online]: http://ncuaqmd.org/index.php?page=aqplanning.ceqa. Accessed: July 30, 2020.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2018. *CEQA Guide: Chapter 6 – Greenhouse Gas Emissions.* [Online]: http://www.airquality.org/LandUseTransportation/Documents/Ch6GHGFinal5-2018.pdf. Accessed: July 30, 2020.

IX. HAZARDS AND HAZARDOUS MATERIALS: *Would the project:*	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	

Environmental 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.

The State of California Department of Toxic Substances Control (DTSC) is the administering agency and the Certified Unified Program Agency (CUPA) for Trinity County with responsibility for regulating hazardous materials handlers, hazardous waste generators, underground storage tank facilities, above ground storage tanks, and stationary sources handling regulated substances. A Hazardous Materials Business Plan (HMBP) is required of businesses in Trinity County that handle, use, generate, or store hazardous materials. The primary purpose of this plan is to provide readily available information regarding the location, type and health risks of hazardous materials to emergency response personnel, authorized government officials, and the public. Large cases of hazardous materials contamination or violations are referred to the Central Valley Regional Water Quality Control Board (RWQCB) and the DTSC.

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. A search of the DTSC and SWRCB lists identified no open cases of hazardous waste violations within one-mile of the project site.

The EPA maintains the Enforcement and Compliance History Online (ECHO) program. The ECHO website provides environmental regulatory compliance and enforcement information for approximately 800,000 regulated facilities nationwide. The ECHO website includes environmental permit, inspection, violation, enforcement action, and penalty information about EPA-regulated facilities. Facilities included on the site are Clean Air Act (CAA) stationary sources; Clean Water Act (CWA) facilities with direct discharge permits, under the National Pollutant Discharge Elimination System; generators and handlers of hazardous waste, regulated under the Resource Conservation and Recovery Act (RCRA); and public drinking water systems, regulated under the Safe Drinking Water Act (SDWA). ECHO also includes information about EPA cases under other environmental statutes. When available, information is provided on surrounding demographics, and ECHO includes other EPA environmental data sets to provide additional context for analyses, such as Toxics Release Inventory data. According to the ECHO program, the project site is not listed as having a hazardous materials violation.

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, 2020). 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, 2020), 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, 2020). These databases are available to the public for review. No hazardous facilities or sites have been documented to be present at the project site or in the adjacent area.

The project site is not located within an airport land use plan and is not within two miles of a public airport or public use airport. The project site is located approximately 5 miles northeast of the end of the runway at the Hayfork Airport (Trinity County, 1996).

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

Impact Analysis: The following includes an analysis of environmental parameters related to *Hazards and Hazardous Materials* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Hazards and Hazardous Materials*.

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) Small quantities of potentially hazardous substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers, pesticides, etc.) are currently and would continue to be used at the project site. However, none of these materials will be stored at the project facilities in quantities to be considered a significant hazard. Fertilizers and soil amendments would be used during cultivation operations and are purchased and transported to the site as needed, these will be stored within a shed adjacent to the proposed dwelling. 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 (CDPR) as "Legal to Use on Cannabis" (CDPR, 2017). The applicant states that these are routinely purchased and utilized onsite but are not stored in large quantities. Application of fertilizers and pesticides would be used on cultivation areas only. Any used fertilizer and chemical containers would be disposed of according to manufacturer's requirements. The proposed project will also be subject to the requirements of the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program and the County Cannabis Ordinance. The SWRCB program and County ordinance have standard requirements applicable to cannabis cultivation operations that address impacts from the storage and use of hazardous materials. These include implementation of spill prevention, control, and countermeasures (SPCC) and the maintenance of appropriate cleanup materials onsite.

   Compliance with standard transport and handling procedures of the chemical manufacturers, and the existing regulatory requirements of the County cannabis ordinances (Trinity County, 2017-2019), CDPR, and the SWRCB, would ensure that impacts from the proposed project would be less than 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, pesticides, etc.) are currently and would continue to 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 minimize potential impacts from the project. As discussed above, the proposed project will also be subject to the requirements of the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program and the County Cannabis Ordinance. The SWRCB program and County ordinance have standard requirements applicable to cannabis

cultivation operations that address impacts from the storage and use of hazardous materials. These include implementation of spill prevention, control, and countermeasures (SPCC) and the maintenance of appropriate cleanup materials onsite.

Therefore, in compliance with existing regulatory requirements, impacts from the proposed project would be less than 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. The project site is located several miles away from the closest schools in the community of Hayfork. Therefore, no impacts would result from the proposed project.

d) According to the DTSC Envirostor database, SWRCB Geotracker database, and USEPA RCRAInfo database, no hazardous facilities or hazardous materials contamination have been documented at the project site or in the adjacent area. As such, 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. Therefore, the proposed project would result in no impacts to this resource category.

e) The project site is not located within an airport land use plan and is not within two miles of a public airport or public use airport. The project site is located approximately 5 miles northeast of the end of the runway at the Hayfork Airport (Trinity County, 1996). Therefore, no impacts would result from the proposed project.

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. Adequate access is currently provided to the site with State, County, Forest Service, and onsite private access roads. The bridge on the project site access road will require replacement since it does not currently meet CDFW standards. Replacement of the bridge will improve emergency access to the project site in addition to reducing impacts to sensitive animal and plant species. Therefore, the proposed project would result in a less than significant impact to this resource category.

g) The majority of the site has been previously disturbed by timber harvest activities and is currently used for cannabis cultivation 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 structures, the availability and accessibility of onsite water storage (thirteen [13] 2,500-gallon water storage tanks), maintenance of access for emergency vehicles, and other measure required for fire protection/suppression as may be determined by the County or CALFIRE. Additionally, the Trinity County General Plan-Safety Element discusses wildland fires and outlines Wildland Urban Interface Zones Fuels Treatment Goals that describe fuel treatment activities around residential and other structures (Trinity County, 2002). 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. Based on the project design and compliance with existing regulatory requirements, 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.

References:

California Department of Forestry & Fire Protection (CALFIRE). 2020. *FHSZ Viewer – FHSZ in SRA.* [Online]: https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414. Accessed: August 2, 2020.

California Department of Pesticide Regulation. *Cannabis Pesticides that are Legal to Use*. 2017. [Online]: https://www.cdpr.ca.gov/cannabis. Accessed: July 21, 2020.

California Department of Toxics Substances Control (DTSC). 2020. *Envirostor Database*. [Online]: https://www.envirostor.dtsc.ca.gov/public/. Accessed: July 31, 2020.

State Water Resources Control Board (SWRCB). *Geotracker Database*. 2020. [Online]: https://geotracker.waterboards.ca.gov/. Accessed: August 2, 2020.

Trinity County. 1996. *Hayfork Community Plan Zoning Map*.

_____. 2002. *General Plan Safety Element*.

_____. 2017. *Cannabis Ordinance No. 315-823*.

_____. 2018. *Cannabis Ordinance Nos. 315-829, 315-830, and 315-841.*

_____. 2019. *Cannabis Ordinance No. 315-843*.

U.S. Environmental Protection Agency (USEPA). 2020. *RCRA Database*. [Online]: https://enviro.epa.gov/facts/rcrainfo/search.html. Accessed: August 2, 2020.

X. HYDROLOGY AND WATER QUALITY: *Would the project:*	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: i) Result in substantial erosion or siltation on- or off-site; ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) Create or contribute runoff water which would exceed the capacity of existing planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows?			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	

Environmental Setting: The project site is a 640-acre property consisting of forestlands that have been previously disturbed by timber harvesting activities. The project site is surrounded by USFS forest land with minimal development. The project site is comprised of steeply sloped coniferous forest that comprises the headwaters of Barker Creek. The entire site drains towards Barker Creek, a Class I perennial tributary of Hayfork Creek. A series of Class II and III watercourses feed into Barker Creek. The only drainage that does not drain into Barker Creek is a portion of a Class II tributary of Little Barker Creek in the southeast corner of the site. After exiting the project site, Barker Creek continues south for 4 miles before the confluence with Hayfork Creek, which flows west for another 27 miles before the confluence with the South Fork Trinity River in Hyampom (see Section 5 – Technical Appendices; PEC, 2020).

The current use of the project site includes up to 10,000 sq ft of cannabis cultivation and related infrastructure (e.g., groundwater well, water storage and distribution system, septic system, etc.). Impacts to water quality associated with the existing cannabis cultivation activities at the project site were initially regulated by the North Coast Regional Water Quality Control Board (RWQCB) under Order No. 2015-0023, but were required to comply with regulations of the State Water Resources Control Board (SWRCB) Order No. WQ 2019-0001-DWQ (previously WQ 2017-0023-DWQ) by July 1, 2019. Additionally, the Cannabis Ordinances developed by the County identifies specific requirements for water use and water quality, including compliance with Senate Bill 94 (SB 94) and any applicable NCRWQCB or SWRCB regulations. The project applicant is required to prepare and implement a Site Management Plan (SMP) for the operations at the project site, in compliance with the conditions outlined in State Order No. WQ 2019-0001-DWQ. The previous Water Resources Protection Plan (WRPP) under Regional Order No. 2015-0023 included cleanup activities mostly consisting of roadway maintenance, culvert installations at stream crossings, roadway water bars, and rolling dips to minimize erosion and resist concentrated runoff. The WRPP also required several stream restorations to reconnect portions of a Class III watercourse that was diverted by an existing road. Most of these activities are required as part of the existing project as both haul and access roads resulting from the historical timber operations left roads open and un-remediated.

Water is provided to the project site from an existing, permitted 220 ft deep groundwater well that produces water at 24 gallons per minute. Water from the groundwater well is pumped from the well to tanks existing near the well. From there, water is pumped through a pipeline to the water tanks at Area 1. The water is then gravity fed through the pipeline down to the remaining water tanks at cultivation areas 2-4. From the water storage tanks at each cultivation area, water is applied to the plants through a drip irrigation system. The water line for the water system is above ground and consists of painted 1.5-inch PVC pipe.

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.

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The California Department of Water Resources (DWR) prioritizes groundwater basins in accordance to the provisions of California Water Code Section 10933(b). The project is located outside the Hayfork Valley Groundwater Basin (No. 1-6). The Hayfork Valley is an irregularly shaped, approximately 5 square mile basin. The Hayfork Valley has been designated "Very Low" priority by the DWR.

Flood zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM). Each flood zone reflects the anticipated type of flooding in the area. According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panels 06105C1225E and 061051015E, the portions of the project site proposed for development are located outside of a regulated flood hazard zone (FEMA, 2010). The entire project site is shown as being in Zone D – Possible but Undetermined Flood Hazard. The Zone D designation indicates that the area is generally sparsely populated and generally no flood analysis has been undertaken. Flooding can occur in Zone D but is generally limited to specific areas. On the project site, there is the potential for flooding along Barker Creek and its tributaries.

Ewing Reservoir is located in Hayfork, approximately 3.5 miles southwest of the project site. Prior to the construction of the dam, an inundation study and map were prepared for Ewing Reservoir.

Impact Analysis: The following includes an analysis of environmental parameters related to *Hydrology and Water Quality* on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Hydrology and Water Quality*.

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 is served by an existing, permitted septic system for the treatment of domestic wastewater. The septic system must be designed and operated in compliance with the requirements of the County Division of Environmental Health.

   Impacts to water quality associated with the existing cannabis cultivation activities at the project site were initially regulated by the North Coast Regional Water Quality Control Board (RWQCB) under Order No. 2015-0023 and were required to transition to regulations of the State Water Resources Control Board (SWRCB) Order No. WQ 2019-0001-DWQ (previously WQ 2017-0023-DWQ) by July 1, 2019. Additionally, the Cannabis Ordinances developed by the County identifies specific requirements for water use and water quality, including compliance with Senate Bill 94 (SB 94) and any applicable NCRWQCB or SWRCB regulations. These existing regulatory requirements address implementation of all applicable best practicable treatment or control (BPTC) measures and submittal of a Site Management Plan (SMP) that includes a time schedule and scope of work for use by the Regional Water Board in developing a compliance schedule as described in *Attachment A: Cannabis Policy*, as well as technical reports that must be submitted to the Regional Water Board as described in *Attachment B: Monitoring and Reporting Program* (MRP). The previous Water Resources Protection Plan (WRPP) under Regional Order No. 2015-0023 included cleanup activities mostly consisting of roadway maintenance, culvert installations at stream crossings, roadway water bars, and rolling dips to minimize erosion and resist concentrated runoff. The WRPP also required several stream restorations to reconnect portions of a Class III watercourse that was diverted by an existing road. Most of these activities are required as part of the existing project as both haul and access roads resulting from the historical timber operations left roads open and un-remediated.

Compliance with these existing regulatory requirements will ensure the proposed cultivation operation will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Based on the above, impacts from the proposed project would be less than significant.

b) Water is provided to the project site from an existing, permitted 220 ft deep groundwater well that produces water at 24 gallons per minute. Water from the groundwater well is pumped from the well to tanks existing near the well. From there, water is pumped through a pipeline to the water tanks at Area 1. The water is then gravity fed through the pipeline down to the remaining water tanks at cultivation areas 2-4. From the water storage tanks at each cultivation area, water is applied to the plants through a drip irrigation system. With the expansion of the cultivation operation, additional water will be required for irrigation. Based on past well production levels, the existing groundwater well at the site has an adequate supply of water for the proposed project.

The project site is a 640-acre parcel that is surrounded by USFS lands. The project is located outside the Hayfork Valley Groundwater Basin (No. 1-6). The Hayfork Valley has been designated "Very Low" priority by the California Department of Water Resources (DWR, 2004). Therefore, the proposed project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

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

i) Result in substantial erosion or siltation on or off-site:

The project activities will be required to comply with the requirements of the County Cannabis Ordinances as well as the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program. These existing regulatory requirements contain a number of regulations related to controlling erosion and preventing potential impacts to water quality from stormwater runoff. In compliance with the requirements of the SWRCB and County, the proposed project would not result in substantial erosion or siltation on or off-site. Therefore, impacts from the proposed project would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:

The project proposes new structures (e.g., greenhouses, dwelling, etc.) that would increase the amount of impervious surface on the project site. As noted above, the project would be required to comply with the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program. The SWRCB program requires the management of stormwater runoff to prevent substantial increases in runoff that would result in flooding. In compliance with these requirements, the proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Therefore, impacts from the proposed project would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff:

Due to the rural location of the project site and the nature of the existing and proposed agricultural activities, there are no stormwater drainage systems which would be impacted by the proposed project. Stormwater runoff will be managed in compliance with the requirements of the State Water Resources Control Board Cannabis Cultivation Waste Discharge Regulatory Program, which would ensure the proposed project does not result in substantial additional sources of polluted runoff. Therefore, impacts from the proposed project would be less than significant.

iv) Impede or redirect flood flows:

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panels 06105C1225E and 061051015E, the portions of the project site proposed for development are located outside of a regulated flood hazard zone (FEMA, 2010). As such, the proposed project would not impede or redirect flood flows. Therefore, impacts from the proposed project would be less than significant.

d) According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM) Panels 06105C1225E and 061051015E, the portions of the project site proposed for development are located outside of a regulated flood hazard zone (FEMA, 2010). The project site is approximately 3.5 miles to the northeast of Ewing Reservoir and is higher in elevation. As such, the location of the project site is outside of an area where inundation from dam failure would occur. Based on the location and elevation of the project site, there are no levees near the proposed project. The threat of a tsunami wave is not applicable to inland areas. There is no body of water near the project site that has the potential for the generation of a seiche. As such, the proposed project would not result in the release of pollutants due to project inundation. Therefore, no impact would result from the proposed project.

e) See the discussion under subsections a) and b) above.

Mitigation Measures: No mitigation measures are required.

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

References:

California Department of Water Resources (DWR). 2004. *North Coast Hydrologic Region – Hayfork Valley Groundwater Basin*. California's Groundwater – Bulletin 18.

Federal Emergency Management Agency (FEMA). 2010. *Flood Insurance Rate Map (FIRM) Panel Numbers 06105C1225E and 061051015E*. Effective 1/20/2010.

Pinecrest Environmental Consulting (PEC). 2020. *Biological Assessment & Special-Status Species Surveys*. *3800 Barker Creek Road (APN 015-030-01-00), Trinity County, California.* April.

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

_____. *State Water Resources Control Board Order No. WQ 2017-0023-DWQ.* [Online]: https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/finaladoptedcango101717.pdf

Trinity County. 2017. *Cannabis Ordinance No. 315-823*.

_____. 2018. *Cannabis Ordinance Nos. 315-829, 315-830, and 315-841.*

_____. 2019. *Cannabis Ordinance No. 315-843*.

XI. LAND USE AND PLANNING: *Would the project:*	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	

Environmental Setting: The project site is located north of SR-3 and the community of Hayfork on a 640-acre property that has been used historically for logging and mining and is currently used for cannabis cultivation. Development surrounding the subject site is generally limited as the parcels are managed by the USFS. The project site is surrounded by County General Plan designated Resource (RE) lands under Unclassified (U) zoning.

The project site has been designated Resource (RE) in the County General Plan and has Unclassified (U) zoning (Trinity County, 1988). Both the County General Plan and County Code did not specifically anticipate development of commercial cannabis when they 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*". 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 County Code, are used to determine appropriate locations and operating standards for cannabis operations in Trinity County. An applicant can apply for a Use Permit for cannabis cultivation operations under the Cannabis Ordinance, as well as a variance to specific provisions and requirements of the Cannabis Ordinance, with approval at the discretion of the County Planning Commission and Board of Supervisors. The project is requesting two approvals from the County, which include the following:

- A Conditional Use Permit to allow up to 1-acre of cultivation; and
- A Variance to allow one of the cultivation areas (Area 4) to occur within the 500 ft setback from the property line.

Impact Analysis: The following includes an analysis of environmental parameters related to *Land Use and Planning* on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Land Use and Planning*.

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. Therefore, no impact would result from the proposed project.

b) The County's General Plan serves as the overall guiding policy document for land use and development. The subject property and surrounding parcels are designated in the General Plan as Resource (RE) and have Unclassified (U) zoning. Agricultural related activities are consistent with the RE designation and an allowed use in the U zone. As the proposed project consists of agricultural related activities, the project is considered consistent with the General Plan designation and Zoning District. 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.

One of the proposed cultivation areas (Area 4) does not comply with the Trinity County Ordinance 315-823, which requires a 500 ft setback from the property lines for a medium (up to one acre of canopy) cannabis cultivation site (see Figure 2 – Project Plans). To allow cultivation in this area, the applicant is preparing an application for a variance. As a condition of approval of the use permit, the variance must be approved before the applicant can proceed with cultivation in the proposed cultivation area requiring the variance. One of the purposes of setback requirements for outdoor cannabis cultivation is to reduce potential odor impacts. Once a variance is issued by the County, the variance is evaluated on an annual basis. Should odor from the project become an issue, the County could terminate the variance approval and require relocation of the cultivation activity at Area 4. Since there are no sensitive receptors within close proximity to the proposed cultivation areas, the reduced setback from the property lines for Area 4 would not expose a substantial number of people to odors.

Based on the location and uses proposed by the project, it does not conflict with a plan, policy, or regulation for the purpose of mitigation an environmental effect. Therefore, the proposed project would result in less than significant impacts.

Mitigation Measures: No mitigation measures are required.

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

References:

Trinity County. 1988. *General Plan – Land Use Element.*

_____. 2017. *Cannabis Ordinance No. 315-823*.

_____. 2018. *Cannabis Ordinance Nos. 315-829, 315-830, and 315-841.*

_____. 2019. *Cannabis Ordinance No. 315-843*.

XII. MINERAL RESOURCES: *Would the project:*	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	

Environmental Setting: 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 State Division of Mines and Geology as being a resource of regional significance and is intended to help maintain any quarrying operations and protect them from encroachment of incompatible uses.

Mineral production has historically been a significant part of the economy of Trinity 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 gold, limestone and manganese to name a few. The proposed project site has historically been used for timber harvest purposes and has evidence of limestone mining activity. 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 (Trinity County, 1973; CGS, 2020).

Impact Analysis: The following includes an analysis of environmental parameters related to *Mineral Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Mineral 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-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 (Trinity County, 1973; CGS, 2020). Therefore, the proposed project would result in a less than significant impact on this resource category.

Mitigation Measures: No mitigation measures are required.

Findings: In the course of the above evaluation it was determined that impacts to *Mineral Resources* would be less than significant.

References:

California Geological Survey (CGS). 2020. *CGS Information Warehouse - Mineral Land Classifications.*

Trinity County. 1973. *General Plan - Open Space and Conservation Element.*

XIII. NOISE: *Would the project result in:*	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

Environmental 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 and land uses. 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 or mitigations will be placed on projects.

Table VII (Maximum Allowable Noise Exposure-Stationary Noise Sources) of the General Plan Noise Element contains maximum allowable noise exposure levels for stationary noise sources (see Table 2 below). Stationary noise sources are defined by the Noise Element (pg. 3) as "Any fixed or mobile sources not preempted from local control by existing federal or state regulations. Examples of such sources include industrial and commercial facilities, and vehicle movements on private property" (Trinity County, 2003).

Table 2.
Maximum Allowable Noise Exposure-Stationary Noise Sources

	Daytime (7 a.m. to 7 p.m.)	Evening (7 p.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Equivalent Sound Level (Leq), dB	55	50	45
Maximum Sound Level (Lmax), dB	75	70	65

Policy 4.2.4 of the General Plan Noise Element addresses compliance with the noise standards in Table VII, which states the following: "*Noise created by proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards of Table VII at noise-sensitive land uses*."

In the vicinity of the project, noise generation sources are varied and consist of vehicle traffic along SR-3 and County Roads, air traffic from the Hayfork Airport, and any maintenance activities on surrounding residential and USFS lands. There are no sensitive receptors in close proximity to the project site that would be impacted by noise from the proposed project. The closest residence is over 1-mile away and the nearest school is several miles away.

The project site is not located within an airport land use plan and is not within the vicinity of a private airstrip or within two miles of a public airport or public use airport. The project site is located approximately 5 miles northeast of the end of the runway at the Hayfork Airport (Trinity County, 1996).

Impact Analysis: The following includes an analysis of environmental parameters related to *Noise* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Noise*.

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) Project generated noise may be heard on neighboring property, but the USFS managed properties are vacant and do not contain sensitive receptors such as residential uses.

Noise will be generated from construction activities including site preparation, grading, and building construction. However, this noise is temporary and would be limited to daytime hours. Based on the limited scope of construction activity and the lack of proximity to sensitive receptors, noise impacts from construction activity would be less than significant at the nearest noise-sensitive land uses.

Typical cannabis cultivation operations are not considered a significant noise generation source because the daily activities are generally hand operations with minimal equipment use. The project will have four (4) 25-watt stationary generators, but hours of operation will typically be limited to daytime hours. Based on the distance to the nearest sensitive receptors (e.g., residences), implementation of standard conditions of the various cannabis ordinances, and review by County staff for compliance during operations, noise levels from the proposed project are not anticipated to exceed the noise standards in the General Plan Noise Element at the nearest noise-sensitive land uses. Therefore, impacts from the proposed project will be 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. Some minor groundborne vibration may occur during construction and operation of the proposed project but would not be considered excessive or have the potential to cause damage to structures. Therefore, the proposed project would result in a less than significant impact.

c) The project site is not located within an airport land use plan and is not within the vicinity of a private airstrip or within two miles of a public airport or public use airport. The project site is located approximately 5 miles northeast of the end of the runway at the Hayfork Airport (Trinity County, 1996). Therefore, no impacts would result from the proposed project.

Mitigation Measures: No mitigation measures are required.

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

References:

Trinity County. 1996. *Hayfork Community Plan Zoning Map*.

_____. 2003. *General Plan – Noise Element*.

_____. 2017. *Cannabis Ordinance No. 315-823*.

_____. 2018. *Cannabis Ordinance Nos. 315-829, 315-830, and 315-841.*

_____. 2019. *Cannabis Ordinance No. 315-843*.

XIV. POPULATION AND HOUSING: *Would the project:*	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

Environmental Setting: Trinity County has a population of approximately 13,786 persons based on the 2010 US Census Data. The median household income is $36,563 per year. Housing throughout the project area is primarily individual rural residences on larger parcels of land.

Impact Analysis: The following includes an analysis of environmental parameters related to *Population and Housing* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Population and Housing*.

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 one 576 square foot residence proposed. Four (4) full-time employees are proposed for this project, and the applicant states that these workers will come from the existing local population. Based on the information provided, and evaluation of the area, there are no growth-inducing impacts associated with this project.

b) The project parcel is currently used for cannabis cultivation with infrastructure remaining from previous uses (i.e., groundwater well, septic system, etc.). The proposed project would not displace any people or existing housing, as none are located at the project site. Therefore, no impact would result from the proposed project.

Mitigation Measures: No mitigation measures are required.

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

References:

U.S. Census Bureau. *American Fact Finder.* [Online]: https://data.census.gov/cedsci/table?q=Trinity%20County,%20California&hidePreview=true&g=0500000US06105&tid=DECENNIALSF12010.P1. Accessed: July 22, 2020.

XV. PUBLIC SERVICES: *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*	**Potentially Significant Impact**	**Potentially Significant Impact Unless Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
Fire Protection?			X	
Police Protection?			X	
Schools?			X	
Parks?				X
Other public facilities?			X	

Environmental Setting: The project site is located north east of Hayfork and south west of Weaverville, which have public services available to residential, commercial and industrial users. Fire protection is provided to the proposed project site by CALFIRE and the nearest volunteer fire department is the Hayfork 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 (CHP). The nearest medical facility is the Trinity Hospital in Weaverville and about 15 miles north of the proposed project. Hayfork Elementary School serves grades K-8, with Hayfork High School serving grades 9-12.

Impact Analysis: The following includes an analysis of environmental parameters related to *Public Services* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Public Services*.

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:

The project would not 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:

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 is not expected to significantly increase the demand for these protection services. 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:

The Mountain Valley School District is a one-school district that provides 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 four (4) 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, the nearest park is Junction City Park which is about 10 miles north 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 additional 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.

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 (CALFIRE). *State Responsibility Area Viewer.* [Online]: https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed: April 22, 2020.

California Department of Education. [Online]: https://www.cde.ca.gov/SchoolDirectory/details?cdscode=53750280000000/. Accessed: April 27, 2020.

Mountain Valley Unified School District. [Online]: https://www.mvusd.us/schools. Accessed: July 22, 2020.

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

XVI. RECREATION:	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

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

Impact Analysis: The following includes an analysis of environmental parameters related to *Recreation* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Recreation*.

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 a land use that would 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. Therefore, no impact would result from the proposed project.

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. Therefore, no impact would result from the proposed project.

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.*

United States Department of Agriculture (USDA) Forest Service, Shasta-Trinity National Forest, Recreation. [Online]: https://www.fs.usda.gov/recmain/stnf/recreation. Accessed: July 22, 2020.

XVII. **TRANSPORTATION:** *Would the project:*	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	

Environmental Setting: The project site is located to the north of the community of Hayfork and is surrounded by USFS land. The project site's main access is provided through an existing USFS road (Forest Rte 32N03) via Barker Creek Road, which intersects with SR-3. SR-3 is the main transportation route in the Hayfork area. Due to the location of the project site, there are no pedestrian and bicycle facilities or transit services adjacent to the site.

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 Department of Transportation through Trinity Transit, which provides daily bus service between destinations such as Arcata, Willow Creek, Hayfork, and Weaverville. The closes bus stop to the project site is along SR-3 in downtown Hayfork. Other private transit carriers also operate in Trinity County to provide services to the elderly, disabled, school children and others (Trinity Transit, 2020).

Impact Analysis: The following includes an analysis of environmental parameters related to *Transportation and Traffic* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Transportation and Traffic*.

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 additional cannabis canopy area (up to 1-acre) on a site that is currently permitted to cultivate up to 10,000 square feet of cannabis canopy. As this project does not propose the development of new roads or easements there is no conflict with the General Plan Circulation Element.

Construction. Construction traffic for the proposed project would result in a short-term increase in construction-related vehicle trips on SR-3, Barker Creek Road, Forest Rte 32N03, and other local roadways in the Hayfork area. Construction would result in vehicle trips by construction workers, haul-truck trips for delivery, and disposal of construction materials and spoils to and from construction areas. Due to the limited amount of development proposed by the project, construction activities would not result in substantial adverse effects or conflicts with the local roadway system.

Operation. As noted above, four (4) full-time employees are anticipated for the expanded cultivation operation. The employees would not live onsite and would commute to work each day. The proposed project is estimated to generate up to 20 vehicle/truck trips per day. This will include 16 employee vehicles trips (conservative estimate of 4 trips per day per employee; 2 trips for commuting to work and 2 trips during lunch hour), 2 trips for the import of agricultural materials and supplies needed for the cultivation operation (1 in/1 out), and 2 trips for the export of unprocessed cannabis plants/flower (1 in/1 out). Employees are presumed to be from the local Trinity County population and would not cause significant additional traffic in the area or vehicle miles traveled (VMT). The

estimated vehicle trips from the proposed project are not anticipated to cause a significant increase in traffic or require changes to any roadways, public transit, or pedestrian/bicycle facilities.

The Governor's Office of Planning and Research (OPR) has developed a screening threshold to determine when detailed analysis is needed due to the potential for a project to generate a potentially significant level of VMT. The threshold states that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact (OPR, 2018). As noted above, the proposed project is estimated to generate approximately 20 vehicle/truck trips per day, which is well below the screening threshold recommended by OPR. For this reason, a detailed analysis of VMT impacts is not included in this Initial Study and it is determined that the project would result in less than significant transportation impacts during operation.

Therefore, the proposed project would not result in conflicts with plans or policies addressing the circulation system and would not conflict with CEQA Guidelines Section 15064.3, subdivision (b) during either construction or operation. As such, less than significant impacts would occur for these resource categories.

c) The proposed project does not propose any new roads and does not propose or require any realignment of existing roads that might cause hazards due to a geometric design feature. The bridge on the project site access road will require replacement since it does not currently meet CDFW standards. Replacement of the bridge will improve access to the project site in addition to reducing impacts to sensitive animal and plant species. The project site is currently used for cannabis cultivation, and no incompatible uses have been identified that would result in significant hazards with implementation of the proposed project. Therefore, no significant hazards are anticipated with the development of this project and the project would have a less than significant impact.

d) Adequate access is currently provided to the site with State, County, Forest Service, and onsite private access roads. The bridge on the project site access road will require replacement since it does not currently meet CDFW standards. Replacement of the bridge will improve emergency access to the project site in addition to reducing impacts to sensitive animal and plant species. 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 CAL FIRE for compliance with State Fire Safe Standards. In compliance with these existing regulatory requirements, emergency access to the site would be adequate and impacts from the proposed project would be less-than-significant.

Mitigation Measures: No mitigation measures are required.

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

References:

Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory – On Evaluating Transportation Impacts in CEQA.*

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

Trinity Transit. 2020. [Online]: http://trinitytransit.org/. Accessed: April 27, 2020.

XVIII. TRIBAL CULTURAL RESOURCES: *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:*	**Potentially Significant Impact**	**Potentially Significant Impact Unless Mitigation Incorporated**	**Less-Than-Significant Impact**	**No Impact**
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			**X**	
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.			**X**	

Environmental Setting: AB 52 was enacted on July 1, 2015 and establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource when feasible (PRC Section 21084.3).

Public Resources Code Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

- 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
- 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 these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California cities, counties, and tribes regarding tribal cultural resources. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

The purpose of the consultation is to determine whether a proposed project may result in a significant impact to tribal cultural resources that may be undocumented or known only to the tribe and its members. As set forth in PRC Section 21080.3.1(b), the law requires:

"Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation."

The project area is located within the ancestral territory of the Wintu Native Americans. More recently, the project site has a documented history of being developed for resource extraction including logging and limestone mining. Roads on the parcel have been developed to facilitate this historical timber harvesting, including stream crossings, log landings, haul roads and forest skid roads. Other openings have been created along existing roads for a variety of past forestry related uses. Other non-historical cultural uses may have occurred at the project site and in the surrounding vicinity. Currently the project site is used for cannabis cultivation.

The applicant provided a Cultural Resources Assessment prepared by Natural Investigations Company (NIC) that included literature and Sacred Lands File searches as well as an intensive-level pedestrian survey over 11.6 acres of the project site. The report notes that no cultural resources have been previously recorded within the project area and concludes that no newly identified prehistoric or historic-era resources were identified during the pedestrian survey (NIC, 2018).

Tribal consultation pursuant to AB 52 was initiated on July 9, 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.

Impact Analysis: The following includes an analysis of environmental parameters related to *Tribal Cultural Resources* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Tribal 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) Tribal consultation pursuant to AB 52 was initiated on July 9, 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. Results from the intensive-level pedestrian survey and associated record search did not identify any prehistoric or historic archaeological sites, ethnographic sites, or historic-era built environment resources on the project site (NIC, 2018).

   However, there remains the possibility that tribal cultural resources could exist in the area and may be uncovered during project development. To prevent potential impacts to unknown tribal cultural resources at the project site, an inadvertent discovery protocol is included as Mitigation Measure CR-1 (see Section V – Cultural Resources). With the proposed mitigation measure, the project will not cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

b) As discussed above, the project site was historically used for logging and mining and is currently used for cannabis cultivation. Results from the intensive-level pedestrian survey and associated record search did not identify any prehistoric or historic archaeological sites, ethnographic sites, or historic-era built resources on the project site (NIC, 2018). Tribal consultation pursuant to AB 52 was initiated on July 9, 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.

   Based on the above information, Trinity County (as lead agency) has determined that there are no known tribal cultural resources present on the project site that are considered significant to a California Native American Tribe. However, there remains the possibility that tribal cultural resources could exist in the area and may be uncovered during project development. To prevent potential impacts to unknown tribal cultural resources at the project site, an inadvertent discovery protocol is included as Mitigation Measure CR-1 (see Section V – Cultural Resources). With the proposed mitigation measure, the project will not cause a substantial adverse change in the significance of a tribal cultural resource. Therefore, the proposed project would result in a less-than-significant impact with mitigation incorporated.

Mitigation Measures: The following mitigation measure has been developed to reduce potential impacts related to undocumented tribal cultural resources 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.

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

References:

Natural Investigations Company. 2018. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 3800 Barker Creek Road, Hayfork, Trinity County, California*. November 2018.

XIX. UTILITIES AND SERVICE SYSTEMS: *Would the project:*	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	

Environmental Setting: Limited public utilities and service systems are provided and available in the area of the project. Power is provided to the site by four (4) stationary 25 watt generators (one at each cultivation site). 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 by an existing groundwater well, no additional water sources are proposed as part of this project.

Impact Analysis: The following includes an analysis of environmental parameters related to *Utilities and Service Systems* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Utilities and Service Systems*.

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 applicant and the four (4) full-time workers at the site 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 to ensure it continues functioning properly. The applicant has indicated that no other wastewater would be generated by the cultivation operation, as the bulk of the water used onsite will be for irrigation. The proposed project is currently served by an existing, permitted groundwater well and no additional water sources are required for the cultivation operation. There is no power connection at the project site and four (4) stationary 25-watt generators would be used to provide power. Based on the current anticipated uses at the site, impacts would be less than significant.

b) Implementation of the proposed project would not require new infrastructure to support water service. Water is currently provided to the site by an existing, permitted groundwater well and no additional water sources are required for the proposed project. There are thirteen (13) 2,500-gallon water storage tanks on the property, which will be used for irrigation, domestic uses, and fire suppression. Based on the water source and storage proposed for the 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 that serve the project site. As required by the Trinity County Environmental Health Department, the applicant shall ensure that the existing septic system meets the Department's requirements within 60 days of issuance of the use permit.

d) The project's waste generation will involve miscellaneous agricultural refuse and debris, and cannabis waste. Refuse will be sorted to divert recyclables such as paper, plastic, glass, and metals from the waste stream. Those recyclables will be taken to a recycling center for recycling. The remaining solid wastes will be collected and deposited into a solid waste receptacle for temporary storage, which will be kept covered.

Solid waste produced by the project will be taken to the Hayfork Transfer Station before being transported to the Anderson Landfill, Inc., a solid waste landfill facility in Shasta County. The Anderson Landfill has the existing capacity of 10,409,132 cubic yards and is permitted to receive a maximum of 1,850 tons of solid waste per day (CalRecycle, 2019). The Hayfork Transfer Station and the Anderson Landfill have sufficient capacity to accommodate the solid waste generated by the proposed project.

In compliance with State or local regulations, the proposed project would not 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. Based on the above description, the proposed project would result in a less than significant impact to this resource category.

e) The California Integrated Waste Management Act of 1989 (Public Resources Code Division 30), enacted through Assembly Bill (AB) 939 and modified by subsequent legislation, required all California cities and counties to implement programs to divert waste from landfills (Public Resources Code Section 41780). Compliance with AB 939 is determined by the Department of Resources, Recycling, and Recovery (Cal Recycle).

The project's construction and operation activities would comply with all federal, State, and local statutes related to solid waste, including AB 939. This would include compliance with recycling, hazardous waste, and composting programs in the County to comply with AB 939. Vegetative matter such as root balls, branches, and leaves would be chipped and composted or hauled offsite and disposed of in accordance with County and State requirements. Therefore, the project will not violate any federal, State, and local statutes and regulations related to solid waste, and a less than significant impact would occur.

Mitigation Measures: No mitigation measures are required.

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 July 22, 2020.

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

Environmental Setting: Fire protection is provided to the proposed project site by CALFIRE and the nearest volunteer fire department is the Hayfork Volunteer Department which provides mutual aid services. 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 between Hayfork and the Douglas City areas. 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, adequate emergency access, and other building and development standards to reduce impacts from wildfires.

The Trinity County Office of Emergency Services (OES) administers the County's *Emergency Operations Plan* to respond to major emergencies and disasters. The *Emergency Operations Plan* identifies a broad range of potential hazards and a response plan for each. The Trinity County Sheriff's Department, California Highway Patrol, and other cooperating law enforcement agencies have primary responsibility for evacuations. These agencies work with the County OES, and with responding fire department personnel who assess fire behavior and spread, which ultimately influence evacuation decisions. As of this time CALFIRE, Trinity County Fire Council, Trinity County OES, Trinity County Sheriff's Department, and others have not adopted a comprehensive emergency evacuation plan applicable to this area.

All evacuations in the County follow pre-planned procedures to determine the best plan for the type of emergency. The designated County emergency evacuation and law enforcement coordinator is the sheriff. The evacuation coordinator is assisted by other law enforcement and support agencies in emergency events. Law enforcement agencies, highway/street departments, and public and private transportation providers would conduct evacuation operations. Activities would include law enforcement traffic control, barricades, signal control, and intersection monitoring downstream of the evacuation area, all with the objective of avoiding or minimizing potential backups and evacuation delays.

Another factor in the evacuation process would be a managed and phased evacuation declaration. Evacuating in phases, based on vulnerability, location, or other factors, enables subsequent traffic surges on major roadway to be minimized over a longer time frame and can be planned to result in traffic levels that flow more efficiently than when mass evacuations include large evacuation areas simultaneously. Law enforcement personnel and Trinity County Office of Emergency Services staff would be responsible for ensuring that evacuations are phased appropriately, taking into consideration the vulnerability of communities when making decisions.

Impact Analysis: The following includes an analysis of environmental parameters related to *Wildfire* based on Appendix G of the State CEQA Guidelines. The discussion not only includes the areas for which there is potential for environmental impacts but also provides justification for the conclusions that either no impacts, less than significant impacts, or less than significant impacts with mitigation could occur. The CEQA Checklist question, discussion, and environmental significance conclusion are provided below under each individual environmental parameter related to *Wildfire*.

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) Based on the Trinity County General Plan Safety Element, SR-3 is considered a Major Evacuation Route. As the project will not impact traffic intensity on the roadway, or impair access to the roadway or surrounding properties, the project is not expected to impair an emergency response plan or emergency evacuation plan. Due to the location of the project, the impacts are considered to be less than significant.

b) Each of the sites that are proposed for cannabis cultivation have been previously disturbed and the proposed project does not propose significant changes to the project site or surrounding property that would exacerbate wildfire risks. The development of the project itself is not anticipated to contribute to any significant increase in risks to occupants from uncontrolled spread of wildfire. Based on past land uses at the site and in the project 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. There are thirteen (13) 2,500-gallon water storage tanks on the property, which can be used for fire suppression if necessary. Maintenance of existing infrastructure at the site (e.g., groundwater well, storage tanks, septic system, access roads, etc.) is not an activity that has the potential to substantially exacerbate fire risk or result in significant impacts to the environment. 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. It is not anticipated that occupants or structures would be exposed to significant risks from flooding or landslides as a result of post-fire runoff. Therefore, impacts from the proposed project are considered to be less than significant.

Mitigation Measures: No mitigation measures are required.

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 Board of Forestry and Fire Protection (CALFIRE). *State Responsibility Area Viewer.* [Online]: https://egis.fire.ca.gov/FHSZ/. Accessed: April 24, 2020.

_____. *SRA Fire Safe Regulations*. [Online]: https://egis.fire.ca.gov/FHSZ/. Accessed: April 24, 2020.

California Public Resources Code (CPRC). *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*.

_____. *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*.

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

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:	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, as mitigated, 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.

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 disturbance within the project area and all its previous uses, 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, with implementation of the proposed mitigation measures, the project is not anticipated to have a substantial adverse effect on the environment. Therefore, there are no significant impacts with mitigation.

Section 4 – CEQA Determination

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.

X 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 of NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Copies of the Initial Study may be obtained on the following websites:

Governor's Office of Planning and Research: CEQAnet Web Portal
https://ceqanet.opr.ca.gov/

County of Trinity Website: Community Development Services – Planning Department
https://www.trinitycounty.org/Planning

Dependent on current work hours and staffing levels, copies may also be obtained at the Trinity County Planning Department, 61 Airport Road, Weaverville, CA 96093. Contact Kim Hunter, Director of Building and Planning (530-623-1351 ext. 2 or khunter@trinitycounty.org) for additional information.

Kim Hunter, Director of Building & Planning
Trinity County

11/2/20
Date

Section 5 – Technical Appendix

Appendix A

Pinecrest Environmental Consulting (PEC). 2020. *Biological Assessment & Special-Status Species Surveys*. *3800 Barker Creek Road (APN 015-030-01-00), Trinity County, California.* April 2020.

BIOLOGICAL ASSESSMENT & SPECIAL-STATUS SPECIES SURVEYS

3800 BARKER CREEK ROAD [APN 015-030-01-00]

TRINITY COUNTY, CALIFORNIA

PREAPRED FOR:

Flowra
790 Main Street, Suite 620
Weaverville, CA 96093

PREPARED BY:

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PROJECT № FL0037

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APRIL 6, 2020

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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of this combined Biological Assessment (BA) and Special-Status Species (SSS) Survey performed by Pinecrest Environmental Consulting Inc. (PEC) is to evaluate the existence of SSS and/or habitats, as well as assess the potential for SSS listed in Appendix A to occur on or near the site of commercial *Cannabis* cultivation activities, pursuant to applicable regulations from County of Trinity and the State of California. This BA/SSS Survey also analyzes the potential for jurisdictional wetlands and other waters of the U.S. to exist onsite, and classifies landforms that may potentially convey sediment to waters of the U.S. including dry creeks, washes, swales, gullys, and other erosional features. Also included is a set of Best Management Practices (BMP) that are adapted from a variety of sources including State Water Resources Control Board *Cannabis* General Order No. WQ 2019-0001-DWQ and other state and local ordinances (Appendix F), as well as a set of Avoidance & Minimization Measures (AMM) designed to avoid impacts to special-status species that are known to exist in the vicinity of the project parcel (Appendix H).

This BA is intended as a standalone substitute for a previous "Biological Report" from 2018 prepared by Down River Consulting (DRC) that was deemed insufficient by California Department of Fish & Wildlife (CDFW) in a memorandum dated October 3, 2019, as well as by SHN Consulting Engineers (SHN) working as planning consultants for the County of Trinity in a memorandum dated July 2, 2019. Despite this, in order to increase the data available for us to draw conclusions, we combined our data with data collected in the previous Biological Report by DRC including protocol-level site visits by three biologists over three different seasons, thus expanding the number of appropriately-timed surveys to the equivalent of 15 person-days over the course of 3 years.

1.2 QUALIFICATIONS

Two biologists from PEC examined the site over the course of two days and one night in 2019. Additionally, three biologists from DRC examined the site over the course of three days in 2018. Details of the field methodology is provided separately in §1.4, below. Resumes for all PEC project staff are available upon request.

Dr. Christopher DiVittorio is the President of PEC, a specialty consulting company with 4 employees that has successfully completed approximately 300 low-impact farm permitting projects across Northern California since its founding in 2015. Prior to founding PEC in 2016, Dr. DiVittorio worked for LSA Associates Inc. between 2006 and 2016 assisting with dozens of complex projects including the Geysers Geothermal Recharge Project, the Golden Eagle Refinery Marine Oil Terminal Seismic Retrofit Project, and the Solano County Habitat Conservation Plan (HCP).

Dr. DiVittorio received his BA and PhD from U.C. Berkeley working with Professor Bruce Baldwin, executive editor of the Jepson Manual of California Plants, and also performed field research at the

Angelo Coast Range Reserve in Mendocino County for many years with Professor Mary Power and Dr. Sarah Kupferberg, leading experts on Steelhead salmon and Foothill yellow-legged frog conservation. Dr. DiVittorio has additionally performed research and taught field biology courses in Mexico, the Mojave Desert, Alaska, Panama, French Polynesia, and the Amazon Basin.

Ms. Melissa Ferriter is PEC Inc.'s Geographic Information Systems (GIS) specialist and wildlife biologist and has a BA from U.C. Berkeley and has worked as a GIS analyst for NASA and ESRI. In addition to her GIS work, Ms. Ferriter has conducted field research on a variety of wildlife including steelhead, spiders, and birds.

The qualifications of the staff from DRC that conducted the Biological Report in 2107 are unknown, however PEC has no reason to believe that the field surveys were deficient. Photos included in the 2018 DRC report document the existence of several SSS onsite thus we have no reason to doubt the thoroughness of the site visits.

1.3 PROJECT BACKGROUND

The proposed project involves permitting of commercial *Cannabis* cultivation by Farms of Trinity Forest (Applicant) on the parcel located at 3800 Barker Creek Road in unincorporated Trinity County, designated Assessor's Parcel Number (APN) 015-030-01-00, north of the town of Hayfork (Figure 1). A previous undated "Biological Report" was performed for the site based on site visits in 2018, however this report was deemed incomplete by CDFW staff via Incomplete Notification of Lake or Streambed Alteration (LSA) dated October 3, 2019. The Incomplete Notification specifically requested nesting bird surveys for American perigrine falcon (*Falco peregrinus anatum*; APF) that were documented from a rock outcrop on the project parcel by US Fish & Wildlife (USFWS) staff several times in the past 10 years. In addition, surveys for Foothill yellow-legged frog (*Rana boylii*; FYLF) and Trinity shoulderband (*Helminthoglypta talmadgei*; TS) were requested if dewatering of Barker Creek is required in the course of replacing bridge abutments. It is the opinion of PEC that dewatering is not required based on our work on other bridge replacement projects, however we defer to the project engineer to determine whether dewatering is required and performed the requested surveys anyway.

In addition, written review of the project permit application by SHN working on behalf of the County of Trinity, in a memorandum dated July 2, 2019, identified additional deficiencies in the submitted "Biological Report", including lack of specific documentation of site characteristics in the areas of actual cultivation, and clarification on whether sensitive species are anticipated to be impacted by cultivation activities. SHN additionally required there to be aquatic avoidance and minimization measures (AMM) prepared due to the presence of special-status species on the project parcel.

1.3 LOCATION

1.3.1 Site Overview

The project site is located at 3800 Barker Creek Road in unincorporated Trinity County, 5.5 miles northeast of downtown Hayfork, 11.5 miles southwest of Weaverville, and 38 miles west of Redding (Figure 1). The parcel encompasses the entirety of Section 16, located in Township 32 North, Range 11 West, on the USGS Hayfork Summit & Junction City 7.5 minute quads (Figure 2). The property is designated Assessor's Parcel Number 015-030-01-00, is deeded 640 acres in size, is zoned "Unclassified", and is under the jurisdiction of the North Coast (Region 1) Regional Water Quality Control Board (RWQCB), and the Northern Region (District 1) of the California Department of Fish & Wildlife (CDFW). The parcel is accessed by driving north for 3.6 miles on Barker Creek Road from the turnoff on California Highway 3 on graded gravel road and is the terminus of Barker Creek Road. Barker Creek Road is also shown on some maps as Forest Service Road 32N03, and as County Road 331. The parcel is a private inholding surrounded on all sides by Shasta-Trinity National Forest (STNF) land (Figure 2). The entire parcel has been selectively logged at various times over the past 30 years, and has also experienced medium severity forest fire particularly in the southwest corner of the parcel in the Rail Fire in 2015.

1.3.2 Federal Critical Habitat

Federal Critical Habitat (FCH) is designated by the U.S. Fish & Wildlife Service (USFWS) and provides special protections for habitats considered important for long-term population persistence of endangered or threatened species. There is no FCH onsite for any animal or plant species. The parcel is, however, entirely surrounded by designated FCH for Northern spotted owl (*Strix occidentalis*; NSO) in forest habitat in the Shasta-Trinity National Forest (STNF). This FCH is part of a larger discontinuous network of FCH for NSO in Trinity County (Appendix D). There is no FCH for any other species within 5 miles of the project parcel.

1.3.3 CNDDB Occurrences

Special-status species (SSS) are those species that receive special protections under either local, State, or Federal law and include both State and Federally Endangered and Threatened species of animals and plants, as well as candidate listing species and other species or populations of special concern for which additional information is required. The California Natural Diversity Database (CNDDB) provides information on most known SSS occurrences in the State of California and a list of considered animals is published annually (CDFW 2019). In addition, all plant species considered by the California Native Plant Society on lists 1 through 4 of the Inventory of Rare Plants (CNPS 2020) are considered special-status and considered in this BA (CNPS 2020). A description of the habitat requirements and likelihood of occurrence of potential SSS on the project parcel based the CNDDB database, published scientific literature, and the expertise of PEC staff, is provided in Appendix A, with all SSS known from a 10 mile radius around the project parcel highlighted. Additionally, map-based representation of all of the SSS within a 5 mile radius around the project site is provided in Appendix C.

1.3.3.1 Special-Status Animals

There are 9 known occurrences of special-status animal species from within 10 miles of the project parcel. Of these, two are known to exist on the project parcel, one snail and one bird. The snail is the Trinity shoulderband (*Helminthoglypta talmadgei*; TS), and is not listed as Threatened or Endangered by the State or Federal government however is considered on the list of Special Status Species by the State of California (CDFW 2019). TS was observed in 1978 in the upper reach of Barker Creek and is shown in the CNDDB database (Appendix C). This species was again observed in 2018 in the riparian zone of Barker Creek near the bridge (Figure 3). This occurrence is not currently recorded in the CNDDB database but is described in the undated "Biological Report" from Down River Consulting (Figure 4).

The second species that is known to exist onsite is American peregrine falcon (*Falco peregrinus anatum*; APF). A breeding pair is known to nest on the rock outcrop shown in Figure 4, as reported by U.S. Fish & Wildlife Service (USFWS) staff as recently as 2016. APF was delisted as Threatened by the Federal government in response to species recovery, however it is still considered a Special Status Species by the State of California (CDFW 2019) and recovery is actively monitored by USFWS. The location of the nest or "scratch site" is shown in Figure 20. While no individuals were observed at the time of the survey, there was evidence of use of the site in the form of moved rocks and whitewash that were determined using binoculars, thus it can be presumed that the site is still used by APF. More discussion about potential impacts and avoidance measures for this species are provided in §3.0 and Appendix H.

The next nearest known occurrence of special-status animal species is Fisher (*Pekania pennanti*) observed in 1985 located immediately adjacent to the parcel to the north and west in STNF land (Appendix C). The next nearest known occurrence of special-status animal species is Northern spotted owl (*Strix occidentalis*; NSO), with approximately 12 occurrences known from within 0.1 miles of the project site. Most of these occurrences are associated with Activity Center TRI0262 offsite approximately 0.15 miles to the northeast. The next nearest NSO Activity Centers include TRI0402 located 0.6 miles to the northwest, and TRI0261 located 0.9 miles to the east in the Little Barker Creek watershed.

The next nearest known occurrences of special-status animal species are Osprey (*Pandion haliaetus*) and Hooded lancetooth (*Ancotrema voyanum*) located 1.5 miles southwest of the parcel near Big Creek. The next nearest known occurrence of special-status animal species is Trinity bristle snail (*Monadenia infumata setosa*) located 2.1 miles northwest of the parcel in Big Creek. The next nearest known occurrence of special-status animal species is Humboldt marten (*Martes caurina humboldtensis*) located 3.3 miles north of the parcel near Hayfork Divide.

1.3.3.2 Special-Status Plants

There are no special-status plant species known from the project parcel (Appendix C). The nearest occurrence of special-status plant species is an indistinct locality of Heckner's lewisia (*Lewisia cotyledon* var. *heckneri*) observed somewhere in the USGS Hayfork Summit 7.5 minute quad (Appendix C), that includes the project parcel. The next nearest known occurrence of special-status plant species is Canyon Creek stonecrop (*Sedum obtusatum* ssp. *paradisum*) located approximately 3.9 miles west of the project parcel near Hayfork Bally. The next nearest known occurrence of

special-status plant species is Shasta chaenactis (*Chaenactis suffrutescens*) located approximately 3.9 miles southeast of the project parcel near Hayfork Summit.

The next nearest known occurrence of special-status plant species is Tracy's Eriastrum (*Eriastrum tracyi*) located approximately 4.4 miles south of the project parcel near Big Creek. The next nearest known occurrence of special-status plant species is Woolly Meadowfoam (*Limnanthes floccosa* ssp. *floccosa*) located 4.7 miles southwest of the project parcel near Hayfork. The next nearest known occurrence of special-status plant species is Buxbaumia moss (*Buxbaumia viridis*) located approximately 6.9 miles northwest of the project parcel near CA-299. The next nearest known occurrence of special-status plant species is Nile's harmonia (*Harmonia doris-nilesiae*) located approximately 7.3 miles west of the project parcel near Hayfork Creek. The next nearest known occurrence of special-status plant species is Oregon fireweed (*Epilobium oreganum*) located approximately 7.7 miles southeast of the project parcel near Little Creek. The next nearest known occurrences of special-status plant species are Elongate copper moss (*Mielichhoferia elongata*) and Flagella-like atractylocarpus (*Campylopodiella stenocarpa*) located approximately 9 miles north of the project parcel near CA-299.

1.3.4 Landforms & Water Features

The parcel comprises 640 acres of steeply sloped coniferous forest that comprises the headwaters of Barker Creek. The maximum elevation of the parcel is 4,466 feet above sea level at the top of a ridge along the center of the eastern parcel boundary, and the minimum elevation is 3,099 feet above sea level at the southwest corner of the parcel where Barker Creek exits the property (Figure 2). The entire property is steeply sloped, with slopes between 20% and 60%, as measured by Suunto PM5 handheld clinometer. The entire site drains to towards Barker Creek, a Class I perennial tributary of Hayfork Creek (Figure 3). A series of Class II and III watercourses feed into Barker Creek. The only drainage that does not drain into Barker Creek is a portion of a Class II tributary of Little Barker Creek in the southeast corner of the site. After exiting the property Barker Creek continues south for 4.0 miles before the confluence with Hayfork Creek, which flows west for another 27 miles before the confluence with the South Fork Trinity River in Hyampom. From the confluence, the South Fork Trinity River flows north for 29 miles before the confluence with the Main Stem Trinity River near Salyer. From the confluence, the Trinity River flows north for approximately 80 miles before the confluence with the Klamath River, which flows north and west for another 40 miles before emptying into the Pacific Ocean near Requa.

1.3.5 Existing Structures

There are five proposed cultivation areas that are in existing clearings in the locations shown in Figure 3 & 4. Photographs of each of the cultivation areas are provided in Figures 12-16. Permanent structures are limited to several outbuildings/sheds, and hoop houses for cultivation (e.g. Figure 14). There are few other improvements onsite except for a groundwater well (Figure 17) and several HDPE water storage tanks associated with the cultivation pads (Figures 18 & 19). Roadways are packed earth and gravel and generally in good condition (Figure 5). The bridge that is the subject of a replacement project is currently stable and no active erosion was visible around the footings (Figures 9-11).

1.3.6 Regional Land Uses

Land uses in the vicinity of the project parcel are primarily Shasta-Trinity National Forest (STNF) land managed for mixed uses including timber harvest, private timber harvest parcels, rural residential parcels, irrigated pastureland in the valley bottoms, and scattered *Cannabis* cultivation farms on valley bottoms and south facing slopes. Farther to the south and east the terrain becomes steep and densely forested and is primarily STNF land. To the south is the Barker Creek valley that contains numerous *Cannabis* farms and rural residences. To the north, west, and east the terrain is steep and densely forested and is primarily STNF land (Figure 1).

1.4 METHODS

1.4.1 Records Search & Literature Review

Based on a review of the literature and relevant databases, we compiled a list of special-status plant and animal species that are known to occur within Trinity County, or that occupy habitats that are known to be present on or near the project site (Appendix A). Sources of information referenced include the California Department of Fish & Wildlife (CDFW) *California Natural Diversity Database* (CNDDB 2020), U.S. Fish and Wildlife Service Environmental Conservation Online System (USFWS 2020), the California Native Plants Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2020), the CDFW *Habitat Relationships System* (HRS), and the knowledge of PEC staff familiar with the species and habitats of Trinity County.

Additional information on sensitive habitats including wetlands was obtained from the USFWS National Wetlands Inventory (NWI 2020), and the County of Trinity Geographic Information System Portal (Trinity Co. 2020). Plant species included here are State or Federally Endangered or Threatened species, and/or considered rare by CDFW, and/or are recognized as special-status species (SSS) by CNPS and/or CDFW. Animal species included here are designated as State or Federally Endangered or Threatened, and/or CDFW species of special concern (SSC), and/or CDFW fully protected species (FPS). In addition, nests of most native bird species, regardless of their regulatory status, are protected from take or harassment under the U.S. Migratory Bird Treaty Act (MBTA) and relevant sections of the California Fish & Game Code.

1.4.2 Focal Species

Site visits were performed by DRC on May 5, June 12, and November 2, 2018 using a total of three biologists. The 2018 report stated that a total of 43 hours were spent in the field. No other information on the survey protocol or times of day were provided in the DRC report, however based on the photographs and results presented, it is assumed that they focused on the bridge and streamchannel of Barker Creek near the bridge, as well as the 5 upland potential cultivation areas. The sampling protocol was not described, thus it is assumed that a random-walk type of survey was performed. Despite the lack of information on survey protocols, a number of special-status species were found onsite including Trinity shoulderband (*Helminthoglypta talmadgei*; TS) and Lemon-colored fawn lily (*Erythronium citrinum* var. *citrinum*; LFL).

In response to concerns by CDFW and County of Trinity, follow-up surveys were performed by PEC during the day on October 28 and 29, 2019. Night surveys were also performed on October 28, 2019. The biologists performing the survey for PEC were Dr. Christopher DiVittorio who specializes in botany and geomorphology, and Mrs. Melissa Ferriter who specializes in wildlife biology. Qualifications for PEC biologists are provided in §1.2, above, and resumes are available upon request.

At the October 2019 site visit, based on previous fieldwork and the CNDDB database we assumed the presence of six special-status species onsite: American peregrine falcon (*Falco peregrinus anatum*; APF), Trinity shoulderband (*Helminthoglypta talmadgei*; TS), and Lemon-colored fawn lily (*Erythronium citrinum* var. *citrinum*; LFL). Additionally, California giant salamander (*Dicamptodon ensatus*; CGS) was observed near the bridge in Barker Creek during 2018 surveys, and Foothill yellow-legged frog (*Rana boylii*; FYLF) and Pacific tailed frog (*Ascaphus truei*) are known from downstream on Barker Creek. Finally, Northern spotted owl (*Strix occidentalis*; NSO) are known from within 0.1 miles of the parcel, and the entire parcel is surrounded by Critical Habitat for NSO (Appendix D).

1.4.3 Field Survey Protocols

The follow-up surveys were performed in October, which is not nesting season for birds and also not mating season for amphibians. However, this is not considered a problem because we already assumed presence of the aforementioned special-status species; the October sites were primarily to determine impacts, and secondarily to perform protocol-level surveys for the aforementioned special-status species. We first focused on determination of whether project activities would result in any impacts to these or any of the other species listed in Appendix A. Project activities in this case refer to replacement of the bridge abutments and operation of the five *Cannabis* cultivation sites, thus we focused our surveys on these locations. Although we focused our impact analysis on these activity locations, we additionally surveyed the entire accessible portion of the parcel on foot recording every plant and animal species encountered (Appendix B).

The weather during the October surveys was typical for this time of year, clear and cold during the day, with temperature between 50-65 degF, relative humpty between 20-30%, and negligible wind speed. Night-time temperature dropped to below 35degF and relative humidity increased to 40-60%. All measurements were made using Kestrel 3000 handheld weather station. Approximately 2" of rain fell in the preceding to months which is somewhat higher than average (NWS 2019), thus all of the vegetation was green and most perennial and annual plant species were flowering. Daytime surveys began at 6:30 AM and ended at approximately 2:00 PM. Night-time surveys began at approximately 11:00 PM and ended at approximately 3:00 AM.

During each site visit, we started with the streamchannel approximately 100 meters upstream and downstream from the bridge (Figures 9-11), eventually making our way up Barker Creek Road and surveying each cultivation site along the way until reaching the fire break at the top of the ridge (Figure 3). Halfway up the road is the rock outcrop site where the APF was observed.

For the streamchannel survey we looked for evidence of TS, PGS, FYLF, and PTF. we walked parallel lines up and downstream 3 feet apart, slowly overturning rocks and flipping over logs and

leaf litter, until we had surveyed 100 meters up and downstream from the bridge, and covered the entire cross section of the streamchannel. This was repeated both days and once in the night with low-power headlamps to look for eyeshine from nocturnal amphibians. Aquatic habitats were also observed for a minimum of 15 minutes without movement in order to observe animals that may hide when approached.

For the APF survey we parked at a turnout and used high-powered binoculars to examine the rock outcrop from a distance including the nest site ("scratch" site) identified in the previous biological report. After verifying that the nest site was not currently occupied, we walked out to the rock outcrop and examined it for signs of animal use.

For the cultivation sites and LFL survey, we walked the entire perimeter and interior of each cultivation site, as well as 500 feet away from each disturbed area, using parallel transects walked 5 feet apart. Although October is not flowering season, it is often possible to identify species based on vegetative parts, particularly if they are perennial plants with distinctive vegetative structures like LFL. Again, it is not critical that we were there during flowering season, because we already presume existence of LFL at this site based on the 2018 report by DRC. These surveys are again primarily to determine impacts.

Plant voucher specimens were taken of any species that were not identifiable in the field, and that were not likely to be special-status. The vast majority of species were identifiable at the time of the survey, although some had to be identified based on vegetative parts. Photographs and voucher specimens were taken of any plants that were identified solely based on vegetative characters. Botanical specimens were taken back to the laboratory for identification if identification was not possible in the field. If species were not flowering at the time of the survey and morphological characteristics indicated that the species may be special-status, notes were made for a follow-up visit. Birds and nests were identified by call and with binoculars. Vocalizations, scat, tracks, feathers, burrows, nests, and molts were used for identification of animals present onsite.

2.0 RESULTS

2.1 REGIONAL ECOLOGICAL SETTING

Using field surveys, a review of published literature, and the knowledge of PEC staff, all of the natural communities present on and around the project site were assessed. Regionally, the dominant vegetation type is mixed pine and fir woodland, with higher proportions of hardwoods near watercourses, chaparral on ridge tops and rocky outcrops, and well-developed riparian corridors at the bottom of steeply incised canyons (Figure 2). In all directions in the immediate vicinity of the project parcel is closed canopy mixed coniferous forest (Figure 1).

2.2 NATURAL COMMUNITIES WITHIN THE PROJECT SITE

The site consists almost entirely of mixed pine and fir secondary forest (Figure 6), with several chaparral-covered rock outcrops (Figure 7), and hardwood riparian forest species along Barker Creek (Figure 8). There is one Class I stream, Barker Creek, that flows west then south, that is fed by several Class II and Class III tributaries, and no potential wetlands or vernal pools. The specific community descriptions below are organized based on the zones that were surveyed, and the floristic results presented in Appendix B. There is much overlap in the overall floristic composition however the descriptions below indicate the habitat in which the majority of individuals of each species are found. Overall, the parcel consists of approximately 80% mixed conifer forest, 10% chaparral and rock outcrop, and 10% riparian forest (Figure 3).

2.2.1 Mixed Oak & Conifer Woodland

The majority of the western portion of the parcel including around the cultivation areas is secondary mixed conifer forest with chaparral understory (Figure 6). Tree species observed in this habitat include Douglas fir (*Pseudotsuga menziesii*) to 36" diameter-at-breast height (DBH), Ponderosa pine (*Pinus ponderosa*) to 18" DBH, Sugar pine (*Pinus lambertiana*) to 16" DBH, Oregon oak (*Quercus garryana*) to 16" DBH, California bay (*Umbellularia californica*) to 16" DBH, Incense cedar (*Calocedrus decurrens*) to 12" DBH, Gray pine (*Pinus sabiniana*) to 12" DBH, White fir (*Abies concolor*) to 10" DBH, and tanoak (*Notholithocarpus densiflorus*) to 8" DBH.

Other herbaceous and understory species include blue fescue (*Festuca idahoensis*), tufted hairgrass (*Deschampsia cespitosa*), blue wildrye (*Elymus glaucus*), squirreltail grass (*Elymus elymoides*), wild oatgrass (*Avena barbata*), soft chess (*Bromus hordeaceous*), ripgut brome (*Bromus diandrus*), dogstail grass (*Cynosurus echinatus*), cheatgrass (*Bromus tectorum*), medusahead (*Elymus caput-medusae*), mountain dandelion (*Agoseris heterophylla*), lowland cudweed (*Gnaphalium palustre*), hairy cat's ear (*Hypochaeris radicata*), rayless arnica (*Arnica discoidea*), bull thistle (*Cirsium*

vulgare), prickly lettuce (*Lactuca serriola*), goatsbeard (*Tragopogon dubius*), yellow star thistle (*Centaurea solstitialis*), sweet cicely (*Osmorhiza berteroi*), bitter dogbane (*Apocynum androsaemifolium*), broad-leaved lotus (*Hosackia crassifolia*), hairy star tulip (*Calochortus tolmiei*), woolly mullein (*Verbascum thapsus*), field parsley (*Torilis arvensis*), crane's bill filaree (*Erodium botrys*), little prince's pine (*Chimaphila menziesii*), wild radish (*Raphanus sativa*), houndstongue (*Cynoglossum occidentale*), bird's foot trefoil (*Acmispon americanus*), black mustard (*Brassica nigra*), English plantain (*Plantago lanceolata*), common geranium (*Geranium molle*), spring vetch (*Vicia sativa*), rose clover (*Trifolium hirtum*), Klamathweed (*Hypericum perfoliata*), and bracken fern (*Pteridium aquilinum*).

There was also an occurrence in the Biological Report of Lemon-colored fawn lily (*Erythronium citrinum* var. *citrinum*; CNPS List 4.3), located near the central cultivation area (Figure 4). Although we were unable to relocate the individual observed in the original study, we have no reason to believe that the bulbs from which they reproduce are not still present underground.

2.2.2 Rocky Outcrop & Chaparral

South-facing slopes and rocky outcrops contained higher proportions of hardwood and chaparral species and higher proportions of native species. Due to the serpentine derived nature of the parent material in this habitat, we were also looking for serpentine-adapted species from Appendix A, many of which are specialists in rock outcrops. Despite this, we did not find any special status species on the rock outcrop habitat, although the species composition was unique and did contain many herbaceous and chaparral species not found in other parts of the property. Species in these habitats include Black oak (*Quercus kelloggii*) to 24" DBH, Madroño (*Arbutus menziesii*) to 16" DBH, Interior live oak (*Quercus wislizeni*) to 10" DBH, poison oak (*Toxicodendron diversilobium*), leather oak (*Quercus durata*), common manzanita (*Arctostaphylos manzanita*), hoary manzanita (*Arctostaphylos canescens*), greenleaf manzanita (*Arctostaphylos patula*), mountain mahogany (*Cercocarpus betuloides*), deer brush (*Ceanothus integerrimus*), buck brush (*Ceanothus cuneatus*), chaparral whitethorn (*Ceanothus leucodermis*), beaked hazelnut (*Corylus cornuta*), blue elderberry (*Sambucus nigra*), common yarrow (*Achillea millefolium*), nineleaf biscuitroot (*Lomatium triternatum*), narrow-leaved mule ears (*Wyethia angustifolia*), rock phacelia (*Phacelia egena*), field peppergrass (*Lepidium campestre*), variable-leaved collomia (*Collomia heterophylla*), silver hairgrass (*Aira caryophyllea*), squirreltail grass (*Elymus elymoides*), and blue wildrye (*Elymus glaucus*).

2.2.3 Barker Creek Riparian Corridor

Trees and woody shrubs found in the riparian corridor of Barker Creek include Canyon live oak (*Quercus chrysolepis*) to 24" DBH, White alder (*Alnus rhombifolia*) to 14" DBH, Bigleaf maple (*Acer macrophyllum*) to 8" DBH, Oregon ash (*Fraxinus latifolia*) to 8" DBH, American yew (*Taxus brevifolia*) to 6" DBH, American dogwood (*Cornus sericea*) to 6" DBH, dusky willow (*Salix melanopsis*), trailing gooseberry (*Ribes binominatum*), snowberry (*Symphoricarpos albus*), Himalayan blackberry (*Rubus armeniacus*), thimbleberry (*Rubus parviflorus*), wood rose (*Rosa gymnocarpa*), beaked hazelnut (*Corylus cornuta*), elk clover (*Aralia californica*), white-flowered hawkweed (*Hieracium albiflorum*), creeping wild ginger (*Asarum caudatum*), leopard lily (*Lilium*

pardalinum), Pacific trillium (*Trillium ovatum*), Pacific star flower (*Lysimachia latifolia*), umbrella plant (*Darmera peltata*), angle-leaf miterwort (*Ozomelis diversifolia*), pig-a-back (*Tolmiea menziesii*), brittle fern (*Cystopteris fragilis*), creek clematis (*Clematis ligusticifolia*), narrow-leaved sword fern (*Polystichum imbricans*), common bog rush (*Juncus effusus*), scouring rush (*Equisetum hyemale*), poison hemlock (*Conium maculatum*), spearmint (*Mentha spicata*), pennyroyal (*Mentha pulegium*), mugwort (*Artemesia douglasiana*), wild carrot (*Daucus carota*), Bolander's sedge (*Carex bolanderi*), orchardgrass (*Dactylus glomerata*), rabbitsfoot grass (*Polypogon monspeliensis*), common cow parsnip (*Heracleum maximum*), curly dock (*Rumex crispus*), Hyssop loosestrife (*Lythrum hyssopifolia*), bracken fern (*Pteridium aquilinum*), miner's lettuce (*Claytonia perfoliata*), wild strawberry (*Fragaria vesca*), Western buttercup (*Ranunculus occidentalis*), and common bedstraw (*Galium aparine*).

2.3 WILDLIFE

Numerous species were observed both directly and indirectly, and we combined species observed in both 2018 and 2019. Bird species observed onsite include red-breasted nuthatch (*Sitta canadensis*), acorn woodpecker (*Melanerpes formicivorus*), turkey vulture (*Cathartes aura*), raven (*Corvus corax*), Stellar's jay (*Cyanocitta stelleri*), Western tanager (*Piranga ludoviciana*), and hermit thrush (*Catharus guttatus*). Mammal species observed directly and indirectly during the October 2019 site visit included Western grey squirrel (*Sciurus griseus*), Siskiyou chipmunk (*Neotamias siskiyou*), scat and prints of mule deer (*Odocoileus hemionus*), scat of Western brush rabbit (*Sylvilagus bachmani*), scat of California black bear (*Ursus americanus californiensis*). Other species observed either during the October 2019 survey or earlier surveys include aquatic garter snake (*Thamnophis atratus*), and scaly chaparral (*Trilobopsis loricata sonomaensis*). Sign of American peregrine falcon (*Falco peregrinus anatum*) was reported on the rock outcrop site near the "scratch" site, but no actual animals were observed during site visits in 2018 or 2019. Although APF was not observed, it is common for these animals to return to the same nesting spot for many years, thus we presume that the site is still active.

Additional animal species including several species of special concern were found during earlier biological surveys as reported in the previous Biological Report. These include California giant salamander (*Dicamptodon ensatus*; CGS) and Trinity shoulderband (*Helminthoglypta talmadgei*) that were found in and around Barker Creek. Focused surveys during the day and night were also performed over sequential days in the streamchannel during 2019 in order to locate any individuals of these species, however none were observed. This does not, however, preclude their existence in this reach of stream and it is presumed based on their existence at an earlier time point that they still exist in this reach of stream.

2.4 WETLANDS & WATERCOURSES

2.4.1 Watercourses

Streams and watercourses onsite were classified according to the three-tier method used by the California Department of Forestry & Fire Protection (CALFIRE 2017) and included as a reference in

Appendix G. All onsite watercourses are shown in Figure 3. There is one Class I watercourse onsite, a perennial reach of Barker Creek (Figure 8), and numerous Class II and III tributaries. There are also three locations along the access road that were identified as requiring culverts that are the subject of the LSA that was submitted and that received the Notice of Incomplete Application dated October 3, 2019. None of the locations appear to contain wetland vegetation although we agree that they are likely jurisdictional and do likely require culverts, although identification of potential LSA projects was not the primary focus of the October 2019 site visits.

2.4.2 Potential Wetlands

Potential wetlands onsite were assessed based on the likelihood to satisfy the three-tier wetland delineation criteria used by the Army Corps of Engineers *Wetland Delineation Manual* (ACOE 1987). According to these criteria, there are no areas that appear to qualify as jurisdictional wetlands, although some of the habitat along the bank of Barker Creek may qualify as fringing wetland. Due to the location of the parcel at the top of a ridge, and the well and excessively drained nature of the soils onsite, there are few opportunities for wetlands to form. None of the three proposed culvert crossings also appear to contain wetland vegetation, however a protocol-level wetland delineation was not performed.

2.5 SOILS & LOCAL GEOMORPHOLOGY

The parent materials on the project parcel are typical of central Trinity County and the Trinity Alps region of the Klamath Mountain Province, with steep canyons cut into heavily uplifted and glaciated granitic bedrock by large west-flowing rivers, with abundant rocky outcrops and shallow soil horizons (USGS 1983).

The north and east portions of the parcel including the Barker Creek corridor and most of the cultivation areas is mapped as well-drained Neuns family loams (#226), 60% to 80% slopes, and (#203), 40% to 60% slopes. Lesser proportions include Huntmount family (10%) and Marpa family (10%) soils. This soil type is classified as not prime farmland, has 0% typical proportion of hydric soils, and has no flood frequency. Parent materials are predominantly residuum weathered from sedimentary and igneous rocks and is not ultramafic.

The southwest corner of the property contains rock outcrops and is mapped as Rock Outcrop-Gozem family complex (#260), 60% to 80% slopes, with lesser proportions of Rubble land (13%) and Toadlake family (12%) soils. This soil type is excessively drained, is not prime farmland, has 0% typical proportion of hydric soils, and has no flood frequency. Parent materials are predominantly residuum weathered from serpentinite and thus is an ultramafic soil type (e.g. serpentine).

3.0 CONCLUSIONS & RECOMMENDATIONS

Protocol-level surveys were performed in 2018 and 2019 for American peregrine falcon (*Falco peregrinus anatum*; APF), Trinity shoulderband (*Helminthoglypta talmadgei*; TS), California giant salamander (*Dicamptodon ensatus*; CGS), Foothill yellow-legged frog (*Rana boylii*; FYLF), Pacific tailed frog (*Ascaphus truei*; PTF), and Lemon-colored fawn lily (*Erythronium citrinum* var. *citrinum*; LFL). In addition, a habitat suitability assessment was performed for Northern spotted owl (*Strix occidentalis*; NSO). Based on the results of these surveys and examination of the CNDDB database, we conclude that all of the aforementioned species likely exist on the project parcel either for breeding, foraging, or migration.

Our assessment of impacts is based on the actual footprints of activities to be performed. For the bridge replacement, the potential species in the vicinity are TS, CGS, FTLF, and PTF. It is the opinion of PEC that the bridge replacement should be able to be conducted without dewatering the stream. Dewatering the stream would be the major source of impacts if dewatering was required as part of the bridge replacement. Thus, we recommend engineering the bridge such that footings can be replaced without dewatering the creek. In addition, for work that takes place out of the active channel but within 100 feet of Barker Creek, we provided a set of Avoidance & Minimization Measures (AMM) provided in Appendix H that should be followed in order to reduce the chance of impacting any of the aforementioned species to negligible levels. These include clearing the site by a biological monitor 24-36 hours prior to ground disturbance.

For the cultivation areas, the species that have the potential to exist in the vicinity are LFL, APF, and NSO. It is the opinion of PEC that continued operation of the existing cultivation areas should not result in any impacts to any species considered in this report as long as the AMMs in Appendix H are followed. These include no tree removal during the breeding bird season (March 1 - August 31), clearance of trees by a qualified biologist 24-36 hours prior to tree removal, and prohibition of aerial wires and upward pointing lights, among others.

Finally, we assessed the impacts due to continued operation of the roadway on migrating amphibians such as FYLF, PGS, and PTF, and on disturbance to nesting APF. Regarding impacts to amphibians, as long as the AMMs in Appendix H are followed, we do not anticipate any impacts to amphibians due to continued use of the roadway. These measures include education of all contractors and workers on identification of amphibians, enforcement of maximum speeds for vehicles, and preconstruction surveys prior to ground disturbance. For APF, we agree with the conclusions of the previous Biological Report that the nesting pair has been using the rock outcrop site for nesting despite continuous use of the road for many decades, thus it is unlikely that continued use of the road would result in abandonment of the rock outcrop site. The rock outcrop site is also approximately 150 feet away from the road and is blocked from view by large live oak trees and dense chaparral, thus as long as the AMMs in Appendix H related to APF are followed we do not anticipate any impact to this species from continued cultivation onsite.

4.0 REGULATORY FRAMEWORK

4.1 FEDERAL ENDANGERED SPECIES ACT

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

4.2 CALIFORNIA ENDANGERED SPECIES ACT

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

4.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT

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

4.4 CLEAN WATER ACT

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

4.5 CALIFORNIA WATER QUALITY REGULATORY PROGRAMS

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

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FIGURE 1: REGIONAL LOCATION

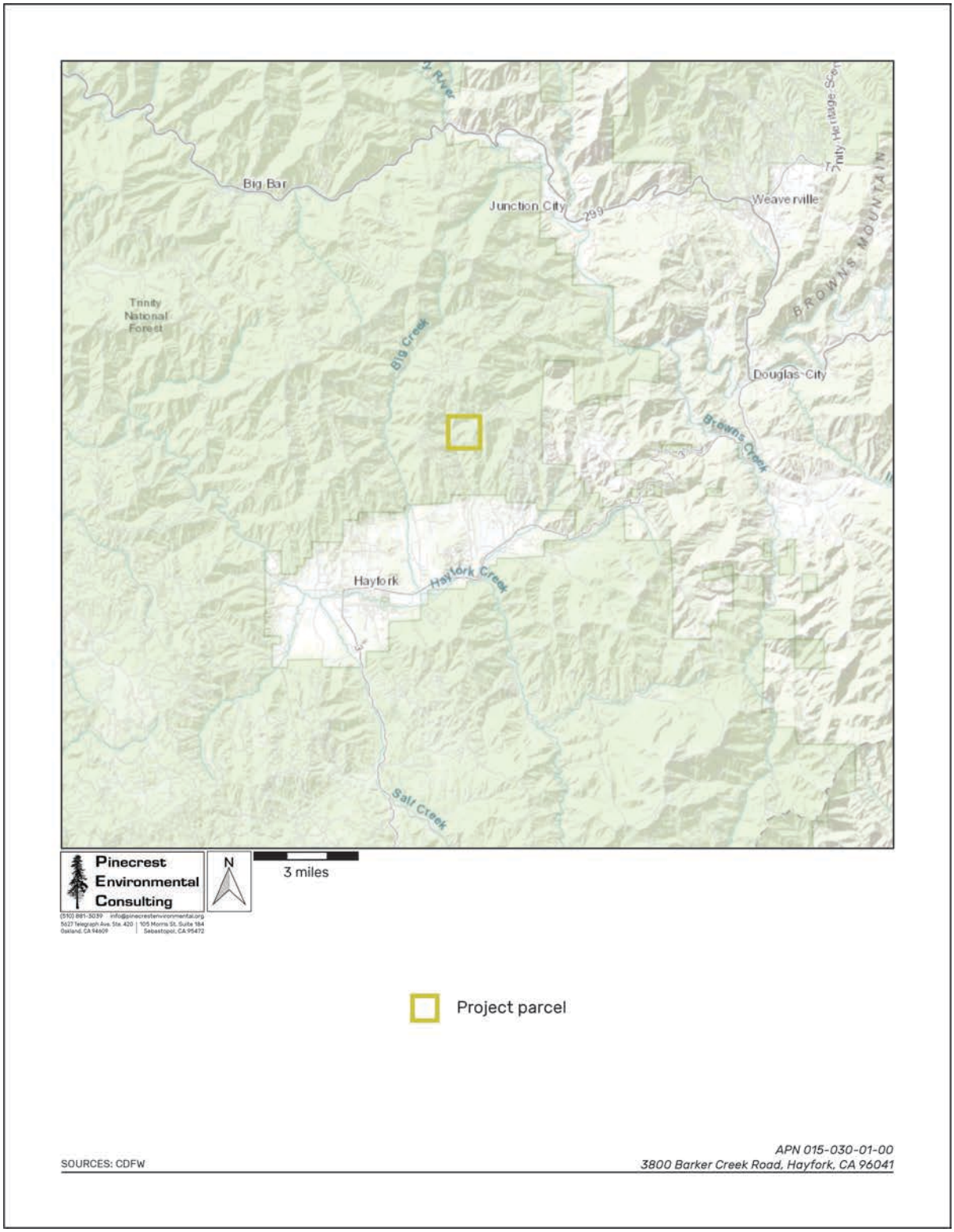
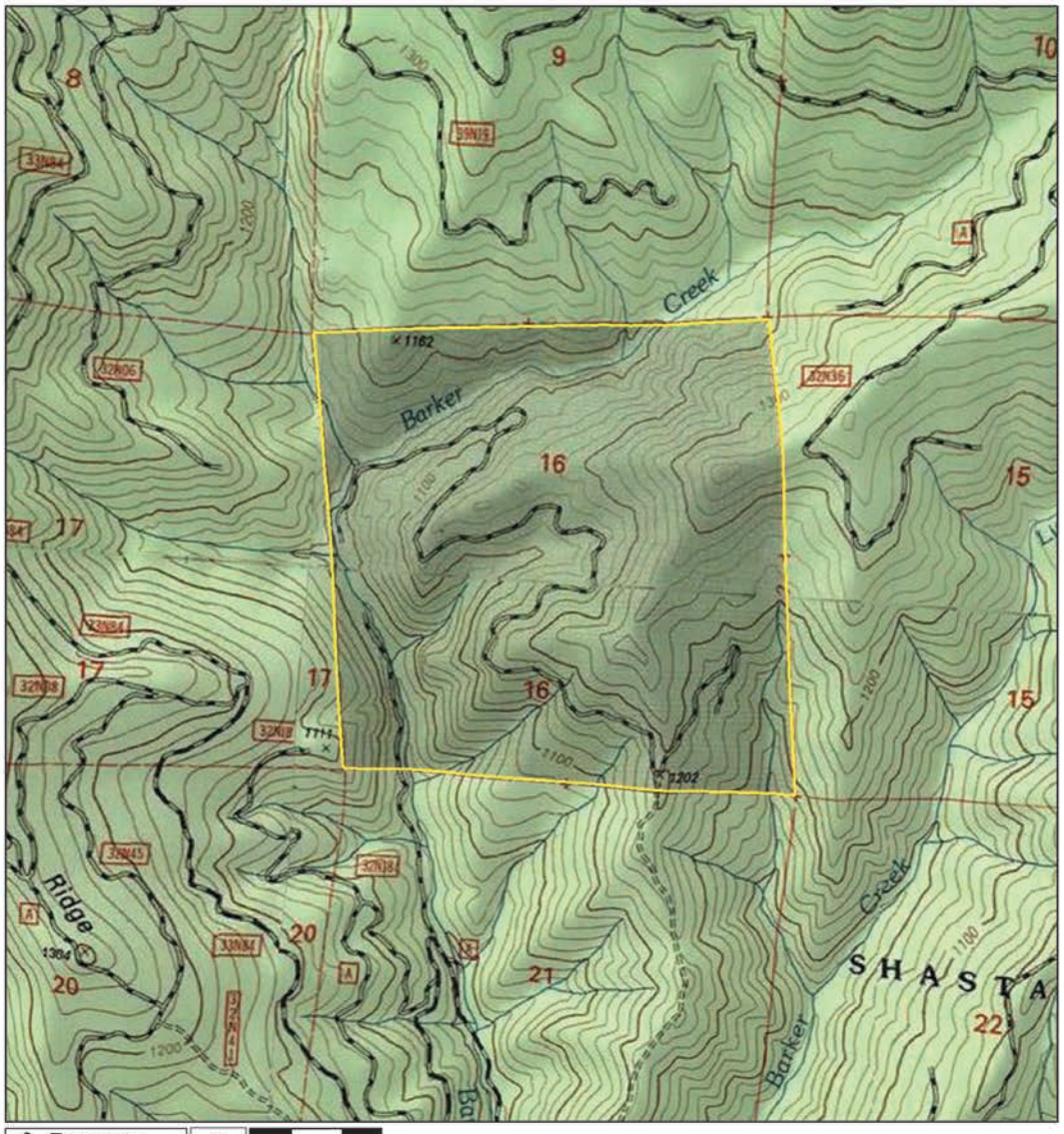


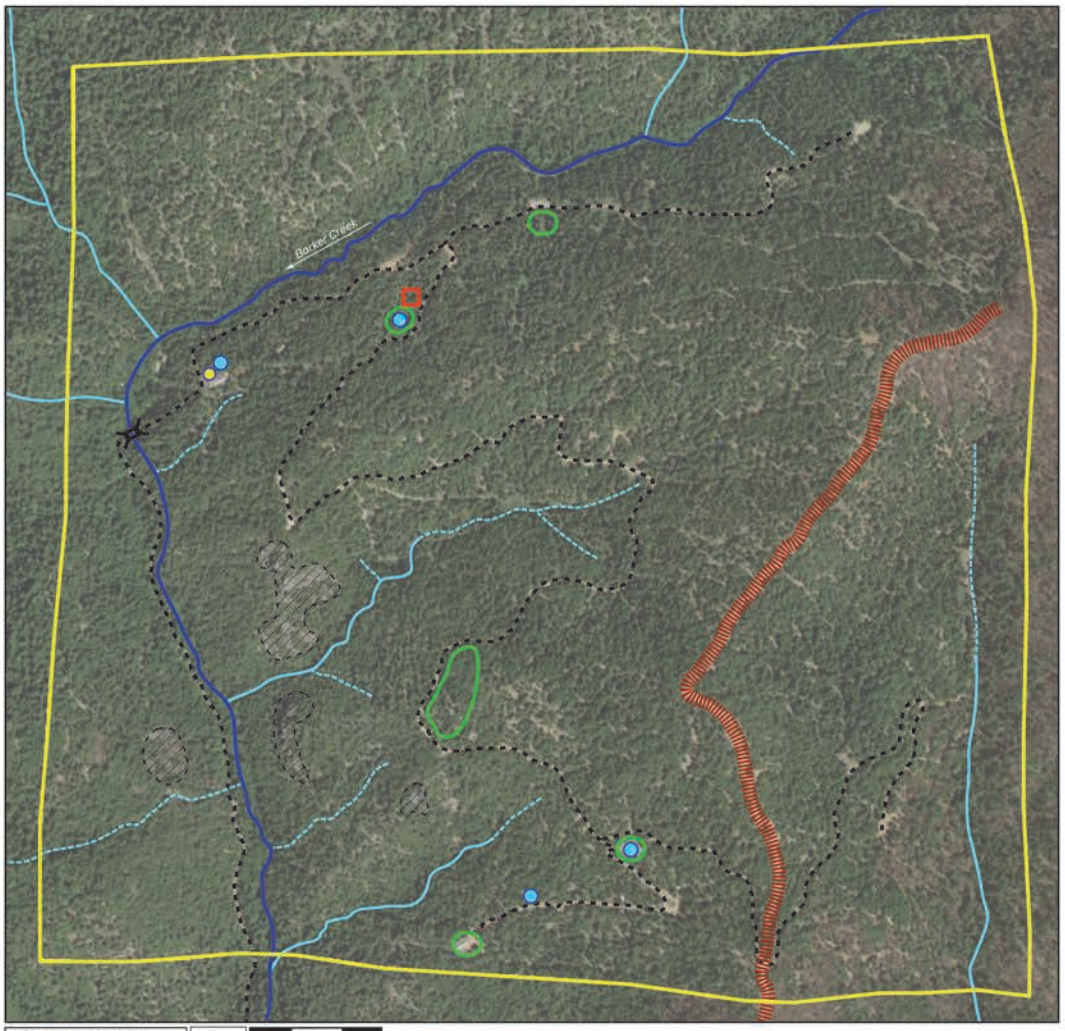
FIGURE 2: 40 FOOT CONTOURS



SOURCES: USGS 7.5-minute Hayfork Summit & Junction City quads

APN 015-030-01-00
3800 Barker Creek Road, Hayfork, CA 96041

FIGURE 3: WATER FEATURES



SOURCES: Google Earth; PEC Inc.

APN 015-030-01-00
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FIGURE 4: SPECIAL-STATUS SPECIES & HABITATS

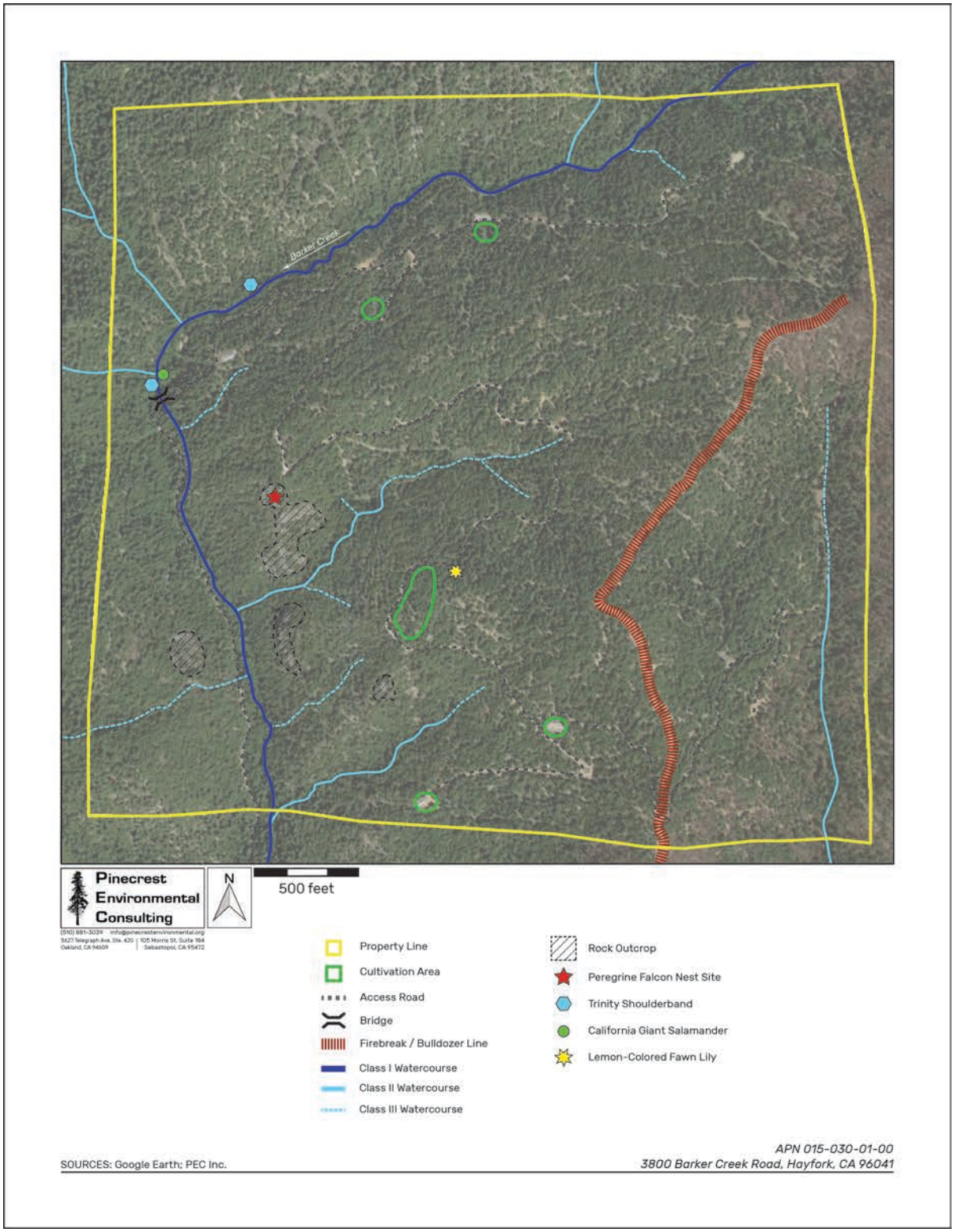

FIGURE 5: PHOTOGRAPH OF ACCESS ROAD

Pinecrest Environmental Consulting

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

SOURCES: PEC Inc.

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FIGURE 6: PHOTOGRAPH OF MIXED CONIFER FOREST

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SOURCES: PEC Inc.

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FIGURE 7: PHOTOGRAPH OF ROCK OUTCROP & CHAPARRAL

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105 Morris St. Suite 184 | Sebastopol, CA 95472

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FIGURE 8: PHOTOGRAPH OF BARKER CREEK RIPARIAN CORRIDOR

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105 Morris St. Suite 184 | Sebastopol, CA 95472

SOURCES: PEC Inc.

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FIGURE 9: PHOTOGRAPH OF BRIDGE - AERIAL VIEW

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105 Morris St. Suite 184 | Sebastopol, CA 95472

SOURCES: PEC Inc.

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FIGURE 10: PHOTOGRAPH OF BRIDGE - UPSTREAM

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 11: PHOTOGRAPH OF BRIDGE - DOWNSTREAM

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SOURCES: PEC Inc.

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FIGURE 12: PHOTOGRAPH OF CULTIVATION AREA 1

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 13: PHOTOGRAPH OF CULTIVATION AREA 2

Pinecrest Environmental Consulting

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Oakland, CA 94609 | Sebastopol, CA 95472

SOURCES: PEC Inc.

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FIGURE 14: PHOTOGRAPH OF CULTIVATION AREA 3

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 15: PHOTOGRAPH OF CULTIVATION AREA 4

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 16: PHOTOGRAPH OF CULTIVATION AREA 5

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 17: PHOTOGRAPH OF GROUNDWATER WELL

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 18: PHOTOGRAPH OF WATER STORAGE A

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 19: PHOTOGRAPH OF WATER STORAGE B

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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FIGURE 20: PHOTOGRAPH OF ROCK OUTCROP NESTING SITE

Pinecrest Environmental Consulting

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SOURCES: PEC Inc.

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APPENDIX A: SPECIAL-STATUS SPECIES CONSIDERED

The following is a list of special-status plant and animal species generated based on knowledge of the species and habitats of Trinity County by PEC staff, from various State and Federal databases, and from the California Natural Diversity Database (CNDDB). CNDDB occurrences within 10 miles of the project site are shown in bold along with a description of the locality.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
PLANTS			
Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)	—/—/1B.1	Vernal pools, riparian woodland	None: No vernal pools exist on the project parcel.
Bald Mountain milk vetch (*Astragalus umbraticus*)	—/—/2B.3	Foothill woodland	Low: Some suitable woodland habitat exists onsite.
Beaked tracyina (*Tracyina rostrata*)	—/—/1B.2	Valley grassland, foothill woodland	Very Low: No suitable grassland habitat exists onsite.
Blushing wild buckwheat (*Eriogonum ursinum* var. *erubescens*)	—/—/1B.2	Serpentine outcrops	Medium: Some rock outcrop habitat exists on the project parcel.
Brandegee's eriastrum (*Eriastrum brandegeeae*)	—/—/1B.1	Chaparral	Low: Some suitable chaparral habitat exists onsite.
Brownish beaked-rush (*Rhynchospora capitellata*)	—/—/2B.2	Freshwater marsh, riparian	Low: Some suitable riparian habitat exists onsite.
California globe mallow (*Iliamna latibracteata*)	—/—/1B.2	Forest	Low: Some suitable forest habitat exists onsite.
Canyon Creek stonecrop (*Sedum obtusatum* ssp. *paradisum*)	**—/—/1B.3**	**Rock outcrops, yellow pine forest**	**Low: Some suitable rock outcrop habitat exists onsite. Nearest occurrence is 3.9 miles W of the parcel near Hayfork Bally.**
Coast fawn lily (*Erythronium revolutum*)	—/—/2B.2	Forest, riparian	Low: Some suitable forest habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Del Norte County Iris (*Iris innominata*)	—/—/4.3	Serpentine	Very Low: No suitable serpentine habitat exists onsite.
Dimorphic snapdragon (*Antirrhinum subcordatum*)	—/—/4.3	Serpentine, chaparral	Low: Some suitable chaparral habitat exists onsite.
Dudley's rush (*Juncus dudleyi*)	—/—/2B.3	Freshwater wetland	Very Low: No suitable wetland habitat exists onsite.
Dwarf soaproot (*Chlorogalum pomeridianum* var. *minus*)	—/—/1B.2	Serpentine chaparral	Very Low: Some chaparral habitat exists onsite.
Elmer's lupine (*Lupinus elmeri*)	—/—/1B.2	Coniferous forest	Low: Some suitable forest habitat exists onsite.
English peak greenbrier (*Smilax jamesii*)	—/—/4.2	Forest, riparian	Very Low: Some suitable forest habitat exists onsite.
Gasquet rose (*Rosa gymnocarpa* var. *serpentina*)	—/—/1B.3	Serpentine outcrops	Low: Some rock outcrop habitat exists onsite.
Giant (Mahogany) fawn lily (*Erythronium revolutum*)	—/—/2B.2	Redwood forest, riparian	None: No suitable redwood forest habitat exists onsite.
Glandular western flax (*Hesperolinon adenophyllum*)	—/—/1B.2	Chaparral	Low: Some suitable chaparral habitat exists onsite.
Grassleaf water plantain (*Alisma gramineum*)	—/—/2B.2	Wetland, riparian	None: No suitable natural pond habitat exists onsite.
Great burnet (*Sanguisorba officinalis*)	—/—/2B.2	Serpentine wetlands	Low: No suitable serpentine wetland habitat exists onsite.
Greene's narrow-leaved daisy (*Erigeron greenei*)	—/—/1B.2	Serpentine grassland	None: No suitable serpentine habitat exists onsite.
Heckner's lewisia (*Lewisia cotyledon* var. *heckneri*)	**—/—/1B.2**	**Rock outcrops, pine forest**	**Medium: Some suitable rocky outcrop habitat exists onsite. Nearest occurrence is somewhere in the USGS Hayfork Summit 7.5 minute quad, that contains the project parcel.**
Howell's montia (*Montia howellii*)	—/—/2B.2	Vernal pools, wetlands	None: No suitable vernal pool habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Humboldt County milk vetch (*Astragalus agnicidus*)	—/—/1B.1	Mixed coniferous forest	Medium: Some suitable forest habitat exists onsite.
Jepson's dodder (*Cuscuta jepsonii*)	—/—/1B.2	Parasitic plant	Very Low: Some suitable host plants known from the project parcel.
Jepson's leptosiphon (*Leptosiphon jepsonii*)	—/—/1B.2	Chaparral, serpentine grassland	Low: Some chaparral habitat exists onsite.
Jepson's milk-vetch (*Astragalus rattanii* var. *jepsonianus*)	—/—/1B.2	Chaparral, serpentine grassland	Low: Some suitable chaparral habitat exists onsite.
Klamath arnica (*Arnica spathulata*)	—/—/4.3	Serpentine	Low: No suitable serpentine habitat exists onsite.
Klamath mountain catchfly (*Silene salmonacea*)	—/—/1B.2	Alpine, yellow-pine forest	Low: Some suitable forest habitat exists onsite.
Konocti manzanita (*Arctostaphylos manzanita* ssp. *elegans*)	—/—/1B.3	Chaparral, foothill woodland	Medium: Some chaparral habitat exists onsite.
Lemon colored fawn lily (*Erythronium citrinum*)	—/—/1B.3	Serpentine, yellow pine forest	Low: Some pine forest habitat exists onsite.
Little-leaved huckleberry (*Vaccinium scoparium*)	—/—/2B.2	Subalpine forest	Very Low: No suitable subalpine forest habitat exists onsite.
Mad River fleabane daisy (*Erigeron maniopotamicus*)	—/—/1B.2	Grasslands, coniferous forest	None: No suitable grassland habitat exists onsite.
Maple leaved checkerbloom (*Sidalcea malachroides*)	—/—/4.2	Coastal prairie, coniferous forest	None: No suitable grassland habitat exists onsite.
Marsh checkerbloom (*Sidalcea oregana* ssp. *hydrophila*)	—/—/1B.2	Freshwater wetland, riparian	Low: Some suitable riparian habitat exists onsite.
Milo Baker's lupine (*Lupinus milo-bakeri*)	—/—/1B.1	Foothill woodland, valley grassland	Very Low: No suitable grassland habitat exists onsite.
Niles' harmonia (*Harmonia doris-nilesiae*)	**—/—/1B.1**	**Serpentine, yellow pine forest**	**Medium: Some suitable pine forest habitat exists onsite. Nearest occurrence is 7.3 miles W of the parcel near Hayfork Creek.**

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Northern Clustered (Bear) sedge (*Carex arcta*)	—/—/2B.2	Wetlands	Very Low: No suitable wetland habitat exists onsite.
Northern meadow sedge (*Carex praticola*)	—/—/2B.2	Coastal prairie, wetlands	Very Low: No suitable wetland habitat exists onsite.
Nuttall's ribbon-leaved pondweed (*Potamogeton epihydrus*)	—/—/2B.2	Freshwater wetlands	None: No suitable natural pond habitat exists onsite.
Oregon fireweed (*Epilobium oreganum*)	**—/—/1B.2**	**Coastal scrub, yellow pine forest**	**Medium: Some suitable forest habitat exists onsite. Nearest occurrence is 7.7 miles SE of the parcel near Little Creek.**
Oregon goldthread (*Coptis laciniata*)	—/—/4.2	Forest, wetland	Low: Some suitable forest habitat exists onsite.
Oregon rockcress (*Arabis oregana*)	—/—/4.3	Chaparral, yellow pine forest	Low: Some suitable forest habitat exists onsite.
Oval-leaved viburnum (*Viburnum ellipticum*)	—/—/2B.3	Chaparral	Very Low: Some chaparral habitat exists onsite.
Pacific gilia (*Gilia capitata* spp. *pacifica*)	—/—/1B.2	Coastal grassland, wet meadow	None: No suitable wet meadow habitat exists onsite.
Pale yellow stonecrop (*Sedum laxum* ssp. *flavidum*)	—/—/4.3	Serpentine outcrops	Medium: Some rock outcrop habitat exists onsite.
Pink-margined monkeyflower (*Erythranthe trinitiensis*)	—/—/1B.3	Forests, grasslands	Low: Some suitable forest habitat exists onsite.
Pinnate-leaved navarretia (*Navarretia linearifolia* ssp. *pinnatisecta*)	—/—/4.3	Chaparral	Low: Some chaparral habitat exists onsite.
Porcupine sedge (*Carex hystericina*)	—/—/2B.1	Wetland, riparian	Very Low: Some riparian habitat exists onsite.
Rattlesnake fern (*Botrypus virginianus*)	—/—/2B.2	Wetlands, woodland	Very Low: Some woodland habitat exists onsite.
Regel's rush (*Juncus regelii*)	—/—/2B.3	Freshwater wetland, riparian	None: No suitable wetland habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Rincon manzanita (*Arctostaphylos canescens* ssp. *sonomensis*)	—/—/4.3	Chaparral	Low: Some chaparral habitat exists onsite.
Robust false lupine (*Thermopsis robusta*)	—/—/1B.2	Coniferous forest	Low: Some coniferous forest habitat exists onsite.
Running Pine (Clubmoss) (*Lycopodium clavatum*)	—/—/4.1	Douglas Fir forest, wetland	Low: Some suitable forest habitat exists onsite.
Seacoast (Bolander's) ragwort (*Packera bolanderi* var. *bolanderi*)	—/—/2B.2	Coastal scrub, wetlands	Very Low: No suitable wetland habitat exists onsite.
Serpentine cryptantha (*Cryptantha dissita*)	—/—/1B.2	Serpentine chaparral	Low: Some chaparral habitat exists onsite.
Serpentine rockcress (*Boechera serpenticola*)	—/—/1B.3	Serpentine outcrops	Low: Some rock outcrop habitat exists onsite.
Shasta chaenactis (*Chaenactis suffrutescens*)	**—/—/1B.3**	**Serpentine outcrops**	**Medium: Some rock outcrop habitat exists onsite. Nearest occurrence is 3.9 miles SE of the parcel near Hayfork Summit.**
Siskiyou checkerbloom (*Sidalcea malviflora* spp. *patula*)	—/—/1B.2	Wetland, grassland	Very Low: No suitable wetland habitat exists onsite.
Siskiyou fireweed (*Epilobium siskiyouense*)	—/—/1B.3	Serpentine outcrops	Low: Some rock outcrop habitat exists onsite.
Siskiyou onion (*Allium siskiyouense*)	—/—/4.3	Serpentine outcrops	Low: Some rock outcrop habitat exists onsite.
Small-flowered calycadenia (*Calycadenia micrantha*)	—/—/1B.2	Foothill grassland	Very Low: No suitable grassland habitat onsite.
Small groundcone (*Kopsiopsis hookeri*)	—/—/2B.3	Forest	Very Low: Some suitable forest habitat exists onsite.
South Fork Mountain lupine (*Lupinus elmeri*)	—/—/1B.2	Coniferous forest	Low: Some suitable forest habitat exists onsite.
Stebbins' harmonia (*Harmonia stebbinsii*)	—/—/1B.2	Serpentine outcrops	Low: Some rock outcrop habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
The Lassics sandwort (*Sabulina decumbens*)	—/—/1B.2	Coniferous forest	Low: Some suitable forest habitat exists onsite.
Thread-leaved beardtongue (*Penstemon filiformis*)	—/—/1B.3	Serpentine clearings	Low: Some rock outcrop habitat exists onsite.
Tracy's beardtongue (*Penstemon tracyi*)	—/—/1B.3	Coniferous forest	Very Low: Some suitable forest habitat exists onsite.
Tracy's eriastrum (*Eriastrum tracyi*)	**—/—/3.2**	**Clearings in yellow pine forest, grasslands**	**Medium: Some suitable pine forest habitat exists onsite. Nearest occurrence is 4.4 miles S of the parcel near Big Creek.**
Tracy's sanicle (*Sanicula tracyi*)	—/—/4.2	Serpentine, yellow pine forest	Low: Some suitable forest habitat exists onsite.
Umpqua green-gentian (*Frasera umpquaensis*)	—/—/2B.2	Pine forest, chaparral	Low: Some suitable forest habitat exists onsite.
Water howellia (*Howellia aquatilis*)	—/—/2B.2	Freshwater marshes	None: No suitable marsh habitat exists in the project area.
Watershield (*Brasenia schreberi*)	—/—/2B.3	Pond, wetland	None: No suitable pond habitat exists in the project area.
Wayside aster (*Eucephalus vialis*)	—/—/1B.2	Douglas fir forest	Low: Some suitable forest habitat exists onsite.
White beaked-rush (*Rhynchospora alba*)	—/—/2B.2	Wetlands, riparian	Very Low: Some riparian habitat exists onsite.
White-flowered rein orchid (*Piperia candida*)	—/—/1B.2	Yellow pine forest	Low: Some suitable forest habitat exists onsite.
Woolly meadowfoam (*Limnanthes floccosa* ssp. *floccosa*)	**—/—/4.2**	**Vernal pools, freshwater wetlands**	**Very Low: No suitable wetland habitat exists onsite. Nearest occurrence is 4.7 miles SW of the parcel near Hayfork.**
Wolfe's evening primrose (*Oenothera wolfii*)	—/—/1B.1	Pine forest, sand dunes	Very Low: Some suitable forest habitat exists onsite.
Yolla Bolly Mtn. bird's-foot trefoil (*Hosackia yollabolliensis*)	—/—/1B.2	Coniferous forest	Very Low: Some suitable forest habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
MOSSES, LICHENS & LIVERWORTS			
Angel's hair lichen (*Ramalina thrausta*)	—/—/2B.1	Old growth conifer and hardwood forests	Medium: Some forest habitat exists onsite.
Buxbaumia moss (*Buxbaumia viridis*)	**—/—/2B.2**	**Forest, woodland**	**Medium: Some forest habitat exists onsite. Nearest occurrence is 6.9 miles NW of the parcel near CA-299.**
Coastal triquetrella (*Triquetrella californica*)	—/—/1B.2	Forest, woodland	Low: Some suitable forest habitat exists onsite although this species found closer to the coast.
Elongate copper moss (*Mielichhoferia elongata*)	**—/—/4.3**	**Conifer forests**	**Medium: Some suitable forest habitat exists onsite. Nearest occurrence is 9.0 miles N of the parcel near CA-99.**
Flagella-like atractylocarpus (*Campylopodiella stenocarpa*)	**—/—/2B.2**	**Forest, riparian**	**Medium: Some suitable forest habitat exists onsite. Nearest occurrence is 9.0 miles N of the parcel near CA-299.**
Methuselah's beard lichen (*Usnea longissima*)	—/—/4.2	Old growth conifer and hardwood forests	Low: Some suitable forest habitat exists onsite.
Pacific fuzzwort (*Ptilidium californicum*)	—/—/4.3	Woodland, riparian	Low: Some suitable riparian habitat exists onsite.
Slender silver moss (*Anomobryum julaceum*)	—/—/4.2	Rocky substrates in forests	Low: Some suitable forest habitat exists onsite.
Torren's grimmia (*Grimmia torenii*)	—/—/1B.3	Forest, woodland	Low: Some suitable forest habitat exists onsite.
FISH			
Chinook Salmon Upper Klamath/Trinity River ESU Population 30 (*Oncorhynchus tshawytscha*)	FT/SE/—	Freshwater streams, open ocean and estuaries	None: No suitable stream habitat exists onsite.
Coho Salmon Central California Coast ESU Population 4 (*Oncorhynchus kisutch*)	FE/SE/—	Freshwater streams, open ocean and estuaries	None: No suitable stream habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Steelhead Summer Run, Population 36 (*Oncorhynchus mykiss irideus*)	FT/—/—	Freshwater streams, open ocean and estuaries	Low: Some suitable stream habitat exists onsite.
AMPHIBIANS & REPTILES			
Del Norte salamander (*Plethodon elongatus*)	—/SSC/—	Forest, riparian	Low: Some suitable forest habitat exists onsite.
Foothill yellow-legged frog (*Rana boylii*)	**—/SSC/—**	**Wetlands, riparian, streams and ponds**	**Medium: Some suitable breeding and estivation habitat exists onsite in Barker Creek and along some larger tributaries. No suitable breeding habitat onsite. Nearest known occurrence is 0.5 miles S of the project parcel in Barker Creek.**
Northern red-legged frog (*Rana aurora*)	—/SSC/—	Seasonal ponds, streams, wetlands	None: No suitable breeding or estivation habitat exists onsite. This species generally prefers ponds to streams.
Pacific tailed frog (*Ascaphus truei*)	**—/SSC/—**	**Woodland streams, riparian corridors**	**Medium: Some suitable breeding habitat exists onsite in Barker Creek and tributaries. Nearest known occurrence is 0.5 miles S of the parcel in Barker Creek.**
Red bellied newt (*Taricha rivularis*)	—/SSC/—	Woodland streams, riparian corridors	Medium: Some suitable stream habitat exists onsite.
Southern Torrent salamander (*Rhyacotriton variegatus*)	—/SSC/—	Coniferous forests near streams	Medium: Some suitable forest habitat exists onsite.
Western pond turtle (*Emys marmorata*)	—/SSC/—	Slow-moving creeks, streams, ponds, rivers, ditches	Low: Some marginally suitable stream habitat exists onsite, although this species generally prefers lower gradient streams and ponds.
INVERTEBRATES			
Briggs' leptonetid spider (*Calileptoneta briggsi*)	—/SSC/—	Caves, leaf litter, rock outcrops	Low: Some suitable rock outcrop habitat exists onsite.
California floater (*Anodonta californiensis*)	—/SSC/—	Freshwater ponds, streams	Low: Some suitable stream habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
California linderiella (*Linderiella occidentalis*)	—/SSC/—	Vernal pools	None: No vernal pool habitat exists onsite.
Crotch bumble bee (*Bombus crotchii*)	—/SSC/—	Grassland and chaparral	Very Low: No suitable grassland habitat exists onsite.
Hooded lancetooth (*Ancotrema voyanum*)	**—/SSC/—**	**Moist areas near streams**	**Medium: Some suitable stream habitat exists onsite. Nearest occurrence is 1.5 miles SW of the parcel near Big Creek.**
Leech's chaetarthrian water scavenger beetle (*Chaetarthria leechi*)	—/SSC/—	Freshwater streams	Low: Some stream habitat exists onsite.
Leech's skyline diving beetle (*Hydroporus leechi*)	—/SSC/—	Freshwater ponds	None: No suitable pond habitat exists onsite.
Natural Bridge megomphix (*Megomphix californicus*)	—/SSC/—	Pine forests	Medium: Some suitable forest habitat exists onsite.
Obscure bumble bee (*Bombus caliginosus*)	—/SSC/—	Grassland, foothill woodland, chaparral	Very Low: No suitable grassland habitat exists onsite.
Oregon floater (*Anodonta oregonensis*)	—/SSC/—	High order freshwater streams	Low: Some suitable stream habitat exists onsite.
Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*)	—/SSC/—	Freshwater ponds	None: No suitable pond habitat exists onsite.
Tehama chaparral (*Trilobopsis tehamana*)	—/SSC/—	Moist forests	Medium: Some suitable forest habitat exists onsite.
Trinity bristle snail (*Monadenia infumata setosa*)	**—/ST/—**	**Riparian forests**	**Medium: Some suitable forest habitat exists onsite. Nearest occurrence is 2.1 miles NW of the parcel along Big Creek.**
Trinity shoulderband (*Helminthoglypta talmadgei*)	**—/SSC/—**	**Grassland, forest**	**High: Some suitable forest habitat exists onsite. Nearest occurrence is from on the current parcel in the riparian corridor surrounding Barker Creek.**
Western bumblebee (*Bombus occidentalis*)	—/SSC/—	Grassland	Very Low: No suitable grassland habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Wawona riffle beetle (*Atractelmis wawona*)	—/SSC/—	Low gradient streams	Low: Some suitable stream habitat exists onsite.
BIRDS			
American perigrine falcon (*Falco peregrinus anatum*)	**—/SSC/—**	**Forages in open grasslands, nests in trees**	**High: Some suitable nesting and foraging habitat exists onsite. Nearest occurrence is from on the present parcel, a nesting pair that uses the rock outcrop discussed in §2.3, above.**
Bald eagle (*Haliaeetus leucocephalus*)	—/SSC/—	Forages over open lakes and streams	Low: No suitable foraging or nesting habitat exists onsite.
Bank swallow (*Riparia riparia*)	FE/SE/—	Typically found near lakes and streams	Very Low: No suitable stream habitat exists onsite.
Black swift (*Cypseloides niger*)	—/SSC/—	Cliff faces near water	Very Low: No suitable stream habitat exists onsite.
Cooper's hawk (*Accipiter cooperii*)	—/WL/—	Forages over open grassland	Low: Some marginal foraging and nesting habitat exists onsite.
Ferruginous hawk (*Buteo regalis*)	—/SSC/—	Forages over open grassland; nests in old-growth trees	Low: Some marginal foraging and nesting habitat exists onsite.
Golden eagle (*Aquila chrysaetos*)	—/SSC/—	Forages over open grassland; nests in old-growth trees	Low: Some marginal foraging habitat exists onsite. Some marginal nesting habitat exists onsite.
Great blue heron (*Ardea herodias*)	—/SSC/—	Nests in large trees, forages in wetlands	Very Low: No suitable foraging habitat exists onsite. No suitable nesting habitat onsite.
Great egret (*Ardea alba*)	FE/SE/—	Nests in large trees, forages in wetlands	Very Low: No suitable foraging habitat exists onsite. No suitable nesting habitat onsite.
Marbled murrelet (*Brachyramphus marmoratus*)	FT/SE/—	Old-growth coastal forests	Very Low: Some forest habitat exists, although this species is limited to old-growth forests near the coast.
Northern goshawk (*Accipiter gentilis*)	—/SSC/—	Forages and nests in mountain forests	Medium: Some suitable foraging and nesting habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Northern spotted owl (*Strix occidentalis*)	**FT/ST/—**	**Nests primarily in old growth forests**	**High: Some suitable nesting and foraging habitat exists onsite. Nearest occurrence is 0.1 miles offsite to the N, as well as 0.1 miles offsite to the W, both in STNF land.**
Osprey (*Pandion haliaetus*)	**—/WL/—**	**Nests large bodies of water with fish**	**Low: Some suitable roosting habitat exists onsite, although this species is almost always found near large lakes or rivers. Nearest occurrence is 1.5 miles SW of the parcel near Big Creek.**
Purple martin (*Progne subis*)	FE/SE/—	Insectivorous, nests in cavities	Very Low: Some marginally suitable nesting and foraging habitat exists onsite.
Sharp-shinned hawk (*Accipiter striatus*)	—/SSC/—	Forest and woodland	Low: Some suitable nesting habitat exists onsite. Some marginal foraging habitat exists onsite.
Tricolored blackbird (*Agelaius tricolor*)	—/SSC/—	Forages in grasslands and nests in dense freshwater marshes	None: No suitable nesting or foraging habitat exists onsite.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	—/SE/—	Woodland, riparian	Very Low: Some marginal habitat exists onsite.
White-tailed kite (*Elanus leucurus*)	—/CFP/—	Prefers to nest in marshes adjacent to deciduous forests	Very Low: Some marginal nesting habitat exists onsite. No foraging habitat onsite.
Yellow breasted chat (*Icteria virens*)	—/SSC/—	Dense shrubby growth, farmland	Low: Some potential nesting and foraging habitat onsite.
Yellow rail (*Coturnicops noveboracensis*)	—/SSC/—	Breeds in marshes, forages in wet meadows	None: No suitable marsh habitat exists onsite.
MAMMALS			
American badger (*Taxidea taxus*)	—/SSC/—	Open grassland habitats with plenty of prey	Medium: Some suitable den and foraging habitat exists onsite.
California wolverine (*Gulo gulo*)	—/SSC/—	Old growth forests	Low: Some suitable den and foraging habitat exists onsite.

Taxon	Status[1] Fed/State/CNPS	Habitat	Potential to Occur Within the Project Area
Fisher (*Pekania pennanti*)	**—/SSC/—**	**Forages and breeds primarily in forests**	**High: Some suitable forest habitat exists onsite. Nearest occurrence is immediately offsite to the N and W in STNF land.**
Fringed myotis (*Myotis thysanodes*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Low: Few suitable roosts in the project area. Limited foraging habitat exists onsite.
Hoary bat (*Lasiurus cinereus*)	—/SSC/—	Forages over open areas, roots in trees or caves at high altitude	Very Low: Few suitable roosts in the project area. Foraging limited to high altitudes.
Humboldt marten (*Martes caurina humboldtensis*)	**—/SSC/—**	**Forages and breeds in forests, typically near streams**	**Medium: Some suitable den and foraging habitat exists onsite. Nearest occurrence is 3.3 miles N of the parcel near Hayfork Divide.**
Long-eared myotis (*Myotis evotis*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Low: Limited roosting habitat exists onsite. Some foraging habitat exists onsite.
Long-legged myotis (*Myotis volans*)	—/SSC/—	Roosts in caves or buildings and forages in open habitats	Low: Limited roosting habitat exists onsite. Some foraging habitat exists onsite.
North American porcupine (*Erethizon dorsatum*)	—/SSC/—	Require rocky areas or trees for dens, abundant open space for foraging	Medium: Some suitable foraging and den habitat exists onsite.
Oregon snowshoe hare (*Lepus americanus klamathensis*)	—/SSC/—	Alpine and high elevation mountains	Low: No suitable alpine habitat exists onsite.
Pacific marten (*Martes caurina*)	—/SSC/—	Forages and breeds in forests, typically near streams	Medium: Some suitable forest habitat exists onsite.
Pallid bat (*Antrozous pallidus*)	—/SSC/—	Common in open dry habitats with rocky areas for roosting	Low: Some foraging habitat exists onsite. No suitable roosts in the project area.
Silver haired bat (*Lasionycteris noctivagans*)	—/SSC/—	Nocturnal, migratory, solitary, roosts in tree cavities	Very Low: Some suitable trees exist for roosting. Some foraging habitat exists onsite.
Sonoma tree vole (*Arborimus pomo*)	—/SSC/—	Douglas fir forest	None: No suitable old growth forest habitat exists onsite.

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

[1] Status:

Federal
FE = Federally Endangered Species
FT = Federally Threatened Species

State
SE = State Endangered Species
ST = State Threatened Species
SSC = California Species of Special Concern
CFP = California Fully Protected Species

CNPS (applies to plants only)
List 1B = plants considered rare, threatened, or endangered in California and elsewhere
List 2B = plants rare, threatened or endangered in California, but more common elsewhere
List 3 = plant is likely rare but more information is required
List 4 = plants of limited distribution

[2] USFWS

APPENDIX B: SPECIES ENCOUNTERED

This list contains a list of all of the plants and animals observed onsite within the study area during site visits in 2018 and 2019. Details of dates and survey protocols are provided in §1.4, above. Any special-status species (SSS) are denoted in bold with an asterisk.

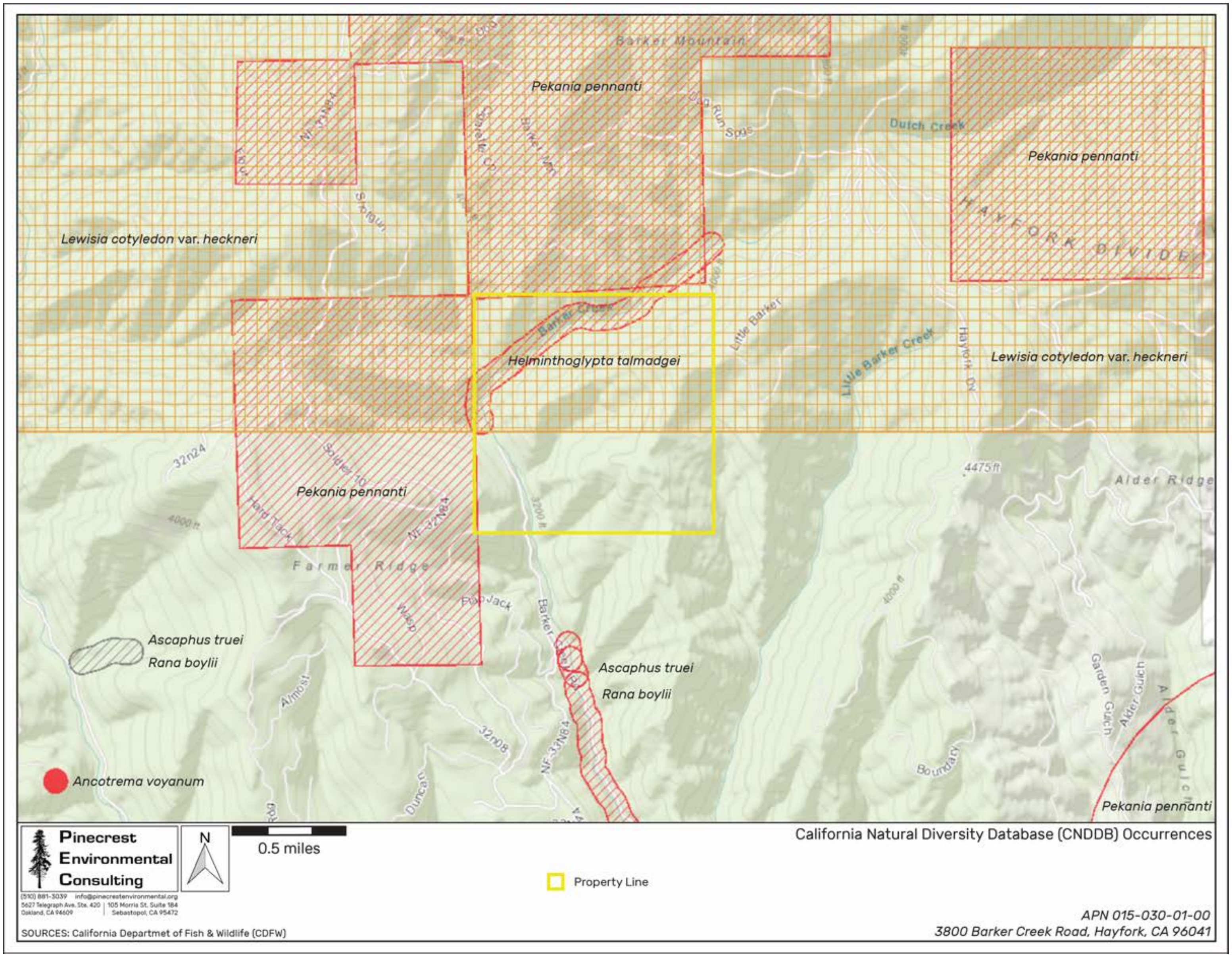
PLANTS
Abies concolor
Acer macrophyllum
Achillea millefolium
Acmispon americanus
Agoseris heterophylla
Aira caryophyllea
Alnus rhombifolia
Apocynum androsaemifolium
Aralia californica
Arbutus menziesii
Arctostaphylos canescens
Arctostaphylos manzanita
Arctostaphylos patula
Arnica discoidea
Artemesia douglasiana
Asarum caudatum
Avena barbata
Brassica nigra
Bromus diandrus
Bromus hordeaceous
Bromus tectorum
Calocedrus decurrens
Calochortus tolmiei
Carex bolanderi
Ceanothus cuneatus
Ceanothus integerrimus
Ceanothus leucodermis
Centaurea solstitialis
Cercocarpus betuloides
Chimaphila menziesii
Cirsium vulgare
Claytonia perfoliata

Clematis ligusticifolia
Collomia heterophylla
Conium maculatum
Cornus sericea
Corylus cornuta
Cynoglossum occidentale
Cynosurus echinatus
Cystopteris fragilis
Dactylus glomerata
Darmera peltata
Daucus carota
Deschampsia cespitosa
Elymus caput-medusae
Elymus elymoides
Elymus glaucus
Equisetum hyemale
Erodium botrys
Erythronium citrinum var. *citrinum* *
Festuca idahoensis
Fragaria vesca
Fraxinus latifolia
Galium aparine
Geranium molle
Gnaphalium palustre
Heracleum maximum
Hieracium albiflorum
Hosackia crassifolia
Hypericum perfoliata
Hypochaeris radicata
Juncus effusus
Lactuca serriola
Lepidium campestre
Lilium pardalinum
Lomatium triternatum
Lysimachia latifolia
Lythrum hyssopifolia
Mentha pulegium
Mentha spicata
Notholithocarpus densiflorus
Osmorhiza berteroi
Ozomelis diversifolia
Phacelia egena
Pinus lambertiana
Pinus ponderosa
Pinus sabiniana
Plantago lanceolata

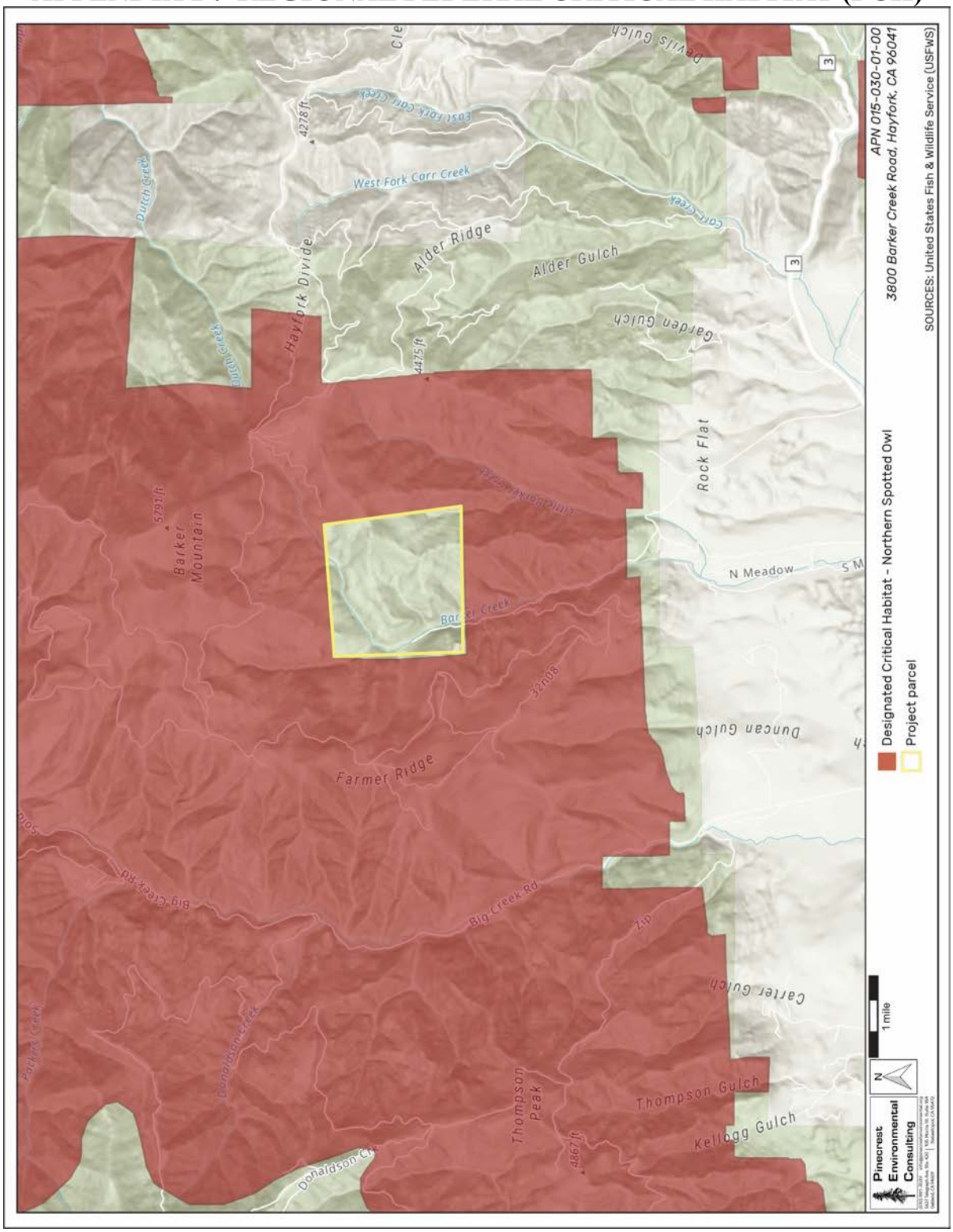
Polypogon monspeliensis
Polystichum imbricans
Pseudotsuga menziesii
Pteridium aquilinum
Quercus chrysolepis
Quercus durata
Quercus garryana
Quercus kelloggii
Quercus wislizeni
Ranunculus occidentalis
Raphanus sativa
Ribes binominatum
Rosa gymnocarpa
Rubus armeniacus
Rubus parviflorus
Rumex crispus
Salix melanopsis
Sambucus nigra
Symphoricarpos albus
Taxus brevifolia
Tolmiea menziesii
Torilis arvensis
Toxicodendron diversilobium
Tragopogon dubius
Trifolium hirtum
Trillium ovatum
Umbellularia californica
Verbascum thapsus
Vicia sativa
Wyethia angustifolia

ANIMALS
Cathartes aura
Catharus guttatus
Corvus corax
Cyanocitta stelleri
Dicamptodon ensatus *
Falco peregrinus anatum *
Helminthoglypta talmadgei *
Melanerpes formicivorus
Neotamias siskiyou
Odocoileus hemionus
Piranga ludoviciana
Sciurus griseus
Sitta canadensis
Sylvilagus bachmani
Thamnophis atratus
Trilobopsis loricata sonomaensis
Ursus americanus californiensis

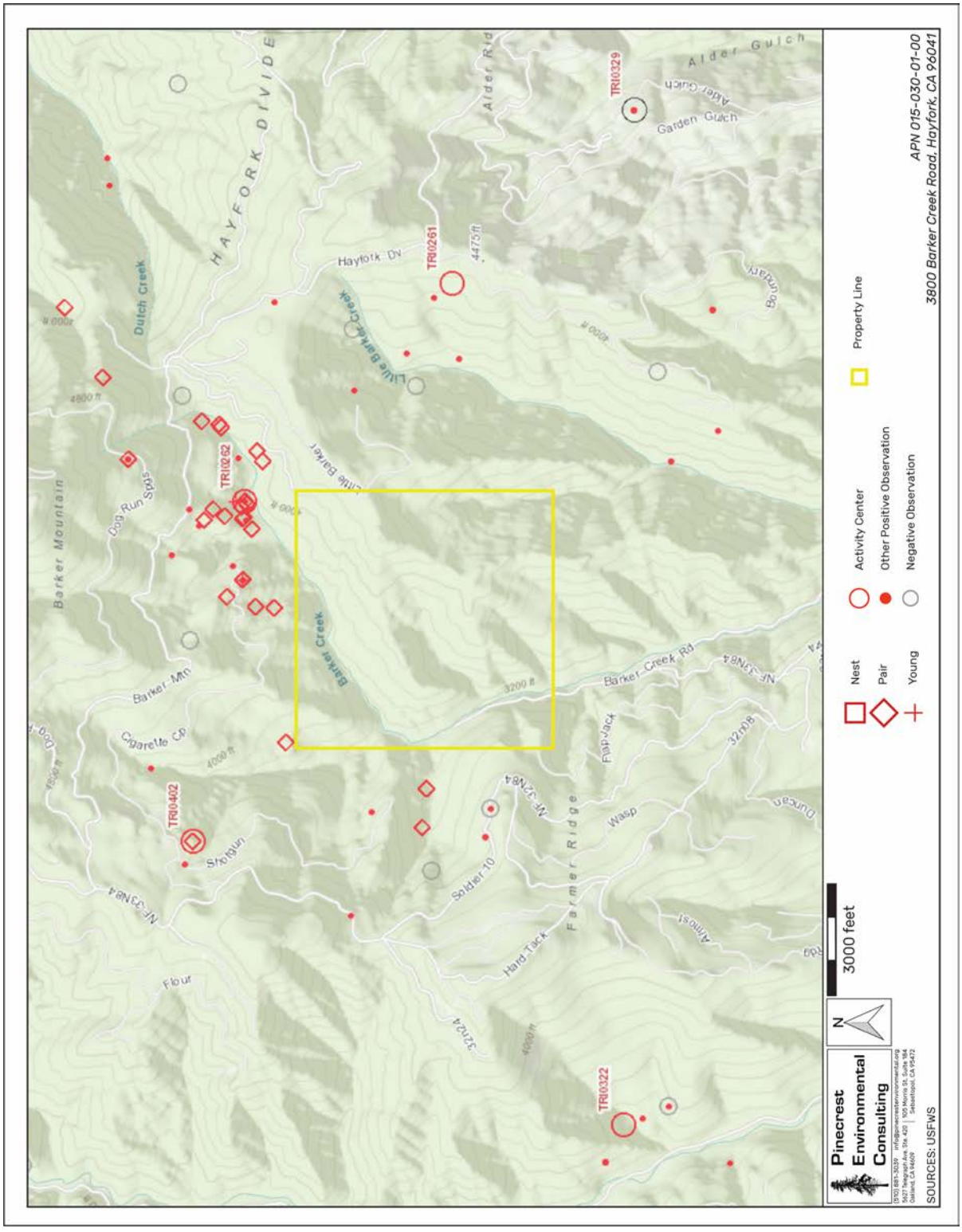
APPENDIX C: CNDDB OCCURRENCES MAP



APPENDIX D: REGIONAL FEDERAL CRITICAL HABITAT (FCH)



APPENDIX E: REGIONAL NSO OCCURRENCES



APPENDIX F: CANNABIS CULTIVATION BEST MANAGEMENT PRACTICES (BMP)

Best Management Practices (BMP) are designed to prevent, minimize, and control the discharge of waste and pollutants associated with site operations and maintenance for the aforementioned project. These BMPs are provided as recommendations however many are considered enforceable conditions under State Water Resources Control Board *Cannabis* General Order No. WQ 2019-0001-DWQ.

F.1 CANNABIS CULTIVATION

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

- Submit monthly pesticide use reports to the County Agricultural Commissioner if required.
- Prior to applying fertilizers, evaluate irrigation water, soils, growth media, and plant tissue to optimize plant growth and avoid over fertilization.
- Apply fertilizers at label rates and no higher.
- Do not apply fertilizers in a way that will result in runoff that may contaminate ground or surface water or escape via airborne drift or fugitive dust.
- Observe riparian corridor setbacks for agricultural cultivation as applicable. These shall be maintained as "no touch" areas and demarcated with appropriate flagging.
- The removal of vegetation is prohibited within riparian setback areas.
- No equipment, vehicles, or other materials shall be stored in the riparian setback areas.
- Composting areas shall not be located in the riparian setback areas.
- Irrigation must be conducted in a manner that does not result in runoff from the cultivated area.
- Any water tanks or storage facilities must obtain permits from the local City or County planning department where required.
- The use of membrane based water bladders is prohibited.
- If using an irrigation system, inspect for and repair leaks prior to planting each year and continuously during the season.
- Irrigation systems shall be equipped with a backflow prevention devices and shutoff valves.
- Recycle or properly dispose of all plastic bags, containers, and irrigation materials.
- Properly dispose of green waste in a manner that does not discharge pollutants to a watercourse. This may be accomplished by composting, chipping, and/or shredding.
- The method of green waste disposal must be documented.
- Used growth medium (soil and other organic medium) shall be handled to minimize or prevent discharge of soil and residual nutrients and chemicals to watercourses. Proper disposal could include incorporating into garden beds, spreading on a stable surface and re-vegetating, storage in watertight dumpsters, or covering with tarps or plastic sheeting prior to proper disposal.
- The method of disposal of growth medium must be documented.
- Compost piles are to be located outside of riparian setbacks for agricultural cultivation and in a manner that will not discharge pollutants to a watercourse.
- If necessary, construct a berm or install fiber roll around compost area to prevent runoff or use straw wattles around perimeter.
- Cover compost piles with tarp or impermeable surface prior to fall rains and continuously throughout the rainy season.
- Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter.

- Avoid soil disturbance between November 1 and April 15 and during times of active precipitation.
- All exposed and disturbed soil must be covered with a minimum of 2 inches of mulch, such as straw, bark, wood chips, etc., by November 15. Alternatively, establish a thick cover crop over disturbed areas composed of native species.
- Erosion control materials shall be available on site at all times in the form of straw, mulch, wattles, silt fencing, erosion control fabrics, sand bags, or other materials adequate to cover areas of disturbed soil or incipient erosion events.
- In the event of a forecast storm event likely to produce runoff, apply mulch, wattles, or other erosion prevention measures to the disturbed areas prior to rain event.
- Any grading or drainage conducted as part of site preparation shall have permits from local County or City agencies if required.

F.2 EROSION & SEDIMENT CONTROL

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

equipment entry).

- When heavy equipment is used, any woody debris and stream bank or streambed vegetation disturbed shall be replaced to a pre-project density with native species appropriate to the site.
- When possible, existing ingress or egress points shall be used or work shall be performed remotely from the top of the creek banks.
- Divert runoff away from unprotected slopes or loose soils using a combination of mats, geotextiles, silt fencing, wattling, check dams, sediment basins, vegetated buffers, or rock armor.
- Deploy appropriate erosion control measures such as silt fencing or straw wattles around all temporary exposed piles or soil or surface disturbances.
- All temporary exposed piles or soil or surface disturbances shall have tarping and sand bags or other stabilization materials deployed in order to prevent discharge of sediments in the event of a rain or wind event.
- Geotechnical fabric shall be deployed on all exposed dirt surfaces with a slope of greater than 15% and staked in place during ground disturbing activities, and silt fencing deployed on slopes of greater than 15% where appropriate.
- Sand bags, straw bales, or other devices shall be placed at appropriate locations near and alongside the roadsides and swales in anticipation of large storm events.
- Bioswales and cultivation areas including parking areas shall be maintained free of trash including empty soil and pesticide or fertilizer containers.
- Locations of sediment sources shall be identified during rain events and mitigated where appropriate.
- Protect ditch inlets and outlets from erosion using rock armor.
- Silt fencing shall be installed downstream of rock piles, stockpiles, and temporary soils storage areas.
- Desilting or retention basins shall be installed if the capacity of the natural percolation exceeds the inputs during routine storm events.
- Sediment traps shall be used on all exposed driveway surfaces where natural vegetation is not able to be established.
- Exposed unvegetated surfaces will be graveled where appropriate.
- Rock placed for slope protection shall be the minimum necessary to avoid erosion, and shall be part of a design that provides for native plant revegetation and minimizes bank armoring.
- Soil exposed as a result of project work, soil above rock riprap, and interstitial spaces between rocks shall be revegetated with native vegetation by live planting, seed casting, or hydroseeding prior to the rainy season of the year work is completed.
- Avoidance of earthwork on steep slopes and minimization of cut/fill volumes, combined with proper compaction, shall occur to ensure the area is resilient to issues associated with

seismic events and mass wasting. If cracks are observed, or new construction is anticipated, consultation with a qualified professional is recommended.

- Culvert fill slopes shall be constructed at a 2:1 slope or shall be armored with rock.
- If it is necessary to conduct work in or near a live stream, the work space shall be isolated to avoid project activities in flowing water.
- Any spoils associated with site maintenance shall be placed in a stable location where it cannot enter a watercourse.
- Sidecasting shall be minimized and shall be avoided on unstable areas or where it has the potential to enter a watercourse.
- Entrance to the project site shall be maintained in a condition that will prevent tracking or flowing of sediment into the public right-of-way.
- All sediment spilled, dropped, washed, or tracked onto the public right-of-ways shall be removed immediately.
- When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-ways.
- When wheel washing is required, it shall be done in an area stabilized with crushed stone that drains into a sediment trap fitted with appropriate erosion control measures.
- To control surface water runoff in and around cultivation areas use fiber rolls or wattling and stake appropriately and perpendicular to the flow path.
- Cover crops should be utilized on all exposed slopes that are not able to be protected by other means.
- Cover crops should be native species as described in the associated biological resources report.
- Rip compacted soils prior to placing spoils to prevent the potential for ponding under the spoils that could result in spoil site failure and subsequent sedimentation.
- Compact and contour stored spoils to mimic the natural slope contours and drainage patterns to reduce the potential for fill saturation and failure.
- Ensure that spoil materials are free of woody debris, and not placed on top of brush, logs or trees.
- Inspect all roads and culverts regularly for blockages.

F.3 WATER USE & POLLUTION

- Ensure that all appropriate water rights permits are filed with the State Water Resources Control Board.
- Notify the California Department of Fish and Wildlife by submitting a Lake and Streambed Alteration (LSA) notification package if the proposed activities involve substantial diversion from or alteration of the bed or bank of a stream or other waterbody.

- Ensure that all water storage features are permitted from the Department of Water Rights if necessary.
- All refueling and pesticide and chemical storage and transfer shall occur greater than 100 feet away from any swales, creeks, or natural areas.
- All refueling and pesticide and chemical storage and transfer shall occur on top of an impermeable metal or other fabric mat that is no less than 2 inches high on all sides and capable of completely containing any spillage.
- Concrete truck and other vehicles shall not be washed out in natural areas or directly onto soil and shall be washed out into a metal or other impermeable basin and disposed of properly such that no water is discharged to the soil.
- All waste shall be kept in plastic drums with tight fitting lids so that water is not able to make contact with the contents and potentially leach to the environment.
- All pesticide sprays shall occur on windless nights for outdoor facilities.
- Chemical or fertilizer wastes shall never be disposed of into swales or creeks and shall be contained inside closed-roof facilities and designated with appropriate labeling until it is possible to dispose of properly.
- Septic leach fields and graywater mulch fields shall be maintained free of large vegetation and not used for aboveground storage that may impact their proper functioning.
- Chemical contamination (fuel, grease, oil, hydraulic fluid, solvents, etc.) of water and soils is prohibited during routine equipment operation and maintenance.
- The use or storage of petroleum-powered equipment shall be accomplished in a manner that prevents the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).
- Schedule excavation and grading activities for dry weather periods.
- Designate a contained area for equipment storage, short-term maintenance, and refueling. Ensure it is located at least 50 feet from waterbodies.
- Inspect vehicles for leaks and repair immediately.
- Clean up leaks, drips and other spills immediately to avoid soil or groundwater contamination.
- Conduct major vehicle maintenance and washing offsite.
- Ensure that all spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries are collected, stored, and recycled as hazardous waste offsite.
- Ensure that all construction debris is taken to appropriate landfills and all sediment disposed of in upland areas or offsite, beyond the 100-year floodplain.
- Use dry cleanup methods (e.g., absorbent materials, cat litter, and/or rags) whenever possible. If necessary for dust control, use only a minimal amount of water.
- Sweep up spilled dry materials immediately.
- Separate organic material (e.g., roots, stumps) from the dirt fill and store separately. Place this material in long-term, upland storage sites, as it cannot be used for fill.

- Spoils shall not be placed or stored in locations where soils are wet or unstable, or where slope stability could be adversely affected.
- Do not locate spoil piles in or immediately adjacent to wetlands and watercourses.
- Store spoil piles in a manner (e.g. cover pile with plastic tarps and surround base of pile with straw wattle) or location that would not result in any runoff from the spoil pile ending up in wetlands and watercourses.
- Keep temporary disposal sites out of wetlands, adjacent riparian corridors, and ordinary high water areas as well as high risk zones, such as 100-year floodplain and unstable slopes.
- Conduct operations on a size and scale that considers available water sources and other water use and users in the planning watershed.
- Implement water conservation measures such as rainwater catchment systems, drip irrigation, mulching, or irrigation water recycling where possible.
- Hauled water utilized for irrigation shall be documented via receipt or similar, and show the date, name, and license plate of the water hauler, and the quantity of water purchased.
- If using a water storage tank, do not locate the tank in a flood plain or next to equipment that generates heat. Locate the tank so it is easy to install, access, and maintain.
- Vertical tanks should be installed according to manufacturer's specifications and placed on firm, compacted soil that is free of rocks/sharp objects and capable of bearing the weight of the tank and its maximum contents.
- Install float valves on tanks to prevent them from overflowing.
- Place proper lining or sealing in ponds to prevent water loss.

F.4 ROAD MAINTENANCE & GENERAL CONSTRUCTION

- Always limit work to the appropriate work date windows considering wet weather, migratory bird and other biological and environmental constrains that may be placed on the project.
- Proper design and location of roads and other features is critical to ensuring that a road or other feature be adequately drained and is best accomplished through consultation with a qualified professional.
- Placement of temporary access roads, staging areas, and other facilities shall avoid or minimize disturbance to habitat.
- If inspection identifies surface rills or ruts, then surfacing and drainage likely needs maintenance. Consultation should be made with a licensed professional to design appropriate erosion control strategies.
- Design of roads should allow for sheet flow of water and use water bars and rolling dips to break up slope length.
- Vehicle speed shall be kept to a maximum of 10 mph while onsite to minimize dust generation.

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

F.5 SWALE & VEGETATION MANAGEMENT

- The work area shall be restored to pre-project work condition or better.
- Any stream bank area left barren of vegetation as a result of cleanup/restoration activities shall be stabilized by seeding, replanting, or other means with native trees, shrubs, and/or grasses appropriate to the site prior to the rainy season in the year work was conducted.
- Ensure that vegetated swales are properly formed, allow moderate velocity water passage without causing sediment entrainment, and are otherwise functioning properly.
- Create and expand vegetated bioswales where necessary, should additional construction or road maintenance be required, in order to maintain flow without scour.
- All bioswales and other drainage features requiring revegetation will be seeded with native vegetation and lawns and hedgerows maintained in good health and watered in dry years.
- Vegetation including grasses shall be mowed as necessary to create fire breaks and to prevent the accumulation of fuels that would be able to sustain a ground fire.
- All vegetation shall be surveyed on foot once a year by staff and new outbreaks of any invasive weeds identified by the California Invasive Plant Council as noxious or invasive to be removed by the owner or qualified landscaping professionals.
- Channels and swales that show evidence of overland flow and scour (e.g. bare of vegetation) shall be seeded with native grasses such as *Stipa pulchra*, *Hordeum brachyantherum*, *Elymus glaucus*, and *Bromus carinatus*, and kept vegetated at all times.
- If shrubs and non-woody riparian vegetation are disturbed, they shall be replaced with similar native species appropriate to the site.
- Disturbance to native shrubs, woody perennials or tree removal on the streambank or in the stream channel shall be avoided or minimized.
- If riparian trees over six inches dbh (diameter at breast height) are to be removed, they shall be replaced by native species appropriate to the site at a 3:1 ratio.
- Where physical constraints in the project area prevent replanting at a 3:1 ratio and canopy cover is sufficient for habitat needs, replanting may occur at a lesser replacement ratio.
- Vegetation planting for slope protection purposes shall be timed to require as little irrigation as possible for ensuring establishment by the commencement of the rainy season.
- The spread or introduction of exotic plant species shall be avoided to the maximum extent possible by avoiding areas with established native vegetation during cleanup/restoration activities, restoring disturbed areas with appropriate native species, and post-project monitoring and control of exotic species.
- Removal of invasive exotic species after construction activities is strongly recommended. Mechanical removal (hand tools, weed whacking, hand pulling) of exotics shall be done in preparation for establishment of native plantings.

- Where permanent soil stabilization is required a locally-appropriate mix of native grass species shall be used such as a mix containing *Nassella pulchra*, *Hordeum brachyantherum*, *Elymus glaucus*, and *Bromus carinatus* or as described in the site's Biological Resources Assessment.
- Entire cultivation site shall be seeded and maintained as a permanent non-tilled cover crop during non-usage times. Straw mulch shall be used where native seeding is not practicable.
- Use mulches (e.g. wood chips or bark) in cultivation areas that do not have ground cover to prevent erosion and minimize evaporative loss.
- Mulch shall be applied at a rate of 4000 lbs / acre and seeding shall be applied to achieve 70% cover in the first year or approximately 200 lbs / acre.
- Annual inspections for the purpose of assessing the survival and growth of revegetated areas and the presence of exposed soil shall be conducted for three years following project work.
- Dischargers and/or their consultant(s) or third party representative(s) shall note the presence of native/non-native vegetation and extent of exposed soil, and take photographs during each inspection.
- Dischargers and/or their consultant(s) or third party representative(s) shall provide the location of each work site, pre- and post-project work photos, diagram of all areas revegetated and the planting methods and plants used, and an assessment of the success of the revegetation program in the annual monitoring report as required under relevant state and local water board regulations.

F.6 IRRIGATION & CULTIVATION MANAGEMENT

- Cultivation-related waste shall be stored in a place where it will not enter a stream.
- Soil bags and other garbage shall be collected, contained, and disposed of at an appropriate facility, including for recycling where available.
- Pots shall be collected and stored where they will not enter a waterway or create a nuisance.
- Plant waste and other compostable materials be stored (or composted, as applicable) at locations where they will not enter or be blown into surface waters, and in a manner that ensures that residues and pollutants within those materials do not migrate or leach into surface water or groundwaters.
- Imported soil for cultivation purposes shall be minimized. In the event that containers (e.g. grow bags or grow pots) are used for cultivation, reuse of soil shall be maximized to the extent feasible.
- Spent growth medium (i.e. soil and other organic medium) shall be handled to minimize discharge of soil and residual nutrients and chemicals to watercourses. Proper handling of spent soil could include incorporating into garden beds, spreading on a stable surface and revegetation, storage in watertight dumpsters, covering with tarps or plastic sheeting prior to proper disposal.

- Trash containers of sufficient size and number shall be provided and properly serviced to contain the solid waste generated by the project.
- Provide roofs, awnings, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.
- Use lined bins or dumpsters to reduce leaking of liquid waste. Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on.
- Make sure trash container areas are screened or walled to prevent off-site transport of trash. Consider using refuse containers that are bear-proof and/or secure from wildlife.
- Refuse shall be removed from the site on a frequency that does not result in nuisance conditions, transported in a manner that they remain contained during transport, and the contents shall be disposed of properly at a proper disposal facility.
- Ensure that human waste disposal systems do not pose a threat to surface or ground water quality or create a nuisance. Onsite treatment systems should follow applicable County ordinances for human waste disposal requirements, consistent with the applicable tier under the State Water Resources Control Board Onsite Waste Treatment System Policy.
- Install buffer strips, bioswales, or vegetation downslope of cultivation areas to filter runoff of chemicals from irrigation.
- Irrigate at rates to avoid or minimize runoff.
- Regularly inspect and repair leaks in mains and laterals, in irrigation connections, or at the ends of drip tape and feeder lines.
- Design irrigation system to include redundancy (i.e., safety valves) in the event that leaks occur, so that waste of water is prevented and minimized.
- Recapture and reuse irrigation runoff (tailwater) where possible, through passive (gravity-fed) or active (pumped) means.
- Construct retention basins for tailwater infiltration; percolation medium may be used to reduce pollutant concentration in infiltrated water. Constructed treatment wetlands may also be effective at reducing nutrient loads in water.
- Ensure that drainage and/or infiltration areas are located away from unstable or potentially unstable features.
- Regularly replace worn, outdated or inefficient irrigation system components and equipment.
- Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter.
- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Evaluate irrigation water, soils, growth media, and plant tissue to optimize plant growth and avoid over-fertilization.
- All chemicals shall be stored in a manner, method, and location that ensures that there is no threat of discharge to waters of the State.

- Products shall be labeled properly and applied according to the label.
- Use integrated pest management strategies that apply pesticides only to the area of need, only when there is an economic benefit to the grower, and at times when runoff losses are least likely.
- Periodically calibrate pesticide application equipment.
- Use anti-backflow devices on water supply hoses, and other mixing/loading practices designed to reduce the risk of runoff and spills.
- Petroleum products shall be stored with a secondary containment system such as a pan or a tub
- Throughout the rainy season, any temporary containment facility shall have a permanent cover and side-wind protection, or be covered during non-working days and prior to and during rain events.
- Materials shall be stored in their original containers and the original product labels shall be maintained in place in a legible condition. Damaged or otherwise illegible labels shall be replaced immediately.
- Bagged and boxed materials shall be stored on pallets and shall not be allowed to accumulate on the ground. To provide protection from wind and rain throughout the rainy season, bagged and boxed materials shall be covered during non-working days and prior to rain events.
- Have proper chemical and fertilizer storage instructions posted at all times in an open and conspicuous location.
- Prepare and keep a spill prevention and cleanup plan onsite when dealing with any hazardous materials.
- Keep ample supply of appropriate spill clean-up material near storage areas.
- Plant cover crops to boost soil fertility, improve soil texture, and protect from storm caused sediment runoff.

APPENDIX G: STREAM CLASSIFICATION CRITERIA

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

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

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

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

APPENDIX H: AVOIDANCE & MINIMIZATION MEASURES FOR WORKING AROUND SPECIAL-STATUS INVERTEBRATES, AMPHIBIANS & NESTING BIRDS

A series of BMP's and relating to erosion, sediment control, water use, vegetation maintenance, and general farm practices are provided in Appendix F. In addition, below are species-specific Avoidance & Minimization Measures (AMM) designed to ensure that there will be no incidental take of any special-status species (SSS), either animal or plant, during the course of construction or operation of the proposed project. These measures are designed for the site specifically and apply to the following species: Foothill yellow-legged frog (*Rana boylii*; FYLF), California giant salamander (*Dicamptodon ensatus*; CGS), Pacific tailed frog (*Ascaphus truei*; PTF), Trinity shoulderband (*Helminthoglypta talmadgei*; TS), American peregrine falcon (*Falco peregrinus anatum*; APF), and Northern spotted owl (*Strix occidentalis*; NSO).

Any harming, harassment, or destruction of any of the aforementioned species without permits authorized by State and/or Federal agencies is considered a crime and must be reported immediately.

- All employees and contractors including one-time contractors and day-laborers shall be distributed cards with visual identifications of all of the aforementioned special-status species, including both male and female, and juvenile and adult forms, and be briefed on all of the following AMMs contained herein. Species cards may be obtained from PEC on request.

- Operator should obtain signatures from all employees at the bottom of a copy of these AMM's on an annual basis to demonstrate understanding of these measures.

- Observation of any of the aforementioned SSS onsite shall result in immediate stoppage of all work and notification of PEC and/or CDFW.

- All animals, whether SSS or not, shall not be molested and shall be allowed to leave the premises voluntarily.

- Vehicle speeds should be limited to 5 mph all year, with 3 mph limit during amphibian breeding and migration season from October to June.

- No unmuffled, non-street legal, or two-stroke vehicles are allowed on the road due to proximity to APF nesting site.

- No loud noises including heavy machinery, hammering, discharge of firearms, or unmuffled generators are allowed during the breeding and nesting window to avoid impacts to NSO and APF which is generally February 1 to September 1.

- Access within 100 feet of the rock outcrops is not allowed, and a sign stating there is a sensitive habitat ahead and no entry is permitted shall be posted at the bend in the road.

- Avoid ground disturbance including trenching, grading, or road scraping to a depth of greater than 10" without first clearing the site from a qualified biologist to avoid disturbing estivating amphibians.

- All roadways and culverts shall be inspected once before major rain events and once after to ensure that all erosion control materials are effective and not discharging sediment to Barker Creek or other watercourses.

- All containers and other vessels left outside unattended shall be checked before use to ensure that no animals are inside.

- Vessels including buckets shall be turned over on their sides to allow animals to escape.

- No holes greater than 6" deep shall be left exposed and uncovered to avoid making "pitfall traps" into which animals can enter but cannot escape. If holes such as post holes must be left for more than 24 hours they should be checked daily to ensure no animals are inside.

- Clear areas within 100 feet of any watercourse by a biological monitor prior to disturbing the ground more than 6".

- Only native woody species should be planted wherever revegetation is required such as along the sides of roadcuts and bridge abutments.

- Dewatering of the creek during bridge repair is not allowed.

- All construction for bridge repair should occur outside the wetted channel.

- All construction for bridge footings should occur 24-36 hours after clearing the site from a qualified biological monitor to ensure that no aquatic species or egg masses are present.

- Preconstruction breeding bird surveys for NSO and other migratory birds are required if tree removal is to take place.

- No tree or vegetation removal is permitted during breeding bird period from February to September.

- No aerial wires or lines are permitted that may impede the flight path of nesting birds.

- No upward pointed lights are permitted during anytime during the year, and ambient outdoor night time lights are prohibited during the breeding bird period from February to September.

- Use of rodenticides is prohibited under all circumstances due to the hazard of secondary ingestion by raptors.

Appendix B

Natural Investigations Company. 2018. *Cultural Resources Assessment for the Cannabis Cultivation Operation at 3800 Barker Creek Road, Hayfork, Trinity County, California*. November 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 5 – Technical 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.