



**INITIAL STUDY and PROPOSED  
MITIGATED NEGATIVE DECLARATION  
Green Beach Ventures LLC Conditional Use Permit  
Application**

Hayfork, California

**APN 017-010-80-00**



Submitted to:

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

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For:

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**Revised June 2021**

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### 1.1 Introduction and Regulatory Guidance

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

### 1.2 Lead Agency

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

### 1.3 Purpose of the Initial Study

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

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

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

This Initial Study is a public information document that describes the proposed project, existing environmental setting at the Project site, and potential environmental impacts of construction and operation of the proposed project. It is intended to inform the public and decision-makers of the proposed project’s potential

## **1.0 INTRODUCTION**

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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 will prepare a Mitigated Negative Declaration and issue 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 will be shown on the Notice of Intent.

### **1.4 Regulatory Background Related to Cannabis**

#### **State Regulatory Framework**

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

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

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

It is important to note that, although California allows medicinal and adult use, cannabis remains classified as a Schedule I 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.

## **1.0 INTRODUCTION**

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### **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 is the planning guideline for the future development of the area which establishes a framework for both private and public projects within the area to maintain the area's high quality of life. The plan was adopted in 1996 and addresses approximately 41.6 square miles (26,628 acres). The plan addresses nine (9) key issues including Population and Housing, Transportation, Public Services and Facilities, Parks and Recreation Facilities, 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.

## **1.76 Review Process**

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

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

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

### 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 approximately 5.61 air miles northeast of the community of Hayfork and 8.96 air miles southwest of Junction City up on a promontory above where Duncan Creek enters Carr Creek valley – a tributary of Hayfork Creek, which drains to the South Fork Trinity River at a confluence approximately 18.7 air miles to the northwest at the community of Hyampom. Historical onsite activities included some minor, selective timber harvest and agriculture. The subject parcel is bounded on all sides by similar agricultural and light commercial and industrial uses.

#### Project Location

The proposed Green Beach Ventures, LLC Conditional Use Permit Project (“Project”, “proposed project”) is located within Trinity County, northeast of central Hayfork. The Project site is located at 324 Frog Pond Lane, Hayfork, California. The 10.94-acre site is situated on rise above Duncan Creek valley, identified as Assessor Parcel Number (APN) 017-010-80. Primary site access is provided via the private, unimproved Frog Pond Lane from the public Summit Creek Road. The site is also identified on the Hayfork Summit USGS 7.5’ quadrangle map, Section 2, Township 31 North, Range 11 West, Mount Diablo Base Meridian (MDBM). The location of the proposed project is shown on **Figure 2.0-1** with a site plan shown on **Figure 2.0-2**. The parcels immediately surrounding the Project are designated by the County’s General Plan as Agricultural (A).

#### Existing Conditions

The land encompassing the Project area is located on a currently semi-developed disturbed hilltop which in the past has seen some minor selective logging and agricultural activities. The parcel falls under the Agricultural (A) General Plan designation and is zoned Agricultural 20-Acre minimum (A20). The site is surrounded by parcels are all of the same zoning and General Plan designations. The Project site is located well above and outside any designated floodplain. The parcel is surrounded by Agricultural-zoned properties in all directions, with neighboring properties consisting variously of cannabis cultivation farms, non-irrigated pastureland and other agriculture in the valley bottoms. The nearest neighboring residence to the parcel is 197 approximately 100 feet to the northeast.

The site currently has an existing residential dwelling and several outbuildings that serve as storage facilities and various other purposes (see **Figure 2-0.3**). Water is currently provided by two constructed and permitted onsite Power is provided by the Trinity Public Utilities District (TPUD).

## 2.0 PROJECT DESCRIPTION

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### 2.2 Proposed Uses

The purpose of this Project is to develop the property to accommodate five licensed operations: (1) Adult-Use-Small Mixed-Light Tier 1 commercial license for the cultivation of up to 10,000 ft<sup>2</sup> of canopy; (2) a non-storefront retail business; (3) a nursery operation; (4) a distribution business; and (5) a Type 6 (non-volatile) manufacturing operation. Licenses have been acquired for both the cultivation and non-storefront retail operations; the Project proponent is applying for three additional licenses for the distribution, nursery, and manufacturing operations.

### Related Zoning and Uses

The subject property has been zoned by the County as Agricultural 20-Acre minimum (A20), which allows for all agricultural uses, including crop and tree farming, livestock farming, dairies, animal husbandry, aviaries, and a single-family dwelling without the need for a Conditional Use Permit. The County Zoning Ordinance does allow for agricultural processing plants with a permit, and for all the other proposed project components the applicant is applying for a Conditional Use Permit, which is the purpose of this document in evaluating the potential environmental impacts of the proposed project.

### Proposed Project Components

There are seven (7) proposed components of this Project, as described below:

1. The property is currently licensed to cultivate up to 10,000 square feet of mixed-light cannabis canopy. The current garden is located on the southwest portion of the property. Small tunnel-style primitive hoop houses are used to cultivate with light deprivation and the plants are accessed from the sides of these structures, not from within. Green Beach Ventures LLC (GBV, LLC) plans on transitioning to permanent, permitted greenhouses for their mature plant canopy. GBV houses its immature plants onsite. Moving forward, the immature plants will be housed within ~~one (1) two (2)~~ planned 3,500 ft<sup>2</sup> engineered and County-approved greenhouses; one of these will be for the cultivation operation, and the other will be for the nursery. There is an area dedicated to composting of organic cannabis waste located to the northeast of the garden. A portion of a 24'x94' shop/garage is currently used for drying and processing the plants once harvested. In the future, the plants will be processed in ~~three (3) four (4)~~ separate 10'x40' shipping containers; ~~Two (2) 10'x40' two of these shipping containers will also be used for drying~~ drying and two (2) 10'x40' shipping containers will be used for processing.
2. The California Bureau of Cannabis Control (BCC), with Trinity County concurrence, has issued GBV, LLC a non-storefront retail license (C9-0000345-LIC). The initial premises will be located in a room in the shop/garage. In the future, this premises will be located in a 10'x20' shipping container.
3. The nursery will be housed in in one (1) 35'x100' year-round greenhouse.
4. The BCC ~~has issued~~ issued GBV, LLC a State self-distribution license on March 23, 2020, which expired on the same date in 2021; GBC is currently in the process of renewing the license, having notified the BCC and initiating the renewal process prior to the expiration of the previous license. The proposed distribution facility will consist of one (1) 10'x40' shipping container.

5. GBV, LLC is proposing a Type 6 (non-volatile) manufacturing operation, which will be located in a 10'x20' shipping container.
6. A permitted dwelling is in the process of being built on the property. There is a permitted garage, septic system, and two (2) ponds onsite.
7. ~~A rainwater catchment system will be designed and developed to harvest water from the building roofs. This water will be stored in tanks until a pond is developed in the northeast portion of the property.~~

### Required Site Improvements (Construction Activities)

The proposed development activities will be infrastructure development in the southwestern section ~~and a rainwater catchment pond in the northeast section~~ of the property. To house the proposed license types, ~~GBV will need to have ten (10) has had eight (8) shipping containers delivered to and installed on the property for which GBV has already submitted a permit application for approval by the County as of August 2020; an additional two (2) containers will need to be delivered and installed at a future date to house the distribution and non-storefront retail operations.~~ All containers will have permitted electricity. The manufacturing container will also have permitted plumbing. A new septic system will be installed to accommodate waste from this facility. There will be one (1) 10'x20' shipping container that will be dedicated solely for onsite miscellaneous storage.

Electrical lines will be extended underground to the new shipping containers and greenhouses.

Due to the site's gentle topography, grading and heavy equipment use in the infrastructure development zone will be minimal and will not require a Trinity County grading permit; ~~however, an excavator will be used to construct the pond. Heavy equipment will be operated by a licensed contractor and construction will occur during the dry season (April 15 to October 15).~~

~~The pond will be constructed with less than a 1.5:1 slope, which will be compacted to a firm and unyielding surface. The pond will be lined with a clay liner. An emergency spillway and wildlife escape ramp will be included in the pond design. A grading permit will be obtained prior to construction of the pond.~~

### Description of Project Operations

GBV is a family-run business. As the licenses are obtained, they expect to hire an additional two (2) to four (4) full-time employees, making the staff a total of eight (8). Additionally, it is anticipated that an additional four (4) seasonal employees will be hired May through October. Non-family employees will not live onsite. ~~The estimated number of daily vehicle trips during Project operations is no more than two.~~

Power is supplied by the Trinity Public Utility District (TPUD). There are two (2) three-phase power poles on the property and as previously stated the applicant is currently scheduling additional 400 amp/three phase power service. ~~The applicant also plans to incorporate solar panels on the roofs of the barn and home. When fully operational, it is anticipated that Project operations would pull 800 amps per day. Energy management and efficiency measures that will be installed and utilized throughout the life of Project operations include fans in the greenhouses, using shade cloth to reduce the solar heat capture, insulating shipping containers that have electricity. and the installation of solar panels on the roofs of the onsite barn and residential dwelling.~~

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This is not a hazardous materials site; there have been no legacy waste discharge issues identified onsite.

Petroleum products will be stored onsite in a 10'x12' dedicated shed and will consist of diesel and gasoline to fuel landscaping equipment and will not exceed three 15-gallon containers at any one time. Equipment used during Project operations and routine maintenance consist only of wee eaters and mowers.

There is no hazardous waste generated at this site, nor would any be generated by proposed project operations. The only hazardous materials that are stored onsite are two gallons of 99% isopropyl (“rubbing”) alcohol and two gallons of industrial-grade hydrogen peroxide. These are kept in the processing area and are disposed of at the Hayfork Transfer Station solid waste facility.

### *Distribution*

The distribution facility will have full climate control. Product will be stored in totes on shelves. The planned capacity is 1,500 to 2,000 pounds.

### *Nursery*

The nursery facility will consist of one (1) 35'x100' engineered and County-approved year-round greenhouse for all immature plants, clones, and other non-mature-canopy agriculture purposes. There will also be one (1) 10'x40' shipping container dedicated for cultivation research and development purposes. Fertilizer would be stored in a 10'x12' shed onsite, and not exceed ten 50-pound bags at one time. The following tables describe the types of fertilizers, soil amendments, and pesticides used onsite.

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<b>Product</b>	<b>How Product is Used</b>	<b>Yards per 10,000 ft<sup>2</sup> of Canopy</b>
Sphagnum Peat Moss	Soil Cover and Soil Retention	79.0
Malibu Compost-Bu's Blend	Compost	15.8
Mushroom Compost	Compost	15.8
Worm Castings	Compost	15.8
Ancient Forest Humic	Compost	15.8
Chicken Manure Compost	Compost	15.8
Small Black Lava Rock form Build-A-Soil	Soil Aeration	26.3
Rice Hulls	Soil Aeration	26.3
Pumice	Soil Aeration	26.3
Bio-Char	Soil Amenity	15.8
Azomite	Soil Amenity	2.3
Gypsum	Soil Amenity	2.3
Oyster Shell	Soil Amenity	2.3
Alfalfa Meal	Soil Amenity	0.66
Kelp Meal	Soil Amenity	2.3
Crab Meal	Soil Amenity	2.3
Fish Bone Meal	Soil Amenity	2.3

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Seabird Guano	Soil Amenity	2.3
Fish Bio Live	Soil Amenity	0.66
Mycos	Soil Amenity	0.99
Malted Barley	Soil Amenity	1.32
Gro-Kashi	Soil Amenity	0.99
Neem – Granja Cake	Pest Control	2.30
Red Wigglers (Worms)	Bioturbation	20,000 ct.

Product	Amount	Active Ingredient	Considerations
Green Clean	2 Gallons	Soybean Oil (39%) and Sodium Lauryl Sulfate (19%) along with citric acid and isopropyl alcohol	for russet mites, spider mites, mealybugs, powdery mildew
Doctor Zymes Eliminator	1 Gallon	citric acid and other biologically stimulating ingredients	fungicide/miticide

### Manufacturing

The manufacturing facility will consist of one (1) 10'x40' shipping container. GBV plans to manufacture bath bombs, lotions, balms, and edibles.

There are 12 security cameras situated throughout the entire property. All storage sheds and shipping containers have deadbolts, padlocks, and double-locking mechanisms.

### Site Access

The property is accessed via Summit Creek Road and Frog Pond Lane. Frog Pond Lane has a native surface. It is a shared private road and is in need of maintenance. The interior access road has a rocky surface. There are approximately 400 feet (4,800 ft<sup>2</sup>) of road on the property. The road is 12 feet wide and has a 4% grade.

### Water Availability

The water source for the farm is a surface diversion from an unnamed stream that fills two (2) permitted ponds. The ponds hold an estimated 370,000 gallons, cumulatively. There is a Small Irrigation Use Registration (SIUR) which allows them to store water for cannabis use. The SIUR Registration Number is H100243. Approximately 150,000 gallons are used annually for cannabis cultivation.

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Water Diversion Statements have been filed for this property since 2015. The Statement Numbers are S024799 and S024800. The total estimated water use for both domestic and cultivation purposes is 250,000 gallons, annually.

Water conservation methods will include drip irrigation, keeping the plants small, covering the greenhouse with shade cloth, and using irrigation timers.

It is anticipated that annual water needs for additional license types are as follows:

- Nursery – 50,000 gallons;
- Manufacturing – 25,000 gallons; and
- Distribution – 5,000 gallons.

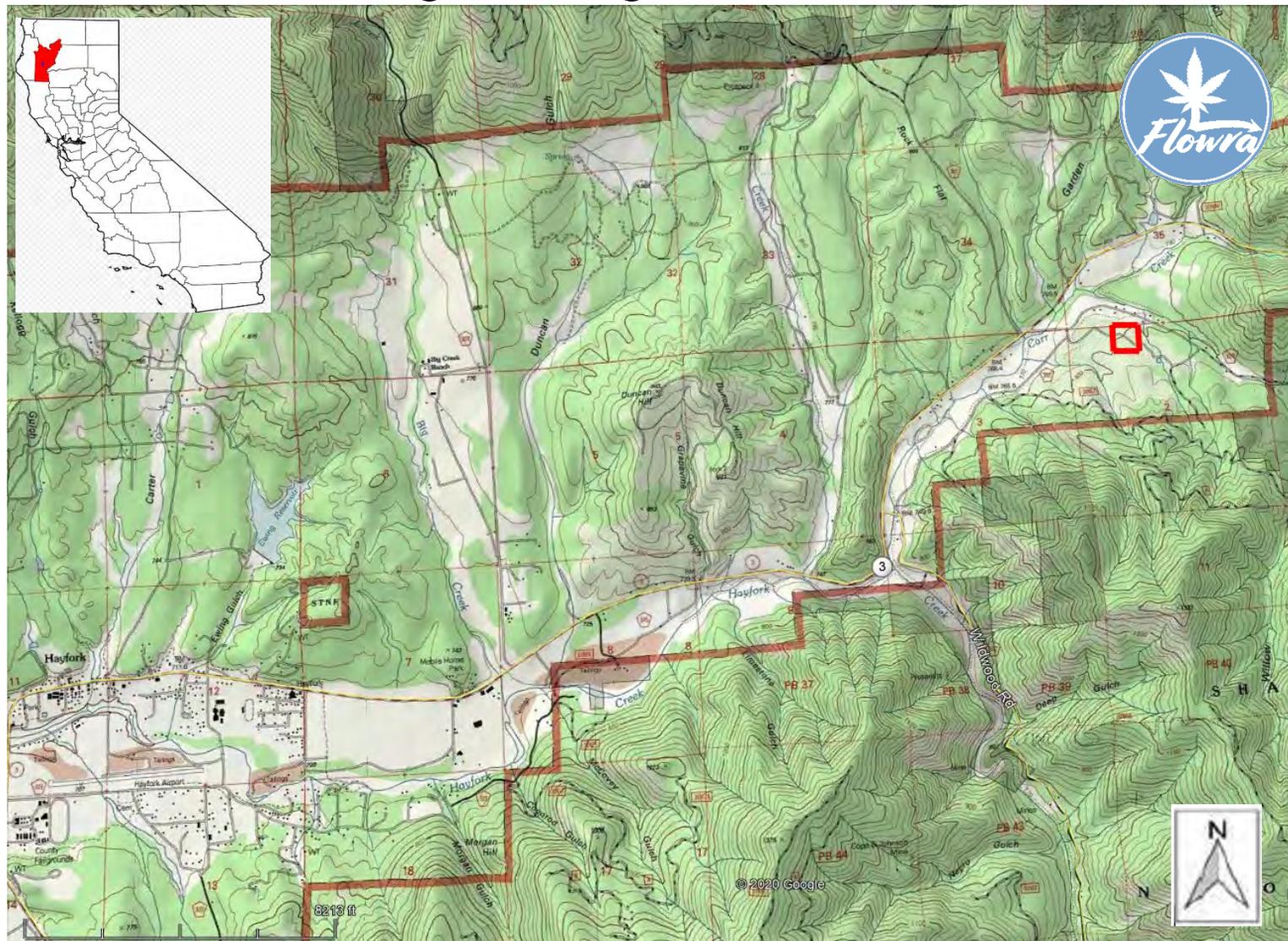
~~Engineered plans will be developed for a rainwater catchment pond in the northwest portion of the property. The pond slopes will be groomed to less than 1.5:1 slope and compacted to a firm and unyielding surface. Pond depth shall not exceed ten (10) feet. A wildlife ramp will be installed at no steeper than 20%. The overflow will have a rock armored spillway, to control overtopping and subsequent discharges into waters of the state. An impervious liner such as clay will be installed on the pond bottom. A grading permit will be required prior to digging the new off-stream pond.~~

~~If rainwater catchment is set up on the dwelling and the barn, it should yield approximately 75,000 gallons of water.~~

### **Domestic Wastewater Discharge**

There is a permitted septic system onsite. A new septic system will be installed to accommodate waste from the manufacturing facility, which will have its own separate and permitted plumbing system.

# Figure 1. Regional Location



 **Project Parcel**

**2.0 PROJECT DESCRIPTION**

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**Figure 2. Project Area Topography**



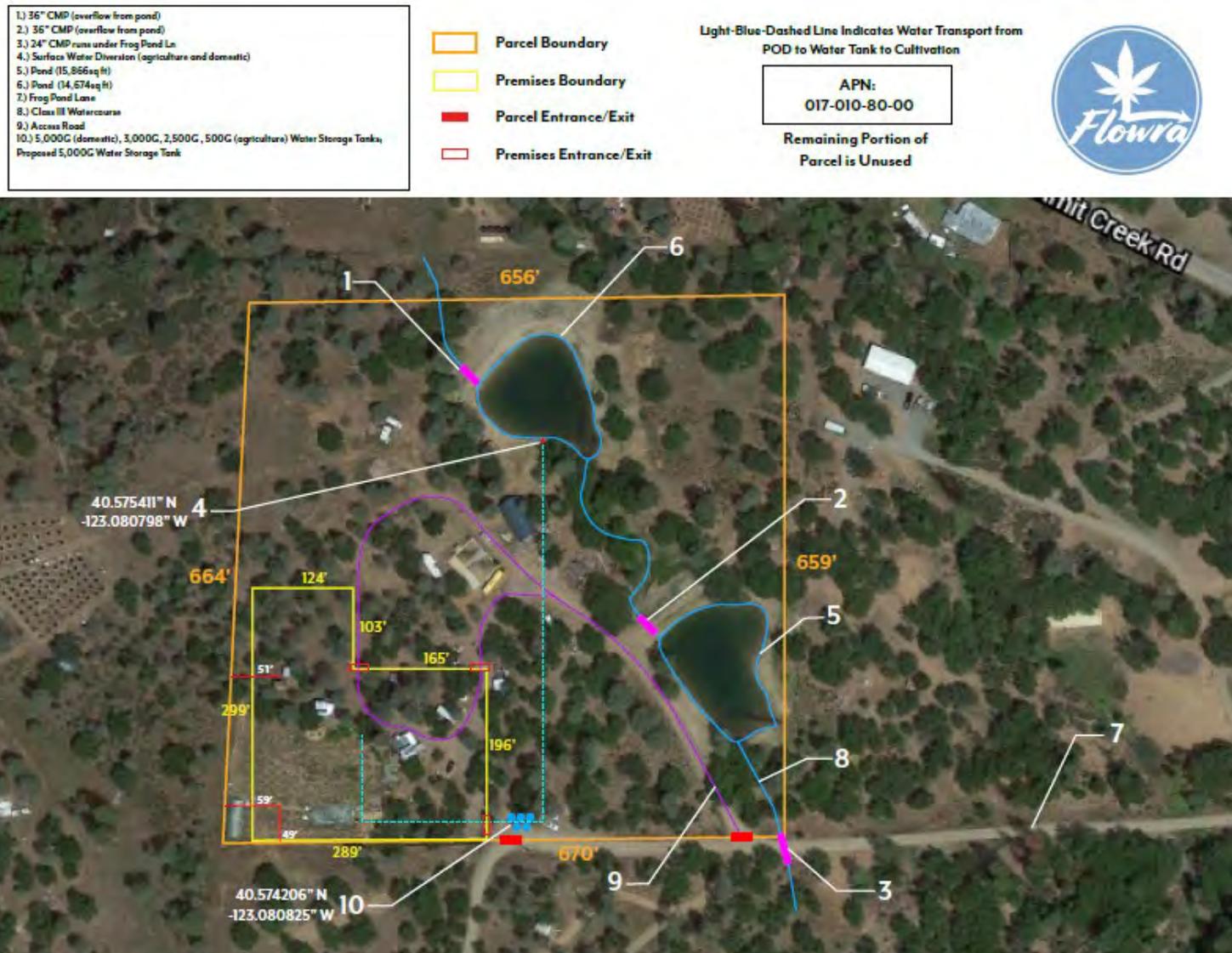


## **2.0 PROJECT DESCRIPTION**

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**Figure 3. Property Diagram**



**2.0 PROJECT DESCRIPTION**

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# Figure 4. Project Diagram



### 3.0 ENVIRONMENTAL CHECKLIST

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1. **Project Title:** Green Beach Ventures LLC Conditional Use Permit Application
2. **Lead Agency Name and Address:** Trinity County Department of Planning, 61 Airport Road, Weaverville, CA 96093
3. **Contact Person and Phone Number:** Kimberly Hunter, Director of Building & Planning, (530) 623-1351 ext. 2
4. **Project Location:** The Project is located at 324 Frog Pond Lane in Hayfork, California on Trinity County Assessor Parcel Number (APN) 017-010-80, approximately 10.95 acres in size. Refer to Figure 1 (Project Location) and Figures 2-3 for specific information on the Project location and activities.
5. **Project Sponsor's Name and Address:** Michael Herron, Green Beach Ventures, LLC, 324 Frog Pond Lane, Hayfork, CA 96041
6. **General Plan Designation:** Agricultural (A)
7. **Zoning:** Agricultural 20 Acre min (A20)
8. **Description of Project:**

The applicant is applying for Conditional Use Permit to develop the property to accommodate five licensed operations: (1) Adult-Use-Small Mixed-Light Tier 1 commercial license for the cultivation of up to 10,000 ft<sup>2</sup> of canopy; (2) a non-storefront retail business; (3) a nursery operation; (4) a distribution business; and (5) a Type 6 (non-volatile) manufacturing operation.

9. **Surrounding Land Uses and Setting:**

The parcel is surrounded by Agricultural-zoned properties in all directions, with neighboring properties consisting variously of cannabis cultivation farms, non-irrigated pastureland and other agriculture in the valley bottoms. The nearest neighboring residence is ~~197~~ approximately 100 feet to the ~~northeast~~ east.

10. **Other Public Agencies Whose Approval is Required:**

Green Beach Ventures LLC ("GBV") is currently licensed with California Department of Food and Agriculture (CDFA/CalCannabis) (CCL19-0000752, exp. 4/8/2021) and the Trinity County Planning Department (CCL- 317, exp. 5/29/2021) to cultivate up to 10,000 ft<sup>2</sup> of cannabis canopy. GBV has been issued a provisional non-storefront retail license (C9-0000345-LIC, exp. 3/23/2021) by the California Bureau of Cannabis Control (BCC), with Trinity County concurrence, and a provisional self-transportation license (C13-0000139-LIC, exp. 11/17/2021)– neither of which requires a Conditional Use Permit (CUP). This CUP application is for the nursery, distribution, and manufacturing licenses. The BCC has also issued GBV a provisional State self-distribution license (C13-20-0000099-REN). Other required permits that have been applied for and/or been issued include but are not limited to State Water Resources Control Board Notice of Applicability (WDID: L\_53CC403556), and CDFW Lake and Stream Bed Notification No. 1600-2015-0265-R1.

11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is**

### **3.0 ENVIRONMENTAL CHECKLIST**

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**there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

Tribal consultation pursuant to AB 52 was initiated on May 12, 2019 with the Nor-Rel-Muk, Hupa, Redding Rancheria, Round Valley, and Wintu Tribes. Only one response was received from the Tribal Chairperson for the Nor-Rel-Muk tribe, indicating their tribe would like to be involved. No responses were received from the other entities requesting initiation of consultation under the provisions of AB 52.

## Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact”, as indicated by the checklist on the following pages.

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

## Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
For

## Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less than Significant with Mitigation Incorporated” applies when the incorporation of mitigation measures has reduced an effect from a “Potentially Significant Impact” to a “Less-than-Significant Impact”. The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level. (Mitigation measures from Section XVII, “Earlier Analyses”, may be cross-referenced.)
5. Earlier analyses may be used if, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D)]. In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where earlier analyses are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and
  - b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

### 3.0 ENVIRONMENTAL CHECKLIST

I. Aesthetics	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The Project site is surrounded by similar private properties with comparable land uses, including many already having various large industrial structures such as shops, garages and warehouses, immobilized recreational vehicles and trailers, outbuildings and scattered debris. The Project parcel itself –and notably the proposed Project area on the parcel – is situated topographically higher in altitude than all but one of the neighboring/adjacent parcels such that the Project site from is not directly visible to offsite viewers. The Project site is not adjacent to any historic sites, therefore the Project is unable to adversely affect a scenic resource (Trinity County GIS). The existing built environment in the vicinity of the proposed project includes both public and privately maintained access roads, scattered residential buildings, and a variety of associated rural structures. The proposed project site has the same general features as surrounding parcels, including an existing cannabis cultivation area and a variety of above and below ground utility services. The nearest residence (offsite) is located approximately 686 feet (0.13 mile) northeast of the Project area.

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

**Discussion of Impacts:**

- a) *No Impact.* Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. There are very limited views of the site from the only public road near the Project (Summit Creek Road), and the

### 3.0 ENVIRONMENTAL CHECKLIST

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development is consistent with current uses. 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) *No Impact.* The Project is not located along a state scenic highway.
- c) *Less Than Significant Impact.* The visual character or quality of the area will be directly impacted following the removal of five Oregon oaks (*Quercus garryana*) with diameters at breast height (DBH) ranging from 11.4” to 16.9” and subsequent installation of 10 shipping containers (seven at 10’x40’ and three at 10’x20’); however, careful consideration of the proposed placement of the shipping containers has allowed for retention of all oak trees with a 16” DBH or greater and/or those with noteworthy habitat value such as possessing a secondary cavity/basal hollow providing nesting or denning potential. Twelve such specimens in the proposed shipping container areas are to remain. Therefore, impacts to the visual character of the surrounding area or impacts to public views are considered less than significant.
- d) *No Impact.* Light pollution occurs when nighttime views of the stars and sky are diminished by an over-abundance of light coming from the ground. Light pollution is a potential impact from the operation of any light source at night. Proper light shields, lighting design, and landscaping are commonly used to reduce light pollution generated from lighting by blocking the conveyance of light upwards. The result is that the lights are not visible from above; therefore, ambient light is not added to the nighttime sky. In addition, light reflecting off surfaces during daylight hours has the potential to create a source of glare in the vicinity of the proposed project.

The proposed project site currently has minimal uses that include minor amounts of nighttime light sources (residence, security lighting). These sources of light are limited and while they are generally seen from a distance as a small light source, do not generate large amounts of light either on or offsite; similarly, the generally developed nature of the surrounding area already has significant electric lighting. Introduction of new lighting from the proposed project will be employed within the shipping containers themselves and not outside and would not be considered a new source of substantial light or glare affecting either daytime or nighttime views in the area. Pursuant to 3 CCR § 8304(c), all outdoor lighting used for security purposes would be shielded and downward facing. ~~The~~ Additionally, the County Cannabis Cultivation ordinance (Ordinance No. 315-823 and amendments) requires that stipulates the light generated by the proposed project would be required to be both (1) downcast, shielded and/or screened to keep light from emanating offsite or into the sky, and (also pursuant to 3 CCR § 8304(g)) (2) light uses for operations require that lighting in greenhouses is shielded so that little to no light escapes, and light shall not escape at a level that is visible from neighboring properties between sunset and sunrise. The proposed greenhouse will utilize blackout tarps for greenhouse light attenuation.

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

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

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

**References:**

Caltrans (California Department of Transportation). 2020. "California Scenic Highway Mapping System." [http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/scenic_highways/). Accessed: October 27, 2020.

———. "Article 2.5 of Chapter 2 of Division 1 of the California Streets & Highways Code". Sacramento: California Office of Legislative Counsel. [http://leginfo.legislature.ca.gov/faces/codes\\_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5](http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5). Retrieved October 27, 2020.

———. "Officially Designated State Scenic Highways and Historic Parkways". Sacramento: California Department of Transportation. [https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019\\_all1y.xlsx](https://dot.ca.gov/-/media/dot-media/programs/design/documents/desig-and-eligible-aug2019_all1y.xlsx) Retrieved October 27, 2020.

National Scenic Byways Program. 2020. <https://www.fhwa.dot.gov/byways/states/CA>. Accessed: October 27, 2019.

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

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

### 3.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>II. Agriculture and Forestry Resources</b>				
<p>In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

**AGRICULTURAL RESOURCES**

According to the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP), the Project site and surrounding areas are designated as *Urban and Built-up Land*. This designation is not considered an agricultural resource. Further, there are no Williamson Act contracted lands in the vicinity of the Project site.

**FORESTRY RESOURCES**

Forest lands are defined under Public Resources Code (PRC) Section 12220(g) as “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland is defined under Public Resources Code Section 4526 as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce timber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

The Project site is not located in forest lands or timberland.

**Discussion of Impacts:**

- a) *No Impact.* The proposed project site possesses soils that are considered “not prime” for agricultural production according to the California Department of Conservation. The County has zoned the area as Agricultural 20 Acre min (A20) which allows agricultural production. The site is not identified on the Department of Conservation’s Important Farmland Series Mapping and Monitoring Program. Based on the above, development impacts related to the conversion of prime, unique, or important farmland would not occur. There is no impact.
- b) *No Impact.* The proposed project site is currently zoned for agricultural uses but not under a Williamson Act contract. Therefore, Project implementation would not result in conflicts with existing agricultural zoning. No impacts would occur.
- c) *No Impact.* The Project would not involve any other changes to the environment that would conflict with zoning for timber production. The site is not zoned TPZ. The current A20 zoning at the Project site does allow for crop and tree farming as a permitted use.
- d) *No Impact.* The site is not located in forest lands.
- e) *No Impact.* Implementation of the proposed project would not result in a conversion of farmland to non-farmland. Therefore, no impacts would occur in this regard.

**Mitigation Measures:** No mitigation measures are required as there is no impact.

**Findings:** In the course of the above evaluations, there will be no impacts associated with *Agricultural Resources* because of the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type.

**References:**

DOC (California Department of Conservation). 2010a. Division of Land Resource Protection, Farmland Mapping and Monitoring Program. <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

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

### 3.0 ENVIRONMENTAL CHECKLIST

III. Air Quality	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment for an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Setting:

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

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

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

Sensitive receptors (e.g. children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes. The nearest sensitive receptors to the Project site are tenants of a single-family residence on an adjacent parcel (approximately 686 feet/0.13 mile northeast of the Project site).

**Discussion of Impacts:**

- a, b) Since Trinity County is in attainment or unclassified for all federal and state air quality standards, the Project is not subject to an air quality plan. The NCUAQMD prepared a Draft Particulate Matter Attainment Plan in May 1995, which is only applicable to portions of the District which are nonattainment for PM10 (e.g., Humboldt County). There would be no impact resulting from Project activities in this regard.

Construction activities proposed by the Project may create minor amounts of dust from extending existing onsite electrical lines to the proposed shipping containers and greenhouses, and installation of a new septic system for the manufacturing container, ~~and construction the catchment pond,~~ but these activities are considered minor activities and would not create dust emissions that would require specialized abatement practices. There would also be a short-term increase of vehicle exhaust during the delivery of the shipping containers to the Project site, and exhaust from chainsaws during the removal of the five Oregon oak trees. These sources would be the only contribution to Project-related changes to existing ambient air quality and will only onsite be for a short and temporary duration. Vehicle use during operation of the Project would be limited to light duty vehicles, and dust emissions would be minor and insignificant. Vehicle traffic associated with the Project is not expected to generate dust emissions that would cause a substantial increase in PM10 within the surrounding area, Trinity County or the NCUAQMD. As such, the Project will not violate any air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulative increase of any criteria pollutant for which the region is in non-attainment.

The Project does not propose to use generators for power, as the site has power provided by the Trinity Public Utilities District (TPUD). Should generators be used at a future time (e.g. as a backup energy source should the TPUD service go down), those uses would be required to be in compliance with the California Air Resources Board (CARB) requirements for the Portable Equipment Registration Program (PERP), should the generators qualify for coverage by this permitting program, or as may be required by the NCUAQMD; additionally, generators would be required to comply with 3 CCR § 8306, which establishes specific requirements for the use and registration of generators rated below or above fifty (50) horsepower. Based on the analysis above, there were no impacts identified.

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

### 3.0 ENVIRONMENTAL CHECKLIST

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Pursuant to 3 CCR § 8106, the proposed project will implement a Pest Management Plan that includes chemical, biological, and cultural methods the applicant anticipates using to control or prevent the introduction of pests on the cultivation site. Furthermore, the proposed project would be required to comply with 3 CCR § 8307, which among other requirements, includes protocols for the prevention of pesticide drift to reduce potential impacts from pesticide application.

Pesticide applications are normally required to be administered a minimum of 300 feet from sensitive receptors (e.g. residences) in the case of dry pesticides and 200 feet in the case of wet pesticides. Generally, pesticide application should occur at low wind velocities (less than 10 mph). As shown on Figure 4 (Project Diagram) and based on a review of aerial photography, application of pesticides in the greenhouses would occur approximately 686 feet from the closest sensitive receptors: a residential building to the northeast on an adjacent downhill parcel. The requirement to maintain appropriate setbacks from nearby residences and limit spraying activities at low wind velocities is a standard County development condition related to cannabis operations. Specifically, the following condition of approval will be a part of the CUP:

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

Based on the analysis above and proposed operating restrictions, development and operation of the Project would have a less than significant impact.

- d) The Project is surrounded by similar private properties with comparable land uses, including many already having various large industrial structures such as shops, garages and warehouses, immobilized recreational vehicles and trailers, outbuildings and scattered debris. The Project parcel itself—and notably the proposed Project area on the parcel—is situated topographically higher in altitude than all but one of the neighboring/adjacent parcels such that the Project site is not directly visible to offsite viewers. The proposed project site has the same general features as surrounding parcels, including an existing cannabis cultivation area and a variety of above and below ground utility services.

Odors that would be generated by the proposed cannabis facility would primarily occur from the cultivation activities. Odors from flowering cannabis plants can be strong within the immediate vicinity of cultivation sites. With the distance of the operation from the nearest offsite sensitive receptor, a single-family home approximately 686 feet (to the northeast), while well outside the 350-foot County Cannabis Ordinance setback requirement from a neighboring habitable dwelling, the effect of strong odors from flowering cannabis plants can be objectionable to some people, which could be considered a significant impact from Project operations.

The Applicant has prepared an Odor Control Plan, found at Attachment A to this document, and upon implementation will serve to reduce any potential impacts from proposed project operations related to objectionable odors to a less-than-significant level. Pursuant to Section 17.43G.040.E of County Ordinance No. 315-849 (Amended Cannabis Program Ordinance), an Odor Control Plan is

not required for lands zoned Agricultural, which is how the Project site is currently zoned. Implementation of the Applicant's proposed Odor Control Plan is included as a mitigation strategy should a substantial number of people be adversely affected by odors generated by Project operations.

**Mitigation Measure AQ-1:** Implementation of the Project's Odor Control Plan, as needed, will reduce potential impacts related to objectionable odors to a less-than-significant level.

**Findings:** In the course of the above evaluation, it is determined that due to Project design, size, location, proposed operating restrictions, and implementation of Mitigation Measure AQ-1 as needed, the Project will have a less than significant impact to *Air Quality*.

#### References:

California Air Resources Board. 2013. "Ambient Air Quality Standards."

<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

———. 2017. *Area Designation Maps/State and National*. <https://www.arb.ca.gov/permits/permits.htm>.

Accessed: October 19, 2020.

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<https://www.cdpr.ca.gov/docs/legbills/calcode/040501.htm>. Accessed: November 7, 2020.

North Coast Unified Air Quality Management District. 2018.

<http://ncuaqmd.org/index.php?page=rules.regulations>. Accessed: October 19, 2020.

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

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

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IV. Biological Resources	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The Project is situated on lands that have been previously disturbed by selective timber harvest and agricultural activities, and is currently used for a single-family residence and cannabis production, as well as appurtenant structures and related uses.

**Discussion of Impacts:**

- a) A Biological Assessment was prepared for the Project by the applicant’s consultant, Down River Consulting (see Attachment B, Biological Assessment and Addendum). The biological assessment included an evaluation of onsite wildlife habitats and the potential presence of Threatened, Endangered, or Sensitive (TES) plant and animal species as well as exotic and/or invasive species. The evaluation found that the site has been historically disturbed by past logging and agricultural

activities and existing plant communities and wildlife habitats consist primarily of native and non-native and invasive plant species.

Literature searches and data analysis of the nine-quadrangle area surrounding the Project site documented occurrences of 11 special status bird species, 8 mammal species of special concern, 3 amphibians of special concern, 4 special status fish species, two invertebrates of special concern, and three special plant species.

Of the 31 species identified, there is very low likelihood that any would be impacted by development of the Project as they are either not present on the site or the habitat areas are not considered part of the Project site (Down River Consulting, 2019). The farm manager will shield all greenhouse lights and install only downcast red LED exterior lighting to mitigate the lighting impacts per existing regulatory requirements of the Trinity County Cannabis Ordinance and CDFA regulations, which will prevent lighting spillover into any sensitive habitat areas in the vicinity of the Project area.

Fisher dens have been documented in close proximity to this project. Fishers and birds of prey could potentially hunt the abundant prey populations available on this property. Fisher mortality has been associated with anticoagulant rodenticides in the Klamath Ranges and the North Coast of California. Any impact that would result in a loss of viability of the previously mentioned predator populations would be considered significant; therefore, Mitigation Measure Bio-5, outlined below, has been developed and will be implemented as part of Project operations that will reduce this potential impact to a less-than-significant level.

There is the aggressively invasive exotic yellow starthistle (*Centaurea solstitialis*) present in the open areas adjacent to the ponds. Many other noxious weed species are present in the cultivation area (see Attachment B, Biological Assessment for a complete list of plants found in the project areas). Proliferation of untreated noxious weeds causes wildlife habitat degradation and has been found to result in enormous agricultural losses. These impacts are considered significant, and Mitigation Measures Bio-1 and Bio-2, outlined below, have been developed and will be implemented as part of Project construction and ongoing operations that will reduce these potential impacts to a less-than-significant level.

- b) The Project does not propose any development or impacts to onsite riparian habitat or any sensitive natural community. Riparian habitat occurs in association with the two onsite ponds. No impacts will occur in this regard.
- c) The two onsite ponds are artificially formed jurisdictional wetlands and would not be affected by Project construction and buildout; the ponds are permitted structures and registered diversions allowing for irrigation purposes. Since these features will be disturbed by the proposed project, no impacts to federally protected wetlands would occur.
- d) Due to the relatively small scale of the proposed project, the movement of any native resident or migratory wildlife species or established native resident or migratory wildlife corridors is not anticipated to be significant. The Project does not propose to alter any streams or rivers or otherwise impact fish movements. Also, the Project site has been previously developed, farmed and otherwise developed with historical activities prior to the Project proposal. These historic activities may have previously altered deer migration or local travel patterns, but this impact is considered the baseline

### 3.0 ENVIRONMENTAL CHECKLIST

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condition and is not considered an impact for this Project. Fencing that may be required around the cannabis operations represents a small portion of the overall historically impacted area and is not seen as a significant impediment to deer migration or the migration of other mammals.

Conversion and construction activities may cause destruction of nests or abandonment of young. Harm to bird nests or eggs would be considered a significant impact; therefore, Mitigation Measure Bio-4, outlined below, has been developed and will be implemented as part of Project construction and ongoing operations that will reduce these potential impacts to a less-than-significant level.

- e) The County General Plan, Conservation Element, discusses the need for the protection and conservation of natural resources including biological resources within the county. While the plan outlines various goals and objectives, there has been no policy developed related to specific biological resources or tree preservation or management that would specifically apply to the Project and the lands where the Project is located. Site development may result in a net loss of 40,000 ft<sup>2</sup> of moderately degraded oak woodland habitat: the Project proposes to remove five Oregon oak (*Quercus garryana*) individuals less than 16" DBH in order to install some of the proposed shipping containers onsite. Though the Project has been designed to avoid impacts to not only the greatest number of existing trees but also the largest and most significant in terms of size and potential wildlife habitat value, loss of Oregon oak woodland would be considered significant. As a result, Mitigation Measure Bio-3, outlined below, has been developed and will be implemented as part of Project construction and ongoing operations that will reduce these potential impacts to a less-than-significant level.
- f) No habitat conservation plans, or other similar plans have been adopted for the Project site or Project area. No impact would occur in this regard.

**Mitigation Measures:** The following mitigation measures have been developed to reduce potential impacts related onsite biological resources to less than significant levels:

**Mitigation Measure Bio-1.** Any heavy equipment used to develop the property should be thoroughly washed and inspected for weeds before arrival in order to prevent the introduction of new weed species.

**Mitigation Measures Bio-2.** Monthly monitoring and treatment of yellow starthistle in the Project development area should be conducted throughout the growing season, together with rapid (treatment) response for new weed populations and modification of an integrated pest management plan, which addresses the biological considerations of the target species.

**Mitigation Measure Bio-3.** Two Oregon oak seedlings shall be planted within the riparian setback around the ponds for every oak tree that is cut during Project development. Seedlings shall be watered once monthly from May through October, for the first three years after planting. Vitality of said plantings shall be monitored once annually. Replanting will occur if the viable population of seedlings drops below 85%. Additionally, vigor monitoring of the planted oaks shall occur once annually, for a period of five years. Data collected for each plant will include date, height, and vigor (good, moderate, poor, or dead). Replacement plantings will occur annually if the planting survival rate falls below 85% of the total original planting numbers.

**Mitigation Measures Bio-4.** Nest and den surveys shall be completed within seven (7) days prior to construction or disturbance by a qualified biologist, as defined in §722.3.A of the California Code of Regulations, if the activities occur between February 1st and August 31st. In the event that a nest or den is

detected, a protective buffer shall be established by the biologist to avoid deleterious impacts to the animal or offspring, such as nest abandonment.

**Mitigation Measures Bio-5.** To mitigate for unintended harm to fishers, the farm shall use preventative and non-chemical strategies to control rodents. The rodent prevention strategy will focus on reducing the rodent carrying capacity of the site by removing food access and items/features that could provide habitat to rodents. The farm manager will erect owl boxes if needed. In the event that an infestation is detected, traps and EradiBait, a non-anti-coagulant powder corn cob, will be used to extirpate the pests.

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

**References:**

Down River Consulting. Biological Assessment, Green Beach Ventures LLC/Frog Pond Legacy, LLC, 324 Frog Pond Lane, Hayfork, CA 96041. May 2019. Addendum: November 25, 2020.

California Department of Pesticide Regulation. *Legal Pest Management Practices for Cannabis Growers in California*. December 2017.

<https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2015/2015atch/attach1502.pdf>. Accessed: November 11, 2020.

———. *Cannabis Pesticides that Cannot be Used*. September 2018.

[https://www.cdpr.ca.gov/docs/cannabis/cannot\\_use\\_pesticide.pdf](https://www.cdpr.ca.gov/docs/cannabis/cannot_use_pesticide.pdf). Accessed: November 11, 2020.

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

USFWS. 2019. National Wetland Inventory. <https://www.fws.gov/wetlands/data/Mapper.html>. Accessed: November 12, 2020.

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

**Setting:**

The Project site has a documented history of being developed for resource extraction (minor logging) and has had minor cannabis cultivation. Other non-historical cultural uses may have occurred at the Project site and in the surrounding vicinity. The Applicant provided a cultural resource study conducted by Nick Angeloff for Archaeological Research and Supply Company that evaluated the proposed project site.

**Discussion of Impacts:**

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

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

**Mitigation Measure CR-1.** If cultural resources, such as chipped or ground stone, or bone are discovered during ground-disturbance activities, work shall be stopped within 50 feet of the discovery, as required by the California Environmental Quality Act (CEQA; January 1999 Revised Guidelines, Title 14 California Code of Regulations [CCR] 15064.5 (f)) and 3 CCR § 8304(d). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the material and offered recommendations for further action.

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

Archaeological Research and Supply Company. *A Cultural Resources Investigation of the Herron Property, Hayfork, Trinity County, CA.* May 2019.

### 3.0 ENVIRONMENTAL CHECKLIST

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

**Setting:**

Construction related energy consumption is considered finite, or short-term, and is considered consistent with construction activities of similar land uses. All construction activities would either rely on the consumption of oil in the form of gasoline and diesel fuel or utilize the three-phase electrical service from Trinity Public utility District (TPUD) that is to be brought to the subject property. The construction activities temporarily increase in energy use would not result in a significant increase in peak or base demands or require additional capacity from the local energy supplier.

There are no local plans for renewable energy or energy efficiency. California passed AB 32 which requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions using methods such as energy efficiency in new development. The Project would be required to comply with the building energy efficiency standards of California Code of Regulations Title 24, Part 6, also known as the California Energy Code. California's Title 24 is the adopted Energy code for Trinity County, as well as the rest of the State of California. The proposed project will comply with these regulations and would inherently reduce energy consumption.

Nine (9) of the shipping containers will utilize standard market-available energy efficient (e.g., compact fluorescent or halogen) light bulbs (total of 25 distributed throughout) and none are to be used for the cultivation operation. One (1) of the shipping containers will employ eight (8) LED Grow Lights (600 watts each) for the R&D area.

Upon Project completion, renewable energy from TPUD is available and planned to be utilized as the primary source of energy, which aligns with state plans for energy from renewable sources.

**Discussion of Impacts:**

- a) Upon completion of Project construction, all Project operations will utilize the energy provided by TPUD. There are no generators or other large machinery proposed for use either during construction or during operation. Additionally, the applicant intends to install solar panels on the roofs of the barn and home, which will reduce consumption of energy from the grid and reliance upon consumption of offsite sources in of energy in general. Due to the nature of Project impacts are considered less than significant.

- b) There are no local plans for renewable energy or energy efficiency. California passed AB 32 which requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions using methods such as energy efficiency in new development. As noted above, the proposed project would not result in a substantial increase in energy consumption beyond existing conditions. The applicant also plans to incorporate solar panels on the roofs of the barn and home, which will be a direct application of renewable energy onsite. Therefore, the proposed project would not conflict or obstruct plans related to renewable energy or energy efficiency, and impacts are less than significant.

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

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

**References:**

Trinity County. *Trinity County General Plan*.

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VII. Geology and Soils	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in an on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Setting:

The Project is situated in the Western Paleozoic and Triassic Belt of the Klamath Mountains province, on the Weaverville Formation, and is composed of sandstone and conglomerate from the Oligocene to Miocene epochs. Upland, to the south of the property, accreted formations from the Eastern Hayfork terrane, composed of argillite and chert from the Devonian to Jurassic periods, dominate. The property is bounded by two faults, one is located approximately less than 3,000 feet to the south, and another major thrust fault is

located less than a mile away to the southwest. The thrust fault separates the Western Hayfork terrane from the Eastern Hayfork terrane, near Hayfork Creek. These faults are not active.

Soils at this site are well-drained and consist of interbedded lenses of loam, gravelly clay loam, gravelly sandy clay loam, and clay loam. These soils are classified as moderately erosive with a K-value of 0.37 and have a hydrological class rating of C. Soils here are the resultant alluvium derived from igneous, metamorphic, and sedimentary rocks.

#### **Discussion of Impacts:**

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

- i) Rupture of a known earthquake fault:

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

- ii) Strong seismic ground shaking:

Although there are known earthquake faults in the Project vicinity these are not considered active. The entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the Project vicinity. Seismic shaking potential is considered minimal and the hazard is not higher or lower at the Project site than throughout the region. Standard design and construction practices meeting current California Building Code (where applicable) will provide adequate protection for buildings, pipelines and other facilities anticipated for the Project. The implementation of these standard building practices will allow the Project to have less than significant impacts.

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

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

- iv) Landslides:

The subject parcel is located on low, moderately-hilly terrain, surrounded by gradually steeper slopes and mountainous terrain; the proposed project site itself is of a very gentle grade. There

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are no documented landslide hazard areas identified within the immediate vicinity of the site that would have an impact on the proposed project. Impacts would be less than significant.

- b) The Project soil classifications consist mainly of well-drained and consist of interbedded lenses of loam, gravelly clay loam, gravelly sandy clay loam, and clay loam. These soils are classified as moderately erosive with a K-value of 0.37 and have a hydrological class rating of C. The site's gentle topography (1%-2% slope maximum for most of the parcel, and the entirety of the Project area) necessitates very little grading to develop the Project, and therefore substantial erosion and sediment transport offsite would not pose a significant impact. Impacts would be less than significant.
- c) See discussion VII.a, above.
- d) There are no documented expansive soils located at the Project site. No impacts would occur in this regard.
- e) An existing permitted septic system is installed on the Project site which meets the requirements of Trinity County Environmental Health Department. Impacts are less than significant.
- f) No paleontological resources or unique geologic features have been identified on the proposed Project site, and the potential for their occurrence is considered minimal; there will be no impact.

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

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

**References:**

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

Johnson, T.D., and Belitz, Kenneth. 2014. *California Groundwater Units: U.S. Geological Survey Data Series 796, 34 p.* <https://dx.doi.org/10.3133/ds796>. ISSN 2327-638X.

National Resource Conservation Service. *WebSoil Survey*. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed: October 30, 2020.

USGS. U.S. *Quaternary Faults*. <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>. Accessed: October 30, 2020.

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

**Setting:**

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

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

**Discussion of Impacts:**

- 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. In any regard, the applicant is planning to install solar panels on the roofs of the barn and home, which will serve as a means to offset the Project’s minor contribution to greenhouse gases and further ensure that the Project’s impacts upon greenhouse gas emissions will be less than significant.

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

As noted above, neither the NCUAQMD nor Trinity County has established thresholds of significance for evaluating a project's GHG emissions. Since there are no applicable thresholds for projects in the Air District or Trinity County, the NCUAQMD recommends the use of thresholds and guidance provided by other air districts in the State such as the Bay Area Air Quality Management District (BAAQMD). The BAAQMD has developed project screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant impacts related to greenhouse gas emissions. Projects below the applicable screening criteria would not exceed the 1,100 metric tons (MT) of CO<sub>2</sub>e/yr GHG threshold established by the BAAQMD for land use projects, which include commercial and industrial facilities. The operational size of the Project as proposed comprises a combined area of 19,400 square feet, and therefore well below the 121,000-square-foot screening threshold size for operational GHG emission levels from a General Light Industrial project.

The proposed project itself, in terms of operations, would not by its nature and design generate a significant amount of GHG emissions. Project operations will be powered by electricity provided through TPUD; the use of a generator or generators would only be for emergency backup power should there be an interruption of TPUD service. During construction, heavy equipment will be used to dig foundations for prefabricated buildings and, to a lesser degree, erect and install those structures; this phase of the Project and the use of such equipment will be finite, intermittent, and short-term. Based on the analysis above, implementation of the Project would have a less than significant impact.

- b) The proposed project involves the construction and operation of several cannabis-related businesses. As a result, the proposed project could generate both direct and indirect GHG emissions. As noted above, there are no local plans that have been adopted for the purpose of reducing the emissions of greenhouse gases.

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

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

*“The inventory for 2016 shows that California’s GHG emissions continue to decrease, a trend observed since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2</sub>e), 12 MMTCO<sub>2</sub>e lower than 2015 levels. This puts total emissions just below the 2020 target of 431 million metric tons. Emissions vary from year-to-year depending on the weather and other factors, but California will continue to implement its greenhouse gas reductions program to ensure the state remains on track to meet its climate targets in 2020 and beyond.”*

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

The Project has been designed such that all proposed operations facilities other than the Nursery and cultivation site would be enclosed within self-contained shipping containers that are required to maintain positive control of the internal environment, and air exhaust from all buildings, including greenhouses used for the Nursery and cultivation area, will be vented through carbon filters to reduce the possibility of any and all incidental emissions that could result from operational activities. Based on the analysis above, development of the Project would have a less than significant impact.

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

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

**References:**

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

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

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

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

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

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

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

——. *District History*. <https://www.trinitypod.com/about/history.aspx>. Accessed: October 30, 2020.

——. *Regional Transportation Plan*. October 2017.

### 3.0 ENVIRONMENTAL CHECKLIST

<b>IX. Hazards and Hazardous Materials</b>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**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

### 3.0 ENVIRONMENTAL CHECKLIST

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accidentally spilled as part of Project development or operations. Hazardous materials are also those listed as hazardous pursuant to Government Code Section 65962.5.

Lists of hazardous materials are maintained by federal and state agencies and are available for public review. The US Environmental Protection Agency (USEPA) maintains a database of hazardous materials as well as radiological materials as part of its RCRAInfo database (USEPA, 2019). 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, 2019), 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, 2019). 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 CALFIRE Fire and Resource Assessment Program (FRAP), delineates the Project area as a part of a designated “Very High Fire Hazard Severity Zone” (VHFHSZ). The FRAP designates lands in three general classifications, “Moderate”, “High” and “Very High” Fire Hazard Severity Zones. Fire suppression for the area is provided by a combination of first responders such as CALFIRE (designated as a State Responsibility Area), with additional firefighting support from nearby the US Forest Service (USFS) stations, and local volunteer fire companies.

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

#### **Discussion of Impacts:**

- a) Small quantities of potentially hazardous substances (e.g., petroleum, chemicals used to operate and maintain vehicles and equipment) would be used at the Project site, but none of these materials will be stored at the Project facilities in quantities to be considered a significant hazard. Fertilizers and soil amendments are used during cultivation operations and are purchased and transported to the site as needed, these will be stored within a shed adjacent to the residence. The nutrients used during the 2017-2018 growing season are listed in the Applicant’s Site Management Plan (SMP). Pest management consists of applications of commercially available Granja (neem oil) cake. The product is listed by the California Department of Pesticide Regulation (DPR) as “Legal to Use on Cannabis.” Pursuant to 3 CCR § 8106, the cultivation operation would adhere to pest management plan submitted to California Department of Food and Agriculture (CDFA). The proposed project would also be required to comply with 3 CCR § 8307, which among other requirements, includes pesticide application and storage protocols. The applicant states that these are routinely purchased and utilized onsite but are not stored in large quantity (see Section 2.0, Project Description). Application of fertilizers and pesticides are used on cultivation areas only. Applicant has stated that used fertilizer and chemical containers are disposed of according to manufacturer’s requirements and taken to the Hayfork Transfer Station solid waste facility. Compliance with standard transport and handling procedures of the chemical manufacturers and standard conditions of approval through the various County cannabis ordinances and DPR requirements would ensure that impacts would 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 and pesticides) would be used at the proposed project site. Accidental releases of these substances could potentially contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. The proposed project would be required to comply with 3 CCR § 8307, which among other requirements, includes pesticide application and storage protocols. Compliance with standard safety procedures, hazardous materials handling regulations, and pesticide application requirements would ensure that impacts 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 nearest one is Hayfork High School, five miles away). No impacts would occur in this regard.
- d) The proposed project is not located on a site which is included on a list of hazardous materials sites and would not create a significant hazard to the public or the environment. No impacts would occur in this regard.
- e) The proposed project is not located within two miles of a public or private airport (Hayfork Airport is 5.5 miles away). No impacts would occur in this regard.
- f) The proposed project is not located in the vicinity of a private airstrip. No impacts would occur in this regard.
- g) There are no indications at this time that the proposed project would impair implementation of, or physically interfere, with an adopted emergency response plan or emergency evacuation plan. There would be no impact from this Project and there would be no impact to users of the Project site.
- h) The vast majority of the site has been previously disturbed by onsite agricultural activities. Development of the Project will comply with State Fire Safe Standards for protection of life and property from wildfires through maintaining appropriate vegetation management around proposed cultivation structures, the availability and accessibility of onsite water storage (i.e., water storage tanks storing a total of 13,100 gallons), and other actions required for fire protection/suppression actions as may be determined by the County or CALFIRE. Through implementation of fire safe standards, the Project will not be at significant risk of damage from wildfire and the Project would not cause significant wildfire risk to the area from Project-related activities and be in compliance with the County General Plan Safety Element. Based on this evaluation the Project would contribute to a less than significant impact related to increased wildfire risk in the area.

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

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

**References:**

California Department of Toxics Substances Control (DTSC). 2020. *Envirostor Database*.

<https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=311+Industrial+Parkway%2C+Weaverville+CA>. Accessed: October 30, 2020.

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

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

———. *Fire Hazard Severity Zones*. 2007.

State Water Resources Control Board. *Geotracker Database*. 2019.

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

———. *General Plan Circulation Element*. Revised 2002.

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

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

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

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

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

USEPA. 2020.. *RCRA Database*. <https://rcrapublic.epa.gov/rcraonline/index.xhtml>. Accessed: October 30, 2020.

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

**Setting:**

The Project is on private lands surrounded by similar development. The water source for the Project is a surface diversion from an unnamed stream that fills two (2) permitted ponds. The ponds hold an estimated 370,000 gallons, cumulatively. There is a Small Irrigation Use Registration (SIUR) which allows them to store water for cannabis use; the SIUR Registration Number is H100243. Approximately 150,000 gallons are used annually for cannabis cultivation. Water Diversion Statements have been filed for this property since 2015. The Statement Numbers are S024799 and S024800. The total estimated water use for both domestic and cultivation purposes is 250,000 gallons, annually.

Impacts to water quality associated with cannabis cultivation activities proposed by the Project were initially regulated by the North Coast Regional Water Quality Control Board (RWQCB) under Order No. 2015-0023

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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, 2019 as applicable to cannabis production. The applicant transitioned to the SWRCB Cannabis Cultivation Policy in 2019 as required. Additionally, the Cannabis Ordinances developed by the County identify specific requirements for water use and quality, including compliance with Senate Bill 94 (SB 94) and any applicable NCRWQCB or SWRCB regulations in effect. The Project applicant has also completed a Site Management Plan (SMP) for the operations at the Project site, in compliance with the conditions outlined in Order 2015-0023 as required by the Cannabis Policy. The SMP includes activities mostly consisting of roadway maintenance and erosion prevention and sediment capture treatments.

#### Discussion of Impacts:

- a) The proposed project is served by an existing onsite permitted septic system for the treatment of domestic wastewater. Additionally, the applicant has had an SMP completed for the site and the current operations. The plan documents that the applicant has been working on improvements outlined in the plan and there is a Streambed Alteration Agreement in place between the applicant and CDFW. As stated by the Regional Water Quality Control Board the applicant is required to comply with the requirements of the Regional Order No. RI-2015-0023 which requires dischargers to implement Appendix B, Best Management Practices for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects. Both of these regulatory requirements are also pursuant to 3 CCR § 8102. The project is also required to comply with 3 CCR § 8307, which among other requirements, includes pesticide application and storage protocols effective for protecting surface water and groundwater. Based on the above, the Project will have a less than significant impact.
- b) Water for the proposed Project is derived from a surface diversion from an unnamed stream that fills two (2) permitted ponds. The ponds hold an estimated 370,000 gallons, cumulatively. There is a Small Irrigation Use Registration (SIUR, Registration Number H100243) which allows them to store water for cannabis use. Approximately 150,000 gallons are used annually for cannabis cultivation. Pursuant to 3 CCR § 8107, the Applicant shall provide information related to water sources and storage used by the proposed project to the CDFA. Engineered plans are being developed for a rainwater catchment pond in the northwest portion of the property. Pond depth would not exceed ten (10) feet. The overflow will have a rock armored spillway, to control overtopping and subsequent discharges into waters of the state. An impervious liner such as clay will be installed on the pond bottom. A grading permit will be required prior to digging the new off-stream pond. While there is no groundwater well on the property or used for the operations, the existing two on-stream ponds and the proposed off-stream catchment basin do represent the potential for reducing a degree of groundwater recharge from the site during the growing season. The overall effect upon the groundwater basin is and will remain less than significant, even in a cumulative sense, as the parcel is perched upon a promontory and most rainwater still runs off the site, downhill towards the Duncan Creek – Carr Creek drainages, and therefore the impact from the Project is less than significant.
- c) ~~While initial excavation of the proposed catchment basin could have potential to cause erosion or siltation on- or offsite, the excavation work will be completed during the region's clear dry season (May 15 through October 15), the bottom of the basin is to be lined with an impervious material rather than left with an earthen bottom, and the overflow spillway is to be rock-armored to prevent~~

any downcutting or erosion/soil transport; therefore, in this regard the Project as proposed poses a less than significant impact resulting from:

- i. erosion or siltation on- or offsite;
  - ii. increase in the rate or amount of surface runoff in a manner, resulting in flooding on- or offsite;
  - iii. runoff water exceeding the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff; or
  - iv. impeding or redirecting flood flows.
- d) Flood zones are geographic areas that FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM). Each zone reflects the anticipated type of flooding in the area. As depicted on the FEMA Flood Zones maps for the area, the Project site is not in a floodway, 100-year flood zone, or the 500-year flood zone. Based upon this information and that the location of the Project site is outside of any flood zone, there is no risk of release of pollutants due to Project inundation. The threat of a tsunami wave is not applicable to inland areas; there is no potential for the generation of a seiche. There is no risk of inundation of the site, and as such no impact would occur. No impact would occur.
- e) There is no water quality control plan or sustainable groundwater management plan in place for either the community of Hayfork or the area of the County in which the proposed project is situated. There will be no impact.

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

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

**References:**

Federal Emergency Management Agency. 2010. *Flood Insurance Rate Map (FIRM), Map Number 06105C1041F, Revised July 20, 2016.*

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

———. *State Water Resources Control Board Order No. WQ 2017-0023-DWQ.*

[https://www.waterboards.ca.gov/water\\_issues/programs/cannabis/docs/finaladoptedcango101717.pdf](https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/finaladoptedcango101717.pdf)

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

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

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

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

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

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XI. Land Use and Planning	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The Project site is located northeast of central Hayfork, up on a promontory above where Duncan Creek enters Carr Creek valley. The Project site is surrounded by County General Plan designated Agricultural (A) lands and Agricultural 20 Acre minimum (A20) lands with varying levels development. There are minimal commercial and public service developments in the community of Hayfork.

The Project site parcel has the same General Plan designation and zoning as the surrounding parcels – Agricultural (A) for Agricultural 20 Acre minimum (A20). Both the County General Plan and Zoning Districts did not specifically anticipate development of commercial cannabis when these land use plans and zoning districts were developed. In response to California State Law that allows commercial cannabis activities under permitted and controlled conditions, Trinity County developed County-specific ordinances to regulate commercial cannabis cultivation, testing, nurseries, manufacturing, distribution, microbusiness, events and sales within the County. Ordinances 315-823, 315-829, 315-830 and 315-841 regulate cultivation and are all specifically titled “An Ordinance of the Board of Supervisors of the County of Trinity Amending Zoning Ordinance No. 315 Creating Section 28: Commercial Cannabis Cultivation Regulations”. All of these ordinances are referred to, collectively, in this section as the “Cannabis Ordinance.” Ordinances 315-828 and 315-834 regulate distribution facilities, Ordinances 315-826 and 315-827 regulate nursery operations, and Ordinances 315-838 and 315-842 regulate Manufacturing activities. All of these stipulate that the respective operations and facilities “shall not be located within one thousand (1,000) feet of a youth-oriented facility, school, church, or residential treatment facility ... or within five hundred (500) feet of an authorized school bust stop. Variances are allowed upon review of the Planning Commission.” As the subject parcel is not in proximity of any of these features/facilities, the Project as proposed is in compliance with those particular provisions of the Ordinances.

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

The Project would not require a variance as the cultivation portion of the Project occurs beyond the 30-foot setback requirement from the property line and no sensitive receptors are expected to be affected by the

Project as the nearest sensitive receptor is a residence on an adjacent parcel 686 feet from the cultivation area, also well outside the 350-foot setback requirement for nearby residences.

**Discussion of Impacts:**

- 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 all sides has similar levels of development. No impact has been identified.
- b) The County's General Plan serves as the overall guiding policy document for land use and development. The subject property is designated in the General Plan as Agricultural (A) land and is zoned for Agricultural 20 Acre minimum (A20). The surrounding properties all have the same zoning General Plan land use designation. As the proposed project consists of agricultural related activities onsite, the Project is considered consistent with the County A20 zoning. 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. There would be no impact.

The Project as proposed complies with the Trinity County Ordinance 315-823, requiring a 350 feet setback from the property line for Type-2 (small, or up to 10,000 square feet of canopy) cannabis cultivation. Based on the proposed uses of the Project, the proposed project does not conflict with the land use designations for the Project site. Therefore, no impacts would occur in this regard.

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

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

**References:**

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

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

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

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

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

### 3.0 ENVIRONMENTAL CHECKLIST

XII. Mineral Resources	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

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

**Discussion of Impacts:**

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

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

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

**References:**

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

National Resource Conservation Service. WebSoil Survey.

<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed: October 30, 2020.

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

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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>XIII. Noise</b>				
Would the project:				
a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

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

In the vicinity of the Project, noise generation sources are varied and consist of vehicle traffic along Summit Creek Road and State Route (SR) 3, and any maintenance and light industrial activities on surrounding parcels. The generally hilly terrain of the area allows noise to travel distance through the canyons, though surrounding vegetation will minimize impacts.

Residential developments, schools and hospitals are considered sensitive noise receptors as these are locations where people sleep or typically expect quiet conditions. Sensitive noise conditions are typically at night and measured as indoor levels in decibels (dB). The nearest sensitive receptor to the Project site is a residence (approximately 638 feet to the north of the property line).

**Discussion of Impacts:**

- a) The nearest offsite sensitive receptor is a residence approximately 686 feet north of the proposed cultivation area. Project-generated noise may be heard at these residences, but normal cannabis operations are not considered a significant noise generation source because the daily activities are generally hand operations with minimal equipment use. The Project will not have any onsite generators, therefore there will be no noise associated with stationary generation devices. Minor

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amounts of noise could be generated from an increase in general vehicle trips to and from the site, possibly on a daily basis, which would contrast with current existing conditions on the site and through the area; however, given that the Project site is surrounded by similar properties and comparable operations and would operate only during normal business hours, the Project as proposed would not generate a level of noise that would be considered excessive and will not violate any noise ordinance. Based on the limited scope of the construction, the proximity of the Project to similar types of development, and the distance to the nearest sensitive receptor, implementation of standard conditions of the various cannabis ordinances and review by County for compliance during operations will reduce impacts to less than significant.

- b) Ground borne vibrations are usually associated with heavy vehicle traffic (including railroad traffic), and with heavy equipment operations. The proposed project does not include activities that would result in groundborne vibration, such as pile driving or heavy construction equipment. Therefore, there will be no impact.
- c) The proposed project is not located within the vicinity of a private or public airport or airstrip. No impacts would occur in this regard.

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

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

**References:**

Environmental Protection Agency, *Noise Effects Handbook*. USEPA, Revised 1981.

[www.nonoise.org/library/handbook/handbook.htm](http://www.nonoise.org/library/handbook/handbook.htm)

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

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

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

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

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

———. *General Plan Noise Element*. 2003.

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

**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 area is primarily individual rural residences on larger parcels of land.

**Discussion of Impacts:**

- a) Implementation of the proposed project would result in the development and use of existing lands, with the installation of a number of new facilities. Two (2) year-round residents are on the site and no seasonal workers are proposed for this Project. 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 associated structures (i.e. sheds, existing greenhouses). The proposed project would not displace any people or existing housing; the existing housing onsite would be retained for use by two of the permanent residents. No impact has been identified.

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

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

**References:**

US Census Bureau. American Fact Finder.  
[https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml). Accessed: November 2, 2020.

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XV. Public Services	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. 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 following public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The Project site is located northeast of central Hayfork, which has 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 Fire 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. The nearest medical facility is Hayfork Community health Clinic, with full services and capabilities available at Trinity Hospital in Weaverville – about 25.5 miles by road northeast of the proposed project. Hayfork Elementary School serves grades K-8, with Hayfork High School and Valley high School serving the upper grades.

**Discussion of Impacts:**

Based on available information as well as that provided by the applicant, and observations made on the Project site and in the vicinity, the following findings can be made:

*Fire and Police Protection:*

Fire and police protection services to the proposed project are currently provided by County, State and Federal agencies and private emergency responders. Development of the Project within the community is not expected to significantly increase the demand for these protection services. 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 Unified School District provides primary and secondary 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 two (2) permanent employees have no plans to use other or seasonal employees for the Project operations. Therefore, the potential impacts are considered less than significant.

*Parks:*

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

*Other public facilities:*

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

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

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

**References:**

California Board of Forestry and Fire Protection. *State Responsibility Area Viewer*.

<https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. Accessed: November 11, 2020.

Mountain Valley Unified School District. <https://www.mvusd.us/>. Accessed: November 11, 2020.

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

Trinity County Office of Education. [www.tcoek12.org](http://www.tcoek12.org). Accessed: November 11, 2020.

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		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>XVI. Recreation</b>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

There are no developed recreation specific parks or facilities near the Project. The nearest developed site is the Hayfork High School that has play equipment and sports fields, with similar facilities at the other local school sites. Other dispersed recreation facilities are a community pool, campgrounds and wilderness areas.

**Discussion of Impacts:**

- a) The proposed project does not propose to add significant new numbers of people that would require housing and ancillary recreation facilities, therefore the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- b) The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

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

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

**References:**

- Trinity County. *General Plan Open Space and Conservation*.
- USDA Forest Service, Shasta-Trinity National Forest, Recreation.  
<https://www.fs.usda.gov/recmain/stnf/recreation>.

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<b>XVII. Transportation</b>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>Would the project:</b>				
a. Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Setting:**

The Project site is located on private property that has existing access which has a connection to SR-3, the main transportation artery connecting the region to other parts of the County as well as neighboring counties.

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).

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). The proposed project is estimated to generate approximately 24 vehicle/truck trips per day during peak activity and 16 vehicle/truck trips per day during the slowest part of the year. As such, even during the peak activity at the site, the estimated project trips would be 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

Public transit services are provided by the County through Trinity Transit, which provides daily bus service between Weaverville and Redding, Weaverville and Lewiston and Weaverville and Hayfork. Other private transit carriers also operate in Trinity County to provide services to the elderly, disabled, school children and others.

**Discussion of Impacts:**

- a, b) Project approval would allow for the development of various cannabis-related business operations on an existing agricultural site. As this Project does not propose the development of new roads or

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easements there is no conflict with the current Circulation Element of the General Plan. The facility is expected to employ two employees, who are also already the permanent residents on the site; this will not cause a significant increase in traffic or require changes to any roadways, public transit, or pedestrian facilities.

Since the proposed project operations could potentially create an increase in general traffic coming to and from the site, possibly on a daily basis, which would contrast with current existing conditions on the site and through the area, this would represent a change in VMT; nevertheless, given that the Project operations as proposed are not unique to this area of greater Hayfork or Trinity County, the impacts are considered less than significant.

- c) The proposed project has not proposed any new roads and does not propose or require any realignment of existing roads that might cause hazards to geometric design features or have incompatible uses. No significant hazards are anticipated with the development of this Project; the Project would have a less than significant impact.
- d) Adequate existing access is provided to the site with State, County and onsite private roads. The Project does not change the existing access to the Project site; therefore, the ability for emergency vehicles and personnel to access the subject property will remain at existing condition levels upon completion of the proposed project. The Project will be required to comply with State and local Fire Safe Standards and applicable regulations for emergency vehicle access to the Project sites including implementation of requirements by the Trinity County Department of Transportation and as directed by CALFIRE for compliance with State Fire Safe Standards. No impacts are anticipated in this regard.

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

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

**References:**

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

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

Trinity Transit. <http://trinitytransit.org/>. Accessed: November 2, 2020.

<b>XVIII. Tribal Cultural Resources</b>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:</p>				
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 § 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 § 5024.1. In applying the criteria set forth in subdivision (s) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting:**

As previously discussed in Cultural Resources section (Section V) of this document, there are no known prehistoric resources that exist on the subject parcel, or historic disturbances have cleared the area of any evidence of prehistoric use. Mitigation measures have been developed for the potential future location of cultural resources which are also identified in Section V of this document and are considered to be sufficient to protect unknown future tribal cultural resources that may be found at the Project site.

**Discussion of Impacts:**

Notification under AB 52 was delivered to interested Tribal entities on May 12, 2019. One response was received within the 30-day comment period requesting formal consultation under the provisions of AB 52. Tribal outreach occurred during the development of the Cultural Resources Investigation (Archaeological Research and Supply Company), and those efforts and results are discussed in Section V, Cultural Resources.

- a) Based on the results of the consultation effort and the Cultural Resources Investigation report for the proposed project, there are no known historical resources that are listed, or eligible for listing, on the California Register of Historical Resources. Mitigation measures were developed for the potential future location of cultural resources and are identified in Section V of this document. Based on the lack of known resources, impacts are anticipated to be less than significant.
- b) Trinity County (as lead agency) has determined that there are no resources present that are considered significant, and no additional mitigation or Project modifications are required. Mitigation

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measures for cultural resources are provided in Section V, Cultural Resources section for development of this Project that are considered to be sufficient to protect unknown future cultural resources that may be found at the Project site.

**Mitigation Measures:** See Mitigation Measure CR-1 and Mitigation Measure CR-2 above in Section V, Cultural Resources, of this document.

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

**References:**

Archaeological Research and Supply Company. *A Cultural Resources Investigation of the Herron Property, Hayfork, Trinity County, CA.* May 2019.

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<b>XIX. Utilities and Service Systems</b>	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b>Would the project:</b>				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider, that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Setting:**

The proposed project has an existing and permitted onsite septic system that disposes of domestic wastewater and is proposing to install a second one to accommodate wastewater from the manufacturing operation. Power is provided to the site by the Trinity Public Utilities District (TPUD) and no additional power sources are proposed for this Project.

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.

The source of water for the site is currently a surface diversion from an unnamed stream that fills two (2) permitted ponds. The ponds collectively hold an estimated 370,000 gallons, and the diversion is permitted through a water right and Small Irrigation Use Registration (SIUR) which allows them to store water for cannabis use. The SIUR Registration Number is H100243. Approximately 150,000 gallons are used annually for cannabis cultivation. Water Diversion Statements have been filed for this property since 2015. The Statement Numbers are S024799 and S024800. The total estimated water use for both domestic and cultivation purposes is 250,000 gallons, annually. ~~Water for the proposed project would be served by the construction of a rainwater catchment basin. Until this system is developed and operational, the Applicant~~

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proposes to design and install a rainwater catchment system to harvest water from the building roofs. This water will be stored in tanks until the catchment basin is developed in the northeast portion of the property.

#### Discussion of Impacts:

- a) The proposed project has an existing onsite septic system that disposes of domestic wastewater. This system would continue to be utilized for the two permanent workers/residents at the site. The applicant is proposing to install a second one to accommodate wastewater from the manufacturing operation. The Applicant will 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. There is sufficient power provided by the TPUD to the site for the proposed project, and there are no stationary generators proposed for the Project. Based on the current anticipated uses at the site, impacts would be less than significant.
- b) Water for the proposed project would be served by the construction of a rainwater catchment basin. Until this system is developed and operational, the Applicant proposes to design and install a rainwater catchment system to harvest water from the building roofs. This water will be stored in tanks until the catchment basin is developed in the northeast portion of the property existing surface diversion from an unnamed stream that fills two (2) permitted ponds. The ponds collectively hold an estimated 370,000 gallons, and the diversion is permitted through a water right and Small Irrigation Use Registration (SIUR) which allows them to store water for cannabis use. The SIUR Registration Number is H100243. Approximately 150,000 gallons are used annually for cannabis cultivation. Water Diversion Statements have been filed for this property since 2015. The Statement Numbers are S024799 and S024800. The total estimated water use for both domestic and cultivation purposes is 250,000 gallons, annually. Based on the current anticipated uses at the site, impacts would be less than significant.
- c) The proposed project is served by an onsite septic system that is owned by the applicant; there are no impacts to community/public wastewater systems, as there are none in the area. The applicant shall ensure that the existing septic system meets the requirements of Trinity County Environmental Health Department, within 60 days of issuance of the use permit.
- d) Non-cannabis solid waste produced by the Project would be disposed of at existing solid waste facilities as other residential and commercial solid waste is currently handled in the County. Sending the solid waste stream to existing permitted facilities, either by existing contract haulers or self-disposal, will ensure that the Project does not violate any federal, State or local statutes related to solid waste. The Project will also develop onsite composting of organic debris from the cannabis cultivation operations, which will reduce the solid waste impact to the landfills. A Cannabis Waste Management Plan will be prepared for the proposed project pursuant to 3 CCR § 8108 and submitted to the California Department of Food and Agriculture. Cannabis waste will be stored and managed at the project site at a designated composting area pursuant to 3 CCR § 8308. Based on the above, the impact to solid waste services will be less than significant.
- e) The County regulates and operates programs that promote the proper disposal of toxic and hazardous materials from households, including those created by the Project. There are no current waste reduction plans or statues in place in the County. However, should they be implemented the

proposed project would comply with local statutes and regulations related to solid waste. Less than significant impacts are anticipated in this regard.

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

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

**References:**

Trinity County Solid Waste. <https://www.trinitycounty.org/Solid-Waste>. Accessed: November 2, 2020.

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

**Setting:**

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 agricultural parcels in the area surrounding the Project. Fire hydrants in the County are limited to highly developed areas, and none are located in the area of the Project. However, the County General Plan has taken this fact into consideration as a part of the Trinity County General Plan Safety Element. In addition to the local General Plan, the State of California has developed Fire Safe Standards (Public Resource Code Sections 4290 and 4291) which dictate development in rural areas throughout the state, and require vegetation clearing, onsite water storage requirements and other building and development standards.

**Discussion of Impacts:**

- a) Based on the Trinity County General Plan Safety Element, State Route 3 is considered a Major Evacuation Route. As the Project will not significantly impact traffic intensity on the roadway relative to existing conditions, or impair access to the roadway or surrounding properties, the Project is not expected to impair the emergency evacuation plan. Due to the location of the Project the impacts are considered to be less than significant.
- b) The Project area has been previously developed and the proposed project does not propose significant changes to the Project site or surrounding property that would exacerbate wildfire risks.

Due to the landform of the site occupants could be exposed to elevated concentrations of pollutants from a wildfire as the site sits in a narrow canyon. However, the development of the Project itself is not anticipated to contribute to any significant elevation in risks to occupants from uncontrolled spread of wildfire. Based on past land uses at the site and in the area that have cleared flammable vegetation, including conformance with State and County fire safe standards, the Project will result in impacts that are less than significant.

- c) The Project area has been previously developed and the proposed project does not propose changes to the Project site or surrounding property that would exacerbate wildfire risks. Due to the landform of the site occupants would be exposed to elevated concentrations of pollutants from a wildfire as the site sits up high on a hill above the Duncan Creek and Carr Creek valleys. The site's forest canopy is very open and interspersed with open grassland, as well as having very wet areas of emergent wetland surround the two pond areas, and a stand-reducing fire event is not likely even in dry conditions. Additionally, the vegetation character is similar on all the surrounding parcels. The development of the Project itself is not anticipated to contribute to any significant elevation in risks to occupants from uncontrolled spread of wildfire (e.g. the electrical distribution lines will be subterranean, appliances are to be contained within sealed shipping containers, irrigation will be gravity-fed, etc.). Based on past land uses at the site and in the area that have cleared flammable vegetation, including conformance with State and County fire safe standards, the Project will result in impacts that are less than significant.

The Project does not include the addition of new roads, fuel breaks, emergency water sources, power lines or other utilities. There are three (3) existing and two (2) proposed water storage tanks on the property totaling 16,000 gallons which can be used for fire suppression. There are no temporary or ongoing activities that will exacerbate the fire risk in the area, and as a result impacts are considered less than significant

- d) The location of the proposed project does not fall within a FEMA flood zone, nor are there any sheer or unstable cliffs in the immediate area. There is no reason to believe that occupants or structures would be exposed to significant risks from flooding or landslides as a result of post-fire runoff; impacts are considered to be less than significant.

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

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

**References:**

- California Public Resources Code, Division 4, Forests, Forestry and Range and Forage Lands. Part 2  
Protection of Forest, Range and Forage Lands. Chapter 2, Hazardous Fire Areas, Sections 4251-4290.5.  
———. Chapter 3, Mountainous, Forest-, Brush- and Grass-Covered Lands, Sections 4291-4299.
- California Board of Forestry and Fire Protection. *State Responsibility Area Viewer*.  
<https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. Accessed: November 2, 2020.

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———. *SRA Fire Safe Regulations*. <https://www.rsf-fire.org/wp-content/uploads/2016/10/SRAFireSafeRegulations.pdf>. Accessed: November 2, 2020.

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

———. *Parcel Viewer*.  
<http://trinitycounty.maps.arcgis.com/apps/Viewer/index.html?appid=320cflc1558c43c8b1f2f70c23d35026>. Accessed: November 2, 2020.

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XXI. Mandatory Findings of Significance	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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, with the implementation of the proposed mitigation measures, the potential for the Project as proposes to degrade the quality of the environment and and/or reduce the habitat or cause wildlife populations to drop below self-sustaining levels is less than significant.

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 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 investigation, 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 air quality, or biological, cultural, and tribal 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

### 3.0 ENVIRONMENTAL CHECKLIST

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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, as well as the incorporation of the proposed mitigation measures, there is the potential of the Project as proposed would cause substantial adverse effects on human beings, either directly or indirectly, is less than significant.

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

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**Attachment A**

**Odor Control Plan**



Mark Herron, Green Beach Ventures LLC

Trinity APN 017-010-80

Application for a Commercial Cannabis Cultivation License

Zone: Agricultural 20 Acre min (A20); General Plan: Agricultural (A)

## Odor Mitigation Plan

### Introduction

Green Beach Ventures LLC will take active measures to eliminate any cannabis odor that may potentially emanate from any facility or component of this cannabis operation to mitigate and eliminate possible disturbances. There are several industry best practices that we will install into our operation to ensure that the air poses zero health risks to any employee, visitor, our surrounding neighbors/community/residents. The multiple layers of odor control that Green Beach Ventures LLC will install will be more than sufficient to mitigate all odors produced. These include redundant carbon filtration located throughout the facility, negative pressure in all cannabis related zones, odor ionizing technology, and employee standard operating procedures.

The following pages describe our hardware and systems, procedural activities, staff training processes, record keeping protocol for all aspects of our odor control policy, and rigorous maintenance, updates, and regular scheduled monitoring for all aspects of our odor control plan. Any air that is emitted from the operation will be carbon filtered, passed through an ozone generator, as well as bi-polar ionized. Green Beach Ventures LLC will ensure that no airborne emissions will be emitted that are readily detectable offsite without instruments by the average person.

### Client Specific Activities

324 Frog Pond Lane, Hayfork, California. The Project is surrounded by similar private properties with comparable land uses, including many already having various large industrial structures such as shops, garages and warehouses, immobilized recreational vehicles and trailers, outbuildings and scattered debris. The Project parcel itself—and notably the proposed Project area on the parcel—is situated topographically higher in altitude than all but one of the neighboring/adjacent parcels such that the Project site is not directly visible to offsite viewers. The Project site is not adjacent to any historic sites; therefore, the Project is unable to adversely affect a scenic resource (Trinity County GIS). The existing built environment in the vicinity of the proposed project includes both public and privately maintained access roads, scattered residential buildings, and a variety of associated rural structures. The proposed project site has the same general features as surrounding parcels, including an existing cannabis cultivation area and a variety of above and below ground utility services. The nearest residence (offsite) is

located approximately 686 feet (0.13 mile) northeast of the Project area.

The proposed project is located approximately 5.61 air miles northeast of the community of Hayfork and 8.96 air miles southwest of Junction City up on a promontory above where Duncan Creek enters Carr Creek valley – a tributary of Hayfork Creek, which drains to the South Fork Trinity River at a confluence approximately 18.7 air miles to the northwest at the community of Hyampom.

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

Any complaints about odors will likely be due to the odor emitted by the cannabis plants two weeks into flower. Before this time, the plant has not matured enough to emit an odor. From this second week of flower until the plant has been packaged is the heaviest odor emitting period. Terpenes released during this stage of development are responsible for the strong odor. This will be how the smell wafts to neighbors and bystanders. Drying and cutting cannabis for processing as well as composting can emit heavy amounts of terpenes into the air. Wind currents then can possibly carry these smells far enough from the property for others to smell it.

If the filtration system of the greenhouse does not prove adequate, biological measures that could be put in place to reduce the cannabis aroma. This can include planting thyme, peppermint, mint, and lavender around the property to mask to the strong smell of cannabis. These plants would be able to possibly act as a natural filter for the cannabis terpenes.

## Background

As cannabis plants grow, they release a distinctive range of odors which are made up of different types of volatile organic compounds (VOCs) called terpenes. Activities during the production, harvest, post-harvest, waste, and composting cycles all release significant odors. Installing a range of control technologies that reduce the amount of all strong odor emissions released during all stages of cannabis production as well as the correct operation, maintenance, staff training, record keeping and following the best management practices detailed in this document are the means to a successful odor mitigation plan for reducing air quality impacts from a cannabis operation.

### *Carbon Filtration*

Carbon filtration is currently the best control technology for reducing all odor emissions from cannabis cultivation facilities. These filters work by using an absorption process where porous carbon surfaces chemically attract and trap volatile organic compounds VOCs along with other gas phase contaminants. The Active Carbon Filters absorbs its molecular weight of contaminants with which it comes in contact. Adsorption is a distinct process where organic compounds in the air react chemically with the activated carbon, which causes them to stick to

the filter. The more porous the activated carbon is, the more contaminants it will capture. Depending on the filter system, carbon filtration can remove 50% - 98% of VOCs. As the filter ages, less carbon surface area is available to trap VOCs; at this point the filter will need to be replaced. Depending on the filter load, most carbon filters will last 6-12 months in a commercial cultivation environment and will be replaced according to the manufacturer's recommendations.

An effective filtration system must be properly sized according to the space needed for volume and air-flow requirements. It is important to not exceed the maximum rated cubic feet per minute rating for air circulation through the filter. If one exceeds this max flow rate, the passing air will not have enough "contact time" with the carbon, and the filter will not be effective at removing odor. Carbon filters will be used in combination with other odor control technologies.

#### *Ozone Generation*

Ozone generators use ultraviolet bulbs or corona discharge (an electrical discharge) to produce ozone gas that works on a molecular level to eliminate virtually all odor. Ozone can be used safely and efficiently by utilizing generators that fit directly into exhaust lines and is one of the most effective methods for removing odors.

#### *Bi-Polar Ionization*

Plasma Air Systems Odor Control: The ions produced by Plasma Air units break down gases with electron-volt potential numbers below 12 to harmless compounds prevalent in the atmosphere such as oxygen, nitrogen, water vapor and carbon dioxide. The resultant compounds are a function of the entering contaminants into the plasma field. In this case the VOC's or terpene odors generated by the cannabis breaks down to carbon dioxide, nitrogen, and water vapor, thus eliminating the odor.

#### **Procedures**

The procedures highlighted in the Green Beach Ventures LLC Odor Mitigation Plan will be applied to the following odor-emitting areas of activity:

- 3,500 ft<sup>2</sup> engineered and County-approved greenhouse;
- 15'x50' Cannabis waste composting area located to the northeast of the garden;
- A portion of a 24'x94' shop/garage currently used for drying and processing the plants once harvested;
- Two (2) 10'x40' shipping containers used for drying;
- Two (2) 10'x40' shipping containers used for processing;
- Nursery housed in in one (1) 35'x100' year-round greenhouse;
- One (1) 10'x40' shipping container for distribution; and
- Type 6 (non-volatile) manufacturing operation located in a 10'x20' shipping container.

I. *Staff training procedures*: Green Beach Ventures LLC has an extensive training program that includes training specifically for odor mitigation. Standard Operating Procedures related to this odor mitigation plan will be part of monthly staff meetings as well as the review of odor data, maintenance schedules, and possible updates to the system.

II. *Record keeping*: Carbon filter report cards will be maintained and filled out after every change by staff on duty. Green Beach Ventures LLC will have a supply of carbon filters on site that will be re-ordered as part of SOPs to keep aligned with the facility maintenance program. If a filter needs to be changed sooner extra filters will be on site to do so. If maintenance is needed it will be performed immediately as to not affect the surrounding areas and the Odor Mitigation plan.

III. *Monitoring and inspection*: Every odor emitting zone will be continuously monitored using a “scentometer” or Nasal Ranger to be able to quantify odors and record “defensible data” from self-testing. If a high volume of odor is detected, precise and accurate responses will be performed to achieve set odor goals. Doors will be installed with automatic closing equipment to ensure no odor is released through open doors.

IV. *Technical system design and equipment installation*: Ionization and active carbon filtering will be installed to mitigate odors within the facility. To the extent possible, the odor mitigation will be intended to mitigate odor migration to the outside of the building and surrounding areas. Each grow room will be designed to create negative air pressure within the growing environment. This essential component to our odor control system isolates odors and does not allow them to escape from their respective grow areas. (For zones where HVAC systems are used a closed-loop system with limited exhaust will used.)

A. *Odor Control*:

1. Cultivation areas: Each cultivation area will have adequate high efficiency, high CFM carbon filtration, ozone generation, and bi-polar ionization systems. Flowering areas are by far the highest odor producing rooms in cannabis cultivation. Therefore, extra precautions will be taken for each flowering area. Each flowering area will have appropriate cubic feet per minute (CFM) of air filtration along with finely tuned negative air pressure, ozone generation, and bi-polar ionization technology.
2. Common areas: High efficiency carbon filtration units will be installed throughout the common areas of the along with bi-polar ionization units. These units will be changed out and maintained on a fixed schedule as identified in the SOPs.
3. Drying, trimming, storage, and packaging areas: These areas will utilize carbon filters and bi-polar Ionization units for odor mitigation.

B. *Staff Training*: Staff training will be comprehensive and specifically tailored for maximum odor control and will include understanding of the odor management system, basic maintenance, and record keeping with the following being key components.

1. How different odor controls tools, equipment, and products work

2. Safety concerns related to odor control
3. Mastering effective odor control strategies
4. Odor systems maintenance
5. Strategies to actively reduce odor
6. Record keeping and data collection

## Summary

Early strategic planning is the key to effective odor control for cannabis operations. Green Beach Ventures LLC will use a matrix approach to controlling odor—leveraging both mechanical means to control odors, as well as filters, ozone generators, and bi-polar ionization. All of this will be supplemented with a rigorous training program and systems in place to ensure all items are properly documented.





## Composting of Solid Cannabis Waste Plan

Green Beach Ventures LLC is committed to a composting approach that prevents the diversion of THC-containing materials from the site, protects the health and welfare of the community, mitigates the risk of water or air pollution, prevents the spread of disease, and conserves natural resources. The composting operation will strictly adhere to the detailed Green Beach Ventures LLC Odor Mitigation Plan and ensure that all stages of the composting protocol will non-impact air quality.

Green Beach Ventures LLC will maintain accurate and comprehensive records that account for and reconcile all waste activity related to the composting of cannabis and cannabis products. All composting of cannabis waste on the licensed premises will be done in compliance with state requirements.

**Cannabis Waste:** Refers to any part of the cannabis plant that is unusable or unprocessable, as well as expired or contaminated plant material, diseased or infested cannabis plants, and harvested cannabis that does not meet the testing standards of the regulating authority and cannot be remediated. This term also applies to solid derivative products containing cannabis that are to be discarded for any reason.

Green Beach Ventures LLC will take active measures to prevent diversion, misuse, loss or contamination of its cannabis waste by implementing the following procedures:

**Minimize Excess Production:** Green Beach Ventures LLC will not produce or maintain quantities of cannabis in excess of what is needed for normal, efficient operation and to anticipate client needs.

**Monitored and Quarantined Storage:** Prior to composting, cannabis waste will be securely stored in a locked compartment in an area under video surveillance and kept quarantined from all usable cannabis in order to prevent contamination.

**Odor Control:** As explained in the Green Beach Ventures LLC Odor Mitigation Plan our composting protocol and system will be enclosed and equipment with all the needed technology to render air leaving the composting enclosed bin odor free.

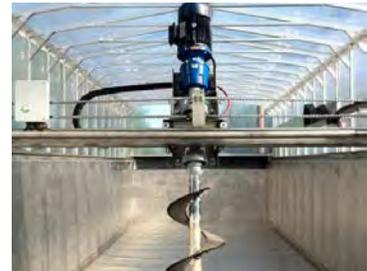
**Pest Management:** Composting can be a somewhat tricky process to successfully render the organic material into a state which can actually be beneficial to reuse. Therefore, at Green Beach Ventures LLC we will be using a composting bin that has a quick turnaround time of 14-21 days to create a finished compost

product that achieves a pathogen-free substrate by heating compost to temperatures of ~131 degree F.

**Inventory Control:** All cannabis waste entered into the composting system will be recorded in the ICS, including the date and time of compost initiation, the employee or manager responsible.

### Composting of Solid Cannabis Waste

- All cannabis that is not usable for composting will be disposed of within ten calendar days of expiration or removal from the regular inventory.
- Mixing will be overseen by a trained authorized employee in a limited access area.
- Cannabis waste to be composted will be securely stored in a limited access area prior to and after mixing.
- Immediately prior to mixing, all cannabis waste will be weighed on a calibrated certified scale that is integrated with the ICS.
- Cannabis waste will be ground up and incorporated with allowed combustible solid waste or other organic materials to a resulting mixture that is at least 50% non-cannabis waste by volume.



- 1.) Proposed 35' x 100' Commercial Nursery
- 2.) Proposed 35' x 100' Greenhouse - Immature Canopy
- 3.) Four 24' x 100' Greenhouses - Mature Canopy
- 4.) 75' x 50' Cannabis Waste Area - Compost
- 5.) Proposed 10' x 12' Building - Ag. Chemical / Pesticide Storage
- 6.) Proposed 10' x 12' Building - Admin Hold Area

An odor control system similar to the diagram below will be installed inside the compost bin.



**Attachment B**

**Biological Assessment**

# Biological Assessment

Green Beach Ventures LLC/Frog Pond Legacy, LLC

324 Frog Pond Lane, Hayfork, CA 96041

Trinity County, CA

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Down River Consulting

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## Introduction

The purpose of this report is to provide an initial analysis of the potential for threatened, endangered, and/or sensitive (TES) biological resources to occur on the proposed commercial cannabis sites that are applying for nursery, distribution, and nonvolatile manufacturing licenses. Initial assessments of the property focused on habitat types present and not species-specific or protocol-level surveys. This report was prepared with the following elements: introduction, project description, environmental setting, methodology, and the analysis of a nine quad search result. A list of impact mitigations is included.

## Environmental Setting

Due to the small property size and intensity of the proposed operations, the entire property was considered to be the action area. The property is located on the eastern aspect of Hayfork Valley, within the Carr Creek watershed, just south of the confluence of Duncan Creek and Carr Creek. Soils at this site are well-drained, and consist of interbedded lenses of loam, gravelly clay loam, gravelly sandy clay loam, and clay loam. These soils are classified as moderately erosive with a K-value of 0.37, and have a hydrological class rating of C<sup>1</sup>. Soils here are a resultant alluvium derived from igneous, metamorphic, and sedimentary rocks.

Geologically, the property is located on the Weaverville Formation, and is composed of sandstone and conglomerate from the Oligocene to Miocene epochs. Upland, to the south of the property, accreted formations from the Eastern Hayfork terrane dominate, which are composed of argillite and chert from the Devonian to Jurassic periods. The property is bounded by two faults, one is located approximately less than 3,000 feet to the south, and another major thrust fault is located less than a mile away to the southwest. The thrust fault separates the Western Hayfork terrane from the Eastern Hayfork terrane, near Hayfork Creek. These faults are not active<sup>2</sup>.

The dominant tree canopy is primarily composed of Oregon white oak (*Quercus garryana*) and codominant ghost pine (*Pinus sabiniana*), with an understory of manzanita (genus *Arctostaphylos*) and ceanothus (Rhamnaceae family). This site has low soil water availability and appropriately spaced vegetation. This area receives an annual average of 37 precipitation inches, with most of it falling in the spring and winter months<sup>2</sup>.

## Project Description

There are six (6) components of this project, as described below.

- (1) The property is currently licensed to cultivate up to 10,000 ft<sup>2</sup> of mixed light cannabis canopy. The current garden is located on the southwest portion of the property. Small tunnel-style primitive hoop houses are used to cultivate with light deprivation and the plants are accessed from the sides of these structures, not from within. Green Beach Ventures (GBV) plans on transitioning to permanent, permitted greenhouses for their mature plant canopy. GBV houses its immature plants on-site. Moving forward, the immature plants will be housed within four (4) shipping containers (40' by 10'). There is an area dedicated to composting of organic cannabis waste located to the northeast of the garden. A portion of a

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<sup>1</sup> Natural Resource Conservation Service. (2019). *Web Soil Survey*. (S. S. Staff, Producer) From <https://websoilsurvey.sc.egov.usda.gov/asp>

<sup>2</sup> United States Geological Service, 2010.

- 24' by 94' shop/garage is currently used for drying and processing the plants once harvested. In the future, the plants will be processed in four (4) separate shipping containers. A 40' by 10' shipping container will be used for drying and two (2) 20' by 10' shipping containers will be used for processing.
- (2) GBV has applied for a non-storefront retail license. The initial premises will be located in a room in the shop/garage. In the future, the premises will be located in a 40' by 10' shipping container.
  - (3) The nursery will be housed in two (2) 40' by 10' shipping containers and a greenhouse (either 96' by 120' or 96' by 144'). One shipping container will house cannabis clones and the other will house mother plants. The plants will be transferred to the greenhouse prior to selling to licensees.
  - (4) The proposed distribution facility will consist of one (1) 40' by 10' shipping container.
  - (5) GBV is proposing a Type 6 (non-volatile) manufacturing operation, which will be located in a 40' by 10' shipping container.
  - (6) A permitted dwelling is in the process of being built on the property. There is a permitted garage, septic system, and two (2) ponds on-site.

## **Required Site Improvements (Construction Activities)**

The proposed development activities will be infrastructure development in the southwestern section and a rainwater catchment pond in the northeast section of the property. To house the proposed licenses types, GBV will need to have thirteen (13) 40' by 10' and two (2) 20' by 10' shipping containers delivered to the property. All containers will have permitted electricity. The manufacturing container will also have permitted plumbing. A new septic system will be installed to accommodate waste from this facility.

Electrical lines will be extended, underground, to the new shipping containers and greenhouses.

Due to the site's gentle topography, grading and heavy equipment use in the infrastructure development zone will be minimal and will not require a Trinity County grading permit; however, an excavator will be used to construct the pond. Heavy equipment will be operated by a licensed contractor and construction will occur during the dry season (April 15 to October 15).

The pond will be constructed with less than a 1.5:1 slope, which will be compacted to a firm and unyielding surface. The pond will be lined with a clay liner. An emergency spillway and wildlife escape ramp will be included in the pond design. A grading permit will be obtained prior to construction of the pond.

## **Description of Project Operations**

GBV is a family-run business. As the licenses are obtained, they expect to hire an additional two (2) to four (4) full-time employees, making the staff a total of eight (8). Additionally, it is anticipated that an additional four (4) seasonal employees will be hired from May through October. Non-family member employees will not live on-site. Temporary sanitation facilities will be brought in as needed to accommodate temporary employees.

The water source for the farm is a surface diversion from an unnamed stream that fills two (2) permitted ponds. The ponds hold an estimated 370,000 gallons, cumulatively. There is a Small Irrigation Use Registration (SIUR) which allows them to store water for cannabis use. The SIUR Registration Number is H100243. Approximately 150,000 gallons are used annually for cannabis cultivation.

Water Diversion Statements have been filed for this property since 2015. The Statement Numbers are S024799 and S024800. The total estimated water use for both domestic and cultivation purposes is 250,000 gallons, annually.

Water conservation methods will include drip irrigation, keeping the plants small, covering the greenhouses with shade cloth, and using irrigation timers.

Power is supplied by the Trinity Public Utilities District (TPUD). There are two (2) 3-phase (3PH) power poles on the property and GBV is in discussions with TPUD about bringing 3-phase power to the property. In addition, GBV plans to install solar panels on the roofs of the barn and home.

The property is accessed via Summit Creek Road and Frog Pond Lane. Frog Pond Lane has a native surface. It is a shared private road and is in need of maintenance. The interior access road has a rocked surface. There are approximately 400 feet (4,800 ft<sup>2</sup>) of road on the property. The road is 12-feet-wide and it has a 4% grade.

This is not a hazardous materials site.

### **Distribution**

The distribution facility will have full climate control. Product will be stored in totes on shelves. The planned capacity is 1,500 to 2,000 pounds of processed cannabis. If the need arises for more space, an additional shipping container will be added.

### **Nursery**

The nursery facility will consist of two (2) 10' by 40' shipping containers and one (1) 40' by 120' greenhouse. Cloning and research and development will occur in the shipping container. When weather allows, the immature plants will be moved to the greenhouse.

### **Manufacturing**

The manufacturing facility will consist of one (1) 10' by 40' shipping container. GBV plans to manufacture cannabis-infused bath bombs, lotions, balms, and edibles.

## **Environmental Commitments**

In order to preserve oak woodland habitat resources, all oak trees with a 16" DBH or with a secondary (2°) cavity, such as a basal hollow, will be retained for nest and denning habitat. Shipping container placement was chosen based on oak tree retainment plans. Five Oregon white oak (*Quercus garryana*) trees are slated for removal. The trees will be cut with chainsaws.

**Table 1:** Diameter at Breast Height (DBH) of Oaks in Development Area

<b>Oak ID</b>	<b>DBH (inches)</b>	<b>Location</b>	<b>Action</b>
1	25.2	Shipping Container Area	Retain
2	12.8	Shipping Container Area	Cut
3	36.1	Shipping Container Area	Retain (2°Cavity)
4	16.2	Shipping Container Area	Retain
5	13.7	Shipping Container Area	Cut
6	33.2	Shipping Container Area	Retain
7	16.9	Shipping Container Area	Cut (dying/little habitat value)
8	31.3	Shipping Container Area	Retain
9	18.8	Shipping Container Area	Retain
10	16.9	Shipping Container Area	Retain (2° Cavity)
11	31.1	Shipping Container Area	Retain
12	17.9	Shipping Container Area	Retain
13	22.8	Shipping Container Area	Retain
14	11.4	Shipping Container Area	Cut
15	32.2	Shipping Container Area	Retain
16	12.5	Shipping Container Area	Cut
17	24.4	Pond	Retain
Total			Cut 5



Figure 1: Oak 1- Retain

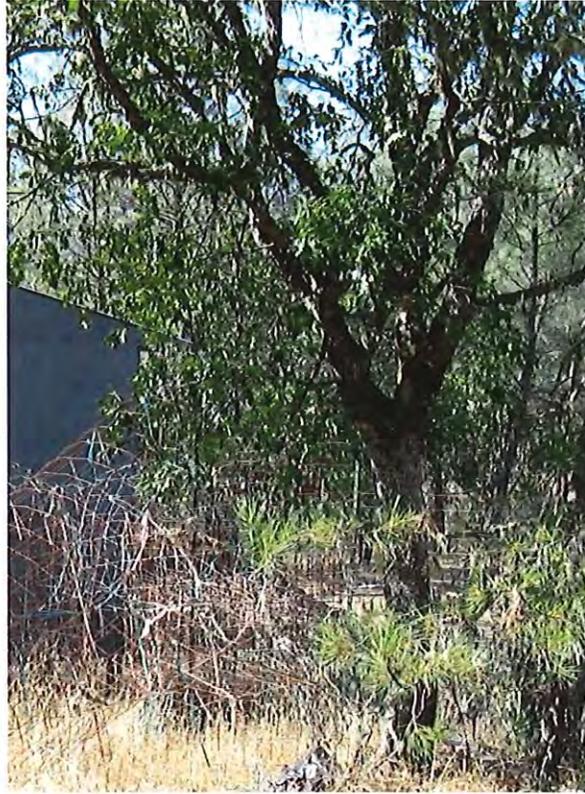


Figure 2: Oak 2- Cut



Figure 3: Oak 3- Retain



Figure 4: Oak 4- Retain



Figure 5: Oak 5- Cut

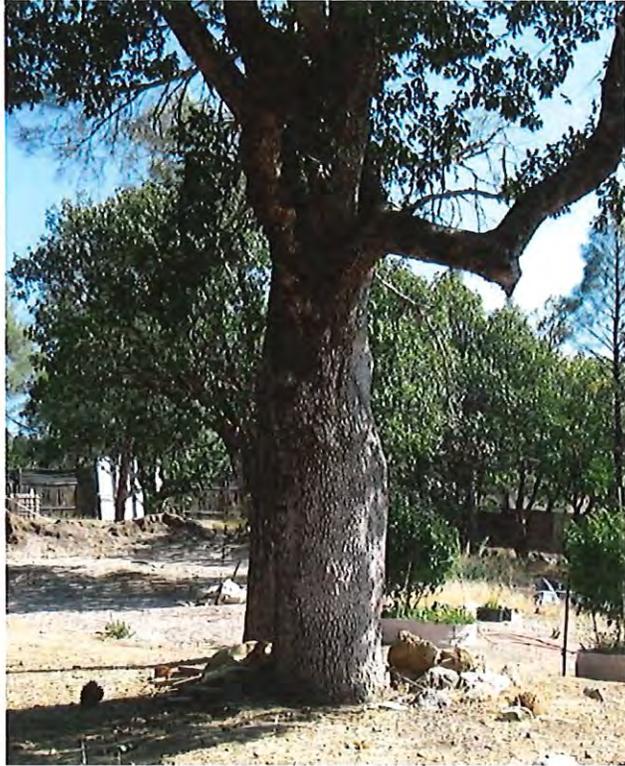


Figure 6: Oak 6- Retain



Figure 7: Oak 7- Retain



Figure 8: Oak 8- Retain



Figure 9: Oak 9- Retain



Figure 10: Oak 10- Retain



Figure 11: Oak 11- Retain



Figure 12: Oak 12- Retain



Figure 13: Oak 13- Retain



Figure 14: Oak 14- Cut

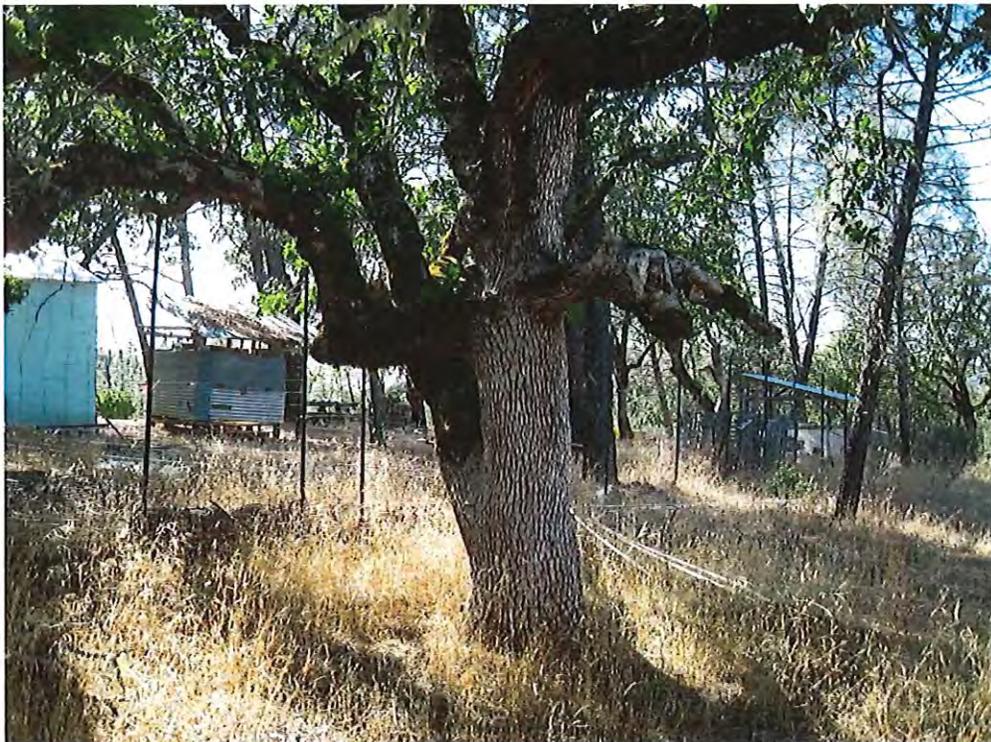


Figure 15: Oak 15- Retain



Figure 16: Oak 17- Retain

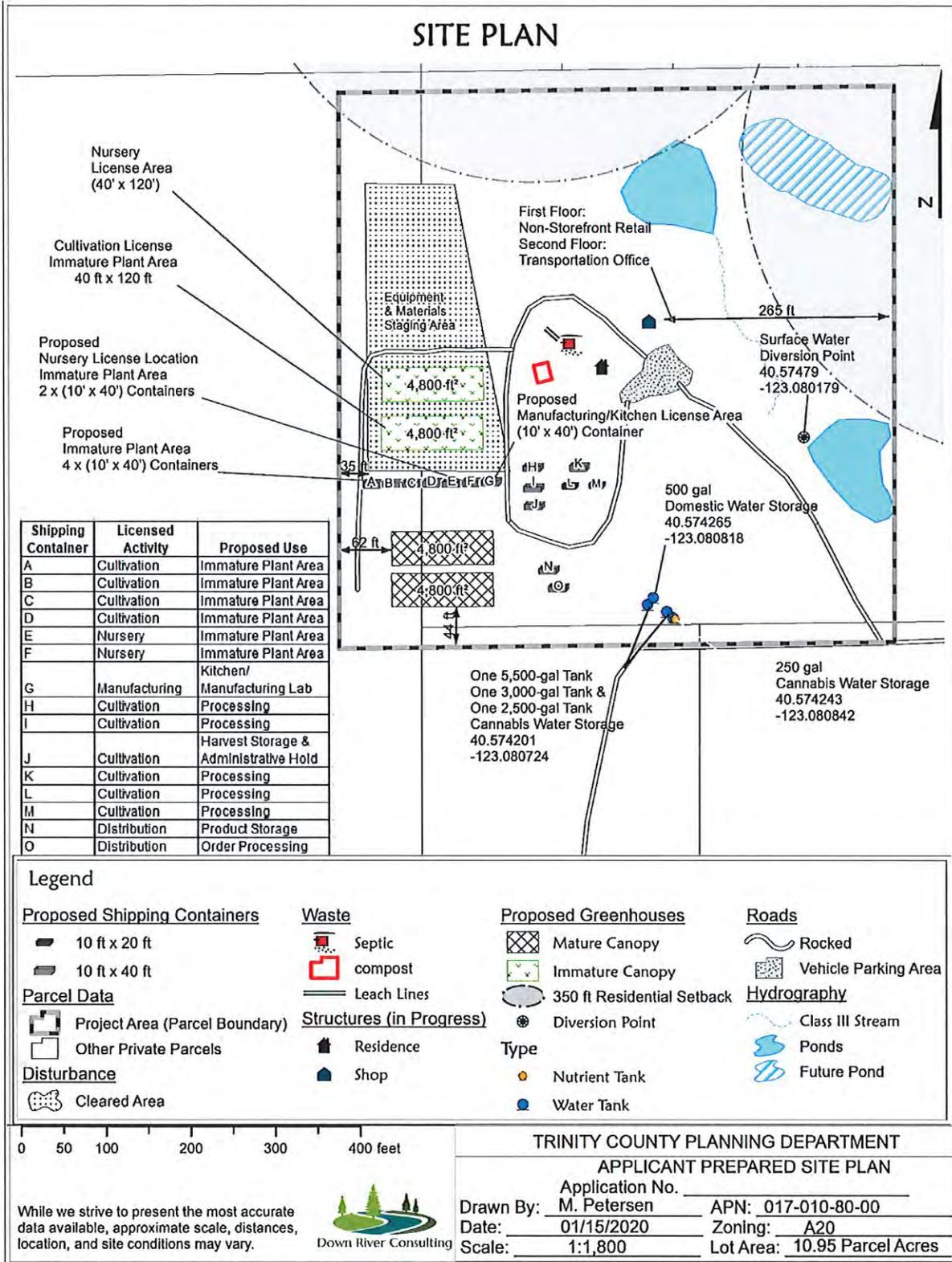


Figure 17: Project Detail Map

## Method

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

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

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

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

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

1. CNDDDB May, 2018 dataset
2. FS TES, Wildlife, Serpentine and Limestone Data (USDA Forest Service, 2018)
3. USGS Geology Spatial Data
4. NRCS Soil Survey
5. NSO nest data created for the Trinity County Land Assessment Project (Combined USFS and CNDDDB nest data) (Sheen, 2018)
6. USFWS Ray Davis NSO Habitat Suitability Data (United States Fish and Wildlife Service, 2011-2012)
7. NMFS Data KMZ and Spreadsheet (National Marine Fisheries Service, 2016)
8. CalFlora What Grows Here 3 (CalFlora, 2018)
9. CalFlora CNPS (CalFlora, 2018)
10. Jepson Manual 2<sup>nd</sup> Edition (Baldwin, 2012)
11. California Herps (Nafis, 2000-2016)
12. Barry Roth Research Gate Research Items (174)
13. Other wildlife references
14. Regulatory references

A nine quad search was performed to determine which TES species may occur within the study area. The project area is in the Hayfork Summit USGS 7.5 quadrangle. Using the select by location tool, all CNDDDB and USFS TES observation data was selected within the selected quad. The selected attribute table data was

exported using the summary tool. The resultant tabular data was converted to an excel file to be used throughout the study.

The likelihood and/or presence of each species occurring within the project location(s) was analyzed using the following criteria:

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

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

Scientific Name	Common Name	Habitat Description	Habitat Suitability	Listing	Ranking
<i>Boehera serpicicola</i>	serpentine rockcress	Serpentine ridges, talus, lower montane coniferous forests, and upper montane coniferous forests. Elevations between 3,605 and 6,890 feet (1,095-2,100 m).	Not Suitable	None	G1 S1 1B.2
<i>Chaenactis suffrutescens</i>	Shasta chaenactis	Unstable, sandy to rocky, generally serpentine soils, scree, and drainages. Elevations between 2,297 and 7,546 feet (700-2,300 m).	Not Suitable	None	G3 S3 1B.3
<i>Epilobium oregonum</i>	Oregon fireweed	Bogs, small streams, lower montane coniferous forests, meadows, seeps, and upper montane coniferous forests. Elevations between 1,804 and 5,905 feet (550-1,800 m).	Moderate Suitability	None	G2 S2 1B.2
<i>Eriastrum tracyi</i>	Tracy's eriastrum	Open areas on shale or alluvium, chaparral, cismontane woodland, valley, and foothill grasslands. Elevations between 1,312 and 3,281 feet (400-1,000 m).	High Suitability	S-Rare	G3Q S3 3.2
<i>Erythronium revolutum</i>	coast fawn lily	Streambanks, wet places, bogs, fens, broad-leaved upland forests, and North Coast coniferous forests. Elevations up to 5,250 feet (1,600 m).	Moderate Suitability	None	G4G5 S3 2B.2
<i>Harmonia doris-nilesiae</i>	Niles' harmonia	Serpentine slopes, openings, and rocky areas. Chaparral, cismontane woodland, and lower montane coniferous forests. Elevations between 2,625 and 5,250 feet (800-1,600 m).	Not Suitable	None	G2G3 S2S3 1B.1
<i>Harmonia stebbinsii</i>	Stebbins' harmonia	Serpentine, chaparral, and lower montane coniferous forests. Elevations between 1,312 and 5,184 feet (400-1,580 m).	Not Suitable	None	G2 S2 1B.2
<i>Juncus dudleyi</i>	Dudley's rush	Wet areas in (lower) montane conifer forests. Elevations under 6,562 feet (2,000 m).	Moderate Suitability	None	G5 S1 2B.3
<i>Limnanthes floccosa</i> sp.	woolly meadowfoam	Vernally mesic, chaparral, cismontane woodland, valley and foothill grassland, and vernal pools. Elevations generally below 1,965 feet (595 m).	Moderate Suitability	None	G4T4 S3 4.2
<i>Sedum laxum</i> sp.	pale yellow stonecrop	Serpentine and volcanic, broad-leaved upland forests, chaparral, cismontane woodland, lower montane coniferous forests, and upper montane coniferous forests. Elevations between 2,624 and 6,561 feet (800-2,000 m).	Not Suitable	None	G5T4Q S4 4.3
<i>Sedum obtusatum</i> sp.	Canyon Creek stonecrop	Granite outcrops, meta-volcanic outcrops, and siltstone. Elevations between 984 and 4,593 feet (300-1,400 m).	Not Suitable	None	G4G5T3 S3 1B.3

**Table 3:** Nine Quadrangle Threatened, Endangered & Sensitive Animal Occurrences. Note: Species with ‘Not Suitable’ habitat suitability will not be discussed any further in this report.

Scientific Name	Common Name	Habitat Description	Habitat Suitability	Listing	Ranking
<i>Ancotrema voyanum</i>	hooded lancetooth	Near streams or intermittent stream channels with permanently damp substrates. Late successional conditions such as large woody debris, riparian hardwood trees, deep leaf mold, and a relatively closed forest canopy. Often associated with limestone and usually within 650 to 3,150 feet (198-960 m) in elevation.	Low Suitability	None	G1G2 S1S2 None
<i>Aquila chrysaetos</i>	golden eagle	Partially or completely open country, especially around mountains, hills, and cliffs. They use a variety of habitats ranging from arctic to desert, including tundra, shrublands, grasslands, coniferous forests, farmland, and areas along rivers and streams.	Moderate Suitability	None	G5 S3 FP;WL
<i>Ascaphus truei</i>	Pacific tailed frog	Adults are aquatic, occupying the streams needed by their eggs and tadpoles. Adults may use thermal microhabitats to avoid warm water temperatures. After heavy rains or dews, adults may be found in moist woods.	Not Suitable	None	G4 S3S4 SSC

<i>Atractelimis wawona</i>	Wawona riffle beetle	Cool, small to medium-sized mountain streams in aquatic bryophytes, specifically in mosses growing between 2,000 and 5,000 feet (610-1,524 m) in elevation. The greatest number of specimens have been detected in the moss species <i>Platyhypnidium riparioides</i> .	Not Suitable	None	G1G3 S1S2 None
<i>Chaetarthria leechi</i>	Leech's chaetarthrian water scavenger beetle	This species burrows in sand at the margins of streams and rivers, where there is little silt, the water is quiet, and there is abundant vegetation.	Not Suitable	None	G1? S1? None
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Forested and open (edge) habitat. Hibernates/maternal colonies in (limestone) caves and mines near entrances.	High Suitability	None	G3G4 S2 SSC
<i>Emys marmorata</i>	western pond turtle	Ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with abundant vegetation, and either rocky or muddy bottoms, in woodlands, forests, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking.	High Suitability	None	G3G4 S3 SSC
<i>Erethizon dorsatum</i>	North American porcupine	Open tundra and deciduous forests. In habitats that lack ground cover, they can be found in trees, preferring those with thick foliage for sight protection such as Douglas fir and hemlock.	Low Suitability	None	G5 S3 SSC

<i>Gulo gulo</i>	California wolverine	Alpine, tundra, taiga, and boreal forest zones, including coniferous, mixed and deciduous woodlands, bogs, and open mountain, as well as tundra habitats with dense spring snowpack.	Low Suitability	F-Proposed Threatened; S-Threatened	G4 S1 FP
<i>Helminthoglypta talmadgei</i>	Trinity shoulderband	Rocks or limestone talus, with proximity to a stream or spring and partial shading by a conifer forest.	Not Suitable	None	G2 S2 None
<i>Lepus americanus klamathensis</i>	Oregon snowshoe hare	Boreal forests and upper montane forests. Within these forests, they favor habitats with a dense shrub layer. They are found near mature conifers (mostly Douglas fir and variants), immature conifers, alder/salmonberry, Sitka spruce, and cedar swamps.	Low Suitability	None	G5T3T4Q S2 SSC
<i>Martes caurina humboldtensis</i>	Humboldt marten	Late-successional coastal redwood, Douglas fir, and mixed conifer forests with dense mature shrub layers and serpentine habitats with variable tree cover, dense shrub cover, and rock piles and outcrops. Elevations for Trinity County observations range from 3,000 to 6,400 feet (914-1,950 m).	Low Suitability	S-Candidate Endangered	G5T1 S1 SSC

<i>Megomphix californicus</i>	Natural Bridge megomphix	Well-shaded (riparian) slopes, as well as within the detritus found under bigleaf maples ( <i>Acer macrophyllum</i> ), California hazelnuts ( <i>Cornus cornuta</i> ), and sword ferns ( <i>Polystichum</i> spp.). It is more likely to be found on north-facing slopes.	Not Suitable	None	G1G2 S1S2 None
<i>Monadenia infumata setosa</i>	Trinity bristle snail	Riparian corridors and uplands and Klamath/Trinity mixed-conifer forests that have a deciduous hardwood understory. This species is primarily found in moist but well-drained, well-shaded canyons or on streamside benches covered with a layer of leaf mold that is at least 4-inches-deep.	Not Suitable	S- Threatened	G2T2 S2 None
<i>Myotis evotis</i>	long-eared myotis	Will use many features for roosts including mines, caves, rock crevices, and buildings. In forests, commonly uses tree roosts. In Trinity County, black oak roosting sites were found. Forages close to roosts. Colony size ranges from 30 to 50.	High Suitability	None	G5 S3 None
<i>Taxidea taxus</i>	American badger	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Commonly associated with treeless regions, prairies, park lands, and cold desert areas.	Low Suitability	None	G5 S3 None
<i>Pandion haliaetus</i>	osprey	Salt marshes, rivers, ponds, reservoirs, estuaries, and coral reefs.	Low Suitability	None	G5 S4 WL

<i>Pekania pennanti</i>	fisher - West Coast DPS	Key habitat components include relatively large diameter trees, high canopy closure, large trees (hardwood and conifer) with cavities, and large downed wood.	Low Suitability	S-Candidate Threatened	G5T2T3Q S2S3 SSC
<i>Rana boylei</i>	foothill yellow-legged frog	Partially shaded, rocky perennial streams. Adult frogs move throughout stream networks from winter refugia to mating habitats where eggs are laid in spring and tadpoles rear in summer. They breed in streams with riffles containing cobble-sized or larger rocks as substrate.	Not Suitable	S-Candidate Threatened	G3 S3 SSC
<i>Vespericola hesperiei</i>	Big Bar hesperian	Beneath decaying hardwood leaves, in woody debris, and on loose rocks near active streams. It is active on damp moss and fallen bigleaf maple leaves around perennial spring seeps that are shaded by a dense canopy of red alder and bigleaf maple. It can also be associated with springs in relatively open stands of Douglas fir.	Not Suitable	None	G1 S1 None

During the field surveys, the vegetation communities were defined using the alliances from A Manual of California Vegetation, 2<sup>nd</sup> Edition. The botanical survey areas were defined using interpretation of aerial imagery and field reconnaissance. The Relve survey method sample size was used for herb, shrub, and forested lands. The biological data was collected by performing a visual encounter survey. Herbarium specimens were not collected during the initial study due to the urgent nature of the reports. The study was conducted by Keiki Yamasaki and Marie Petersen on April 4, May 14<sup>th</sup>, and July 18<sup>th</sup> of 2019. Approximately 14 hours were spent in the field by the biologists.

## Results

The most prevalent vegetation type throughout the property and project area is a state threatened (S3) Oregon white oak (*Quercus garryana*) alliance. A diverse geophyte community grows underneath the sparse canopy of Oregon white oak and grey pine. Sparse ceanothus and manzanita shrubs provide nesting habitat, as well as foraging opportunities and protection from predators, to a diverse avian community.



Figure 18: Old Oregon White Oak with 2<sup>o</sup> Cavity

The area around the ponds is dominated by annual European grasses and yellow star-thistle. There is little to no overstory canopy in these areas and prolific ground squirrel burrows are found throughout this area. Abundant prey species, coupled with a water source, draw in larger predatory birds such as herons. The ponds are heavily used by amphibians and aquatic mollusks. An abundant population of *Nostoc* spp. balls was found in late summer.



Figure 19: Non-Native Grasses with Rodent Burrows



Figure 20: Nostoc spp. Colonies

**Table 4: Vegetation Alliances Found on the Property**

<b>Subproject Name</b>	<b>Vegetation Alliance</b>	<b>CNDDDB Rank</b>	<b>Acres Observed</b>
Commercial Cannabis Expansion	<i>Quercus garryana</i> (Oregon white oak) Woodland Alliance	G4 S3	5.4
Commercial Cannabis Existing Garden	Ruderal/No Dominant Life Form	Not Rare	0.8
Water Source	<i>Bromus diandrus</i> (ripgut brome) Semi-Natural Herbaceous Stand	Not Rare	0.85
Undeveloped Upland Area	<i>Poa pratensis</i> (Kentucky bluegrass) Semi-Natural Herbaceous Stands	Not Rare	1.5
Future Rainwater Catchment Pond Area	<i>Ceanothus cuneatus</i> (wedgeleaf ceanothus) Shrubland Alliance	G4 S4	0.9
<b>Total</b>			<b>9.5 Acres</b>

# Green Beach Ventures, LLC: Biological Survey Results



## Legend

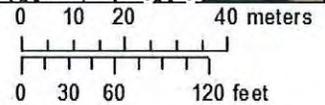
### Type

- Shipping Container
- Ponds
- Property Boundary
- Recent Disturbance
- Septic
- Surveyed Trees
- Nutrient Tank
- Water Tank
- Residence
- Shop

- Future Cultivation
- Greenhouse, Future
- Mapped Streams
- Ponds
- Access Roads
- Vehicle Parking Area

### Vegetation Alliances

- Cheatgrass Semi-Natural Herbaceous Stands
- Kentucky Bluegrass Semi-Natural Herbaceous Stands
- Wedge-Leaf Ceanothus Shrubland Alliance
- Oregon White Oak Woodland Alliance
- Ruderal, No Dominant Lifeform



Down River Consulting  
 Map By: M. Petersen  
 Map Date: 01/15/2020  
 Scale = 1:1,200

Figure 21: Green Beach Ventures LLC Vegetation Map

# Plants

## Vascular Plants

Due to the fact that there are no rock outcrops or ultramafic soils in the project vicinity, it does not provide suitable habitat for the following species: Dudley's rush (*Juncus dudleyi*), Nile's harmonia (*Harmonia doris-nilesiae*), Stebbins' harmonia (*Harmonia stebbinsii*), serpentine rockcress (*Boechera serpenticola*), Shasta chaenactis (*Chaenactis suffrutescens*), pale yellow stonecrop (*Sedum laxum* sp. *flavidum*), and Canyon Creek stonecrop (*Sedum obtusatum* sp. *paradisum*). They will not be discussed further in this report.

**Coast fawn lily** (*Erythronium revolutum*) is a perennial bulbiferous herb in the Liliaceae family. It is listed as G4 S2S3 2B.2. The bloom period is from March to July. The typical habitat for this species is streambanks, wet places, bogs, fens, broad-leaved upland forest, and North Coast coniferous forest. Its bioregional distribution includes the North Coast, Klamath Ranges, and North Coast Ranges. It is found at elevations up to 5,250 feet (1,600 m). While some habitat elements were present on-site, water does not persist in these soils long enough to support this species. During the study, this organism was not found within the study area.

**Oregon fire herb** (*Epilobium oreganum*) is a perennial herb in the Onagraceae family. It is listed as G2 S2 1B.2. The bloom period is from June to September. The typical habitat for this species is (serpentine) mesic bogs and fens, lower montane coniferous forests, upper montane coniferous forests, meadows, and seeps. This plant is also found in the Klamath Ranges. It is found at elevations generally between 1,640 and 7,349 feet (500-2,240 m). While some habitat elements were found in the project vicinity, ultramafic soils do not exist on-site and water does not persist in the soil long enough to provide high quality habitat for this species. During the study, Oregon fire herb was not found within the study area.

**Tracy's eriastrum** (*Eriastrum tracyi*) is an annual herb in the Polemoniaceae family. It is listed as G3Q S3 3.2. The bloom period is from May to August. The typical habitat for this species is (disturbed) open areas on shale or alluvium, chaparral, cismontane woodland, valley, and foothill grasslands. Its California floristic provinces include the Klamath Ranges, the Inner North Coast Ranges, the South Sierra Nevada Foothills, the San Francisco Bay Area, the Warner Mountains, and the Modoc Plateau. It is found at elevations between 1,312 and 3,281 feet (400-1,000 m). Disturbed roadside habitat was observed in the project area. During the study, this organism was not found within the study area.

**Woolly meadowfoam** (*Limnanthes floccosa* sp. *floccosa*) is an annual herb in the Limnanthaceae family. It is listed as G4T4 S3 4.2. The bloom period is from March to May. The typical habitat for this species is vernal mesic, chaparral, cismontane woodland, valley and foothill grassland, and vernal pools. Its bioregional distribution includes the Klamath Ranges and Inner North Coast Ranges. It is found at elevations generally below 1,965 feet (595 m). This habitat type was observed in the project area. During the study, woolly meadowfoam was not found within the study area.

# Animals

## Invertebrates

### Insects

The project site does not provide suitable habitat for the following species: Leech's chaetarthrian water scavenger beetle (*Chaetarthria leechi*) and Wawona riffle beetle (*Atractelmis wawona*). They will not be discussed further in this report.

### Mollusks

**Terrestrial mollusks** thrive in conditions that allow for 4 or more inches of leaf mold in moist substrates, often near perennial streams with high canopy cover and late seral stage stands. The species found in Trinity County are often associated with limestone substrate. The project site does not provide suitable habitat for the following species: Big Bar hesperian (*Vespericola pressleyi*), Hooded lancetooth (*Ancotrema voyanum*), Natural Bridge megomphix (*Megomphix californicus*), and Trinity shoulderband (*Helminthoglypta talmadgei*). They will not be discussed further in this report.

**Trinity bristle snail** (*Monadenia infumata*) is an air-breathing terrestrial snail in the Helminthoglyptidae family. It is listed as G2T2 S2. The typical habitat for this species is riparian corridors and uplands and the Klamath/Trinity mixed-conifer forests with a deciduous, hardwood understory. This species is primarily found in moist but well-drained, well-shaded canyons or streamside benches covered with a layer of leaf mold that is at least 4-inches-deep. The project sites are open, lack tree cover, and do not provide typical habitat; however, sometimes this species is observed in dry sites not considered to be their typical habitat. Although this study took place during the months of April and May, when terrestrial mollusks are generally active, Trinity bristle snail was not found on-site (Bureau of Land Management, 2009).

### Fish

Results from the UC Davis PISCES search for the Carr Creek HUC12 Watershed included the following six fish species: Klamath Smallscale Sucker (*Catostomus rimiculus*), Klamath River Lamprey (*Entosphenus similis*), Coastal Rainbow Trout (*Oncorhynchus mykiss irideus*), Klamath Mountains Province Winter Steelhead (*Oncorhynchus mykiss*), Upper Klamath-Trinity Fall Chinook Salmon (*Oncorhynchus tshawytscha*), and Upper Klamath-Trinity Spring Chinook Salmon (*Oncorhynchus tshawytscha*). Fin fish-bearing streams were not present in the project area. Furthermore, the ponds did not have any resident fin fish in them. Fin fish will not be discussed further in this report.

### Reptiles & Amphibians

The ponds provide ideal nursery habitat for Pacific tree frogs (*Pseudacris regilla*) and California toads (*Anaxyrus boreas halophilus*). Both species were observed in the upper (northern) pond on the property. In the

spring, tree frog and toad tadpoles were abundant, and by summer time, there were hundreds of sub-adult tree frogs and toads along the edges of the pond. The ponds provide ideal habitat for turtles; however, no western pond turtles (*Emys marmorata*) were observed on the property.



Figure 22: Tree Frog



Figure 23: Upstream Pond



Figure 24: Deformed Frog

Due to the lack of perennial streams with rocky substrate, the project site does not provide suitable habitat for the following species: Foothill yellow-legged frog (*Rana boylei*) and Pacific tailed frog (*Ascaphus truei*). These species will not be discussed further in this report.

**Western Pond Turtle** (*Emys marmorata*) is an aquatic turtle in the Emydidae family. It is listed as G3G4 S3. The typical habitat for this species is ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with abundant vegetation, and either rocky or muddy bottoms, in woodlands, forests, and grasslands. In streams, it prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. It may enter brackish water and seawater. This habitat type was observed on the property; however, during the study, no western pond turtles were observed (Nafis, 2000-2018).

## Mammals

The only mammal observed on the property was the California ground squirrel (*Otospermophilus beecheyi*). They were, however, quite abundant and their burrows were found throughout the entire property. Ground squirrel management options are described in the Discussion section of this report.

Suitable habitat for the following species of mammals were not found on-site: American badger (*Taxidea taxus*), California wolverine (*Gulo gulo*), North American porcupine (*Erethizon dorsatum*), Oregon snowshoe hare (*Lepus americanus klamathensis*) and Humboldt marten (*Martes caurina humboldtensis*). They will not be discussed further in this document.

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

## Bats

The nine quad CNNDDB search for sensitive species lists two bat species. These species were not directly observed during site visits, but the property owner has observed a variety of unidentified bat species flying around the property at dusk. Due to the prevalence of nesting and foraging habitat in the project vicinity, presence of all sensitive bats listed below should be assumed.

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

**Townsend's Big-Eared Bat** (*Corynorhinus townsendii*) is a mammal in the Vespertilionidae family. It is listed as G3G4 S2. The typical habitat for this species includes coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types. Its distribution is strongly correlated with the availability of caves and cave-like roosting habitat, with population centers occurring in areas dominated by exposed, cavity-forming rock and/or historic mining districts. They roost in abandoned buildings, under tree bark, and in rock crevices (National Park Service, 2018). They only forage during complete darkness, so reducing nocturnal artificial lighting is important to the presence of this species. Foraging habitat was observed on the property and in the surrounding area (Townsend's Long-Eared Bat, 2017).

## Birds

Bird species observed in the project area were mourning doves (*Zenaida macroura*), acorn woodpeckers (*Melanerpes formicivorus*), Steller's jays (*Cyanocitta stelleri*), American robins (*Turdus migratorius*), ravens (*Corvus corax*), turkey vultures (*Cathartes aura*), common starlings (*Sturnus vulgaris*), a green-backed heron (*Butorides virescens*), and a killdeer (*Charadrius vociferus*).

Acorn woodpeckers were observed on-site as well as a granary tree. Granary trees are an important survival resource for populations of the acorn woodpecker and usually occur at a rate of only 2.1 granary trees/6 ha home range (CalPIF, 2002). Retention of a suitable supply of acorns around the granary tree is recommended. Personal observations of other granary trees in the Hayfork area indicate that the acorn woodpecker will continue to use a granary tree in anthropogenically developed areas with an amply acorn supply.

The female killdeer exhibited distressed behavior adjacent to one of the ponds. She flopped around and vocalized to try to draw attention and potential predators away from a nest. The killdeer nest location was not detected during the survey; however, it is suspected to be on the ground near the pond.



Figure 25: Acorn Woodpecker Granary Tree

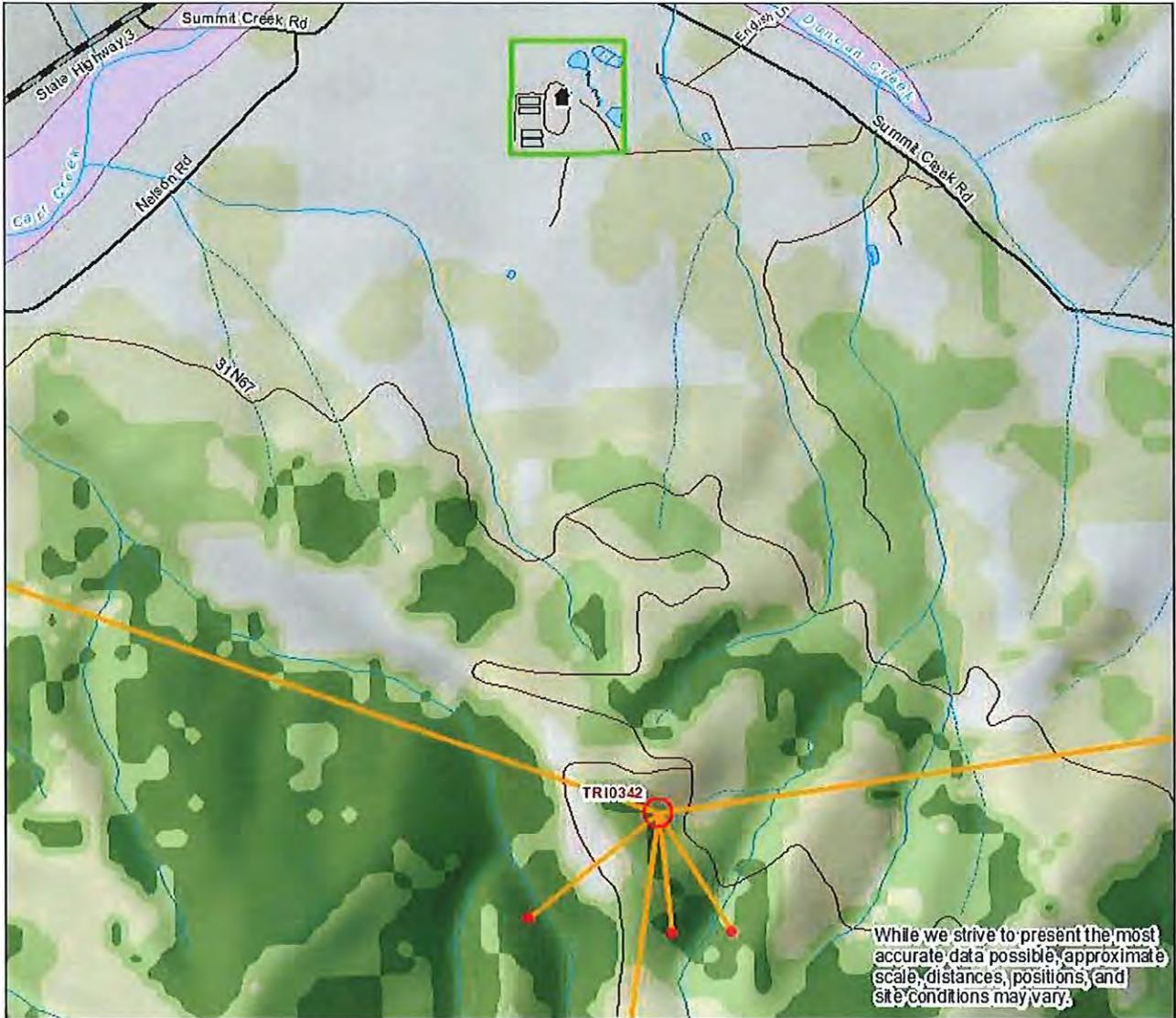


Figure 26: Oregon White Oak Cavity

### Northern Spotted Owl (*Strix occidentalis caurina*)

Owl TRI0342 occupies a nest 0.75 miles from the project area; however, suitable northern spotted owl habitat is not found on-site. Furthermore, recent hooting data documents owl TRI0342 avoiding the non-suitable areas to the north and using the areas shown on the map as nesting and roosting habitat. This project will not contribute to the decline of the northern spotted owl.

# Green Beach Ventures, LLC: Northern Spotted Owl Map



## Legend

### Northern Spotted Owl Data

- Positive Observation
- Activity Center
- Spotted Owl Spider Diagram
- Dispersal Habitat
- Forested, but not Dispersal Habitat
- Nesting/Roosting Habitat
- Nonforested

### FEMA National Flood Hazard

- 100 Year Floodplain ~ No BFEs (Zone A)

### Project Area (Parcel Boundary)

- Residence (In Progress)
- Proposed Greenhouses

### Hydrology

- Perennial Streams
- Intermittent Streams
- Ephemeral Streams
- Mapped Streams
- Ponds
- Future Pond

### Roads

- Highway
- Paved
- Rocked
- Dirt

0 100 200 400 meters

0 300 600 1,200 feet



Map By: M. Petersen  
Map Date: 01/15/2020  
Scale = 1:4,200

Figure 27: Northern Spotted Owl Habitat Map

## Other Birds

Due to the lack of fin fish-bearing streams and waterbodies, the project site does not provide suitable habitat for the following species: Osprey (*Pandion haliaetus*). This species will not be discussed further in this report.

**Golden Eagle** (*Aquila chrysaetos*) is a large raptor in the Accipitridae family. It is listed as G5 S3. The typical habitat for this species is partially or completely open country, especially around mountains, hills, and cliffs in habitat types such as tundra, shrublands, grasslands, coniferous forests, farmlands, and areas along rivers and streams. Suitable habitat was observed on the property; however, golden eagles were not observed during the surveys.

## Avoidance and Mitigation Measures

1. There is yellow star-thistle present in the open areas adjacent to the ponds. Many other noxious weed species are present in the cultivation area. Please refer to Appendix A for a complete list of plants found in the project areas. Proliferation of untreated noxious weeds causes wildlife habitat degradation and has been found to result in enormous agricultural losses. These impacts are considered significant (FAC Article 1.7, 7270).
  - a. Mitigation Bio-1: Any heavy equipment used to develop the property should be thoroughly washed and inspected for weeds before arrival, in order to prevent the introduction of new weed species.
  - b. Mitigation Bio-2: Monthly monitoring and treatment of yellow star-thistle in the expansion area should be conducted throughout the growing season, together with rapid (treatment) response for new weed populations and modification of an integrated pest management plan, which addresses the biological considerations of the target species.
2. Site development may result in a net loss of 40,000 ft<sup>2</sup> of moderately degraded oak woodland habitat. Loss of Oregon white oak (*Quercus garryana*) woodlands (S3) would be considered significant.
  - a. Mitigation Bio-3: Two Oregon white oak seedlings shall be planted within the riparian setback around the ponds, for every one oak tree that is cut during project development. Seedlings shall be watered once monthly from May through October, for the first three years after planting. Vitality of said plantings shall be monitored once annually. Replanting will occur if the viable population of seedlings drops below 85%.
3. Conversion and construction activities may cause destruction of nests or abandonment of young. Harm to bird nests or eggs would be considered a significant impact.
  - a. Mitigation Bio-4: Nest and den surveys shall be completed within seven (7) days prior to construction or disturbance, by a qualified biologist, as defined in §722.3.A of the California Code of Regulations, if the activities occur between February 1st and August 31st. In the event that a nest or den is detected, a protective buffer shall be established by the biologist to avoid deleterious impacts to the animal or offspring, such as nest abandonment.
4. The Townsend's big eared bat and long-eared myotis are low flying bats that are significantly impacted by artificial lighting at night. They only forage during complete darkness. Disruption of foraging

activities could result in a take of the CESA-protected Townsend's big eared bat, and would be considered a significant impact.

- a. Mitigation Bio-5: The farm manager shall shield all greenhouse lights and install only downcast red LED exterior lighting to mitigate the lighting impacts. Bat-friendly lighting would result in less than significant lighting impacts (Coxworth, 2018).
5. Fisher dens have been documented in close proximity to this project. Fishers and birds of prey likely hunt the abundant prey populations available on this property. Fisher mortality has been associated with anticoagulant rodenticides in the Klamath Ranges and the North Coast of California. Any impact that would result in a loss of viability of the previously mentioned predator populations would be considered significant.
- a. Mitigation Bio-6: In order to mitigate for unintended harm to fishers, the farm shall use preventative and non-chemical strategies to control rodents. The rodent prevention strategy will focus on reducing the rodent carrying capacity of the site by removing food access and items/features that could provide habitat to rodents. The farm manager will erect owl boxes if needed. In the event that an infestation is detected, traps and EradiBait, a non-anti-coagulant powder corn cob, will be used to extirpate the pests. The use of this pest management strategy, rather than anticoagulant rodenticides, reduces the rodent management impacts to less than significant.

## Discussion

### Bullfrog Prevention

There are currently no bullfrogs present in the ponds on the property; however, the ponds provide ideal habitat for bullfrogs, and monitoring should be implemented. Early detection and rapid response are necessary when combating invasive species. Seasonal pond draining coupled with trapping of adults seems to be the most effective way to disrupt the bullfrog life cycle. (Doubledee et al., 2007)

### Water Quality Issues

Recently, a deformed Pacific tree frog (*Pseudacris regilla*) with an extra hind leg was observed in the upper pond. The photo (Figure 24: Deformed Frog) was forwarded to CDFW staff who specialize in amphibians. The conclusion was that the deformity was caused by the parasitic flatworm (*Ribeiroria spp.*) that scrambles leg bud cells during metamorphosis.

It has been hypothesized that artificial habitats with high productivity, such as farm ponds, create ideal habitat for *Ribeiroria* for three reasons: 1) The fertilizer runoff can cause increased algae growth and increases in snail (*Ribeiroria*'s first host) populations, 2) there has been an increase in the creation of man-made impoundments in the last 60 years, and 3) *Ribeiroria*'s second and third necessary hosts (amphibians and birds) are commonly associated with pond habitats (Johnson, 2003).

Water quality would improve with a reduction in the fertilizer (N-P-K) inputs to the ponds. This will be difficult for this property, because the ponds are fed by a Class III stream that flows from properties that are upstream. Vegetated buffer strips (4 to 10-feet-wide) of native grass would help to minimize some of the fertilizer inputs (Penn State Extension, 2019).

## Appendix A

**Table 5: Oak Woodland Species**

Family	Scientific Name	Common Name	Status (Blank = Native & Not Rare)
Asteraceae	<i>Anaphalis margaritacea</i>	pearly everlasting	
Asteraceae	<i>Leontodon saxitillia</i> sp. saxitillia	hawkbit	
Caryophyllaceae	<i>Silene boulanderii</i>	Boulander's silene	
Fagaceae	<i>Quercus garryana</i>	Oregon white oak	
Iridaceae	<i>Iris macrosiphon</i>	ground iris	
Liliaceae	<i>Calochortus tolmiei</i>	hairy star tulip	
Poaceae	<i>Dactylis glomerata</i>	orchard grass	CallIPC Rating Invasive-Limited
Poaceae	<i>Festuca microstachys</i>	small fescue	
Primulaceae	<i>Primula hendersonii</i>	Western shooting star	
Ranunculaceae	<i>Delphinium decoratum</i> sp tracyi	Tracy's larkspur	
Rhamnaceae	<i>Ceanothus cuneatus</i>	buckbrush	
Rubiaceae	<i>Galium parisiense</i>	wall bedstraw	

**Table 6: Existing Cultivation Area**

Family	Scientific Name	Common Name	Status (Blank = Native & Not Rare)
Asteraceae	<i>Centaurea solstitialis</i>	yellow star-thistle	CallIPC Rating Invasive-High
Asteraceae	<i>Madia elegans</i>	common madia	
Brassicaceae	<i>Brassica nigra</i>	black mustard	CallIPC Rating Invasive-Moderate
Chenopodiaceae	<i>Chenopodium album</i>	white goosefoot	Non-native
Convulvulaceae	<i>Calystegia malacophylla</i>	morning glory	
Fagaceae	<i>Quercus garryana</i>	Oregon white oak	
Poaceae	<i>Festuca idahoensis</i>	blue bunchgrass	
Poaceae	<i>Poa pratensis</i>	Kentucky bluegrass	CallIPC Rating Invasive-Limited

**Table 7: Species Near Ponds**

Family	Scientific Name	Common Name	Status (Blank = Native & Not Rare)
			CallIPC Rating Invasive-High
Asteraceae	<i>Centaurea solstitialis</i>	yellow star-thistle	
Polygonaceae	<i>Rumex crispus</i>	curly dock	CallIPC Rating Invasive-Limited
Geraniaceae	<i>Erodium cicutarium</i>	red stemmed filaree	CallIPC Rating Invasive-Limited
Poaceae	<i>Hordeum murinum sp. glaucum</i>	foxtail grass	Non-native
Poaceae	<i>Bromus diandrus</i>	ripgut brome	CallIPC Rating Invasive-Moderate
Pinaceae	<i>Pinus Ponderosa</i>	ponderosa pine	

## Appendix B

**Table 8: Animal Species Present On-Site**

Scientific Name	Common Name	Location
<i>Zenaida macroura</i>	mourning dove	in oak trees
<i>Melanerpes formicivorus</i>	acorn woodpecker	in oak trees
<i>Cyanocitta stelleri</i>	Steller's jay	in oak trees
<i>Turdus migratorius</i>	American robin	edge of pond
<i>Corvus corax</i>	raven	in flight
<i>Cathartes aura</i>	turkey vulture	soaring
<i>Pseudacris regilla</i>	Pacific tree frog	pond
<i>Anaxyrus boreas halophilus</i>	California toad	pond
<i>Butorides virescens</i>	green-backed heron	pond
<i>Otospermophilus beecheyi</i>	California ground squirrel	throughout property
<i>Sturnus vulgaris</i>	common starling	in oak trees
<i>Charadrius vociferus</i>	killdeer	driveway

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1. CNDDDB Updated Records

The table below summarizes the changes to the CNDDDB spatial data since the initial biological assessment was completed, for this project. There are two new species found in the nine-quad area.

Jepson's dodder (*Cuscuta jepsonii*) is a parasitic plant in the Convolvulaceae family. It's known host plants are pinemat manzanita (*Ceanothus diversifolius*) and mahala mats (*Ceanothus prostrates*). Neither of these species were found on this site. In addition, all species of dodder are very conspicuous and were not observed during field surveys of this site. The *Cuscuta* genus is currently under taxonomic and genetic review. I am participating in the hunt for and collection of genetic samples, from any populations of dodder that are found, as well as host plants. Based on the current available habitat and host plant knowledge as well as physical surveys, there will not be any impacts to Jepson's dodder as a result of this project.

The Trinity County amphipod (*Stygobromus trinus*) is a stygobiont in the Crangonyctidae family. This animal occurs in groundwater aquifers and lives out its whole life in subterranean environment. Typical habitat elements include caves, fissures, and springs, as well as limestone and alluvium substrates. These habitat elements are not present in the project area. Furthermore, the water source for this project is captured rainwater and surface flows from a Class III stream. Based on the current available species habitat data the project will not have a significant impact on the Trinity County amphipod.

Scientific Name	Common Name	Habitat Suitability	Change	Project Impacts
<i>Cuscuta jepsonii</i>	Jepson's Dodder	Not Suitable	Added to CNDDDB; <b>G3 S3 1B.2</b>	None due to absence of known host plants
<i>Myotis evotis</i>	Long-eared Myotis	High Suitability	Removed from CNDDDB	N/A no longer included for consideration
<i>Pekania pennanti</i>	Fisher	Low Suitability	Former State-Candidate for Listing; Now not listed State or Federally	No effect
<i>Rana boylei</i>	Foothill yellow-legged frog	Not Suitable	Former State Candidate Threatened; Now State Endangered	Suitable habitat does not occur in the project area, no impact
<i>Stygobromus trinus</i>	Trinity County amphipod	Not Suitable	Occurrence added to CNDDDB records; Ranking G1 S1	No impact: Surface water will be used as the water source; these animals occur in groundwater.
<i>Taxidea taxus</i>	American badger	Low Suitability	Record removed from CNDDDB	N/A no longer included for consideration

Table 1: Summary of Changes to Species Under Consideration Between 2018 and 2020

2. Oak Tree removal mitigation monitoring criteria:

Vigor monitoring of the planted oaks shall occur once annually, for a period of 5 years. Data collected for each plant will include: date, height, and vigor (good, moderate, poor, or dead). Replacement plantings will occur annually if the planting survival rate falls below 85% of the total original planting numbers.

3. Northern Spotted Owl Hooting Data:

The recent Northern Spotted Owl hooting data cited is referring to the combination of CNDDDB NSO spatial data as well as USDA Forest Service hooting survey spatial data as referenced in the Biological report methodology. I combined the two spatial datasets into one feature class to create a more complete nest core layer, for the Landscape Assessment project that was completed at the request of the Trinity Collaborative Group. Over the years I have continued to update this combined layer as new Forest Service and CNDDDB data becomes available.

4. Preparers Qualifications:

A short summary biography, as well as a resume can be found in Attachment 1.

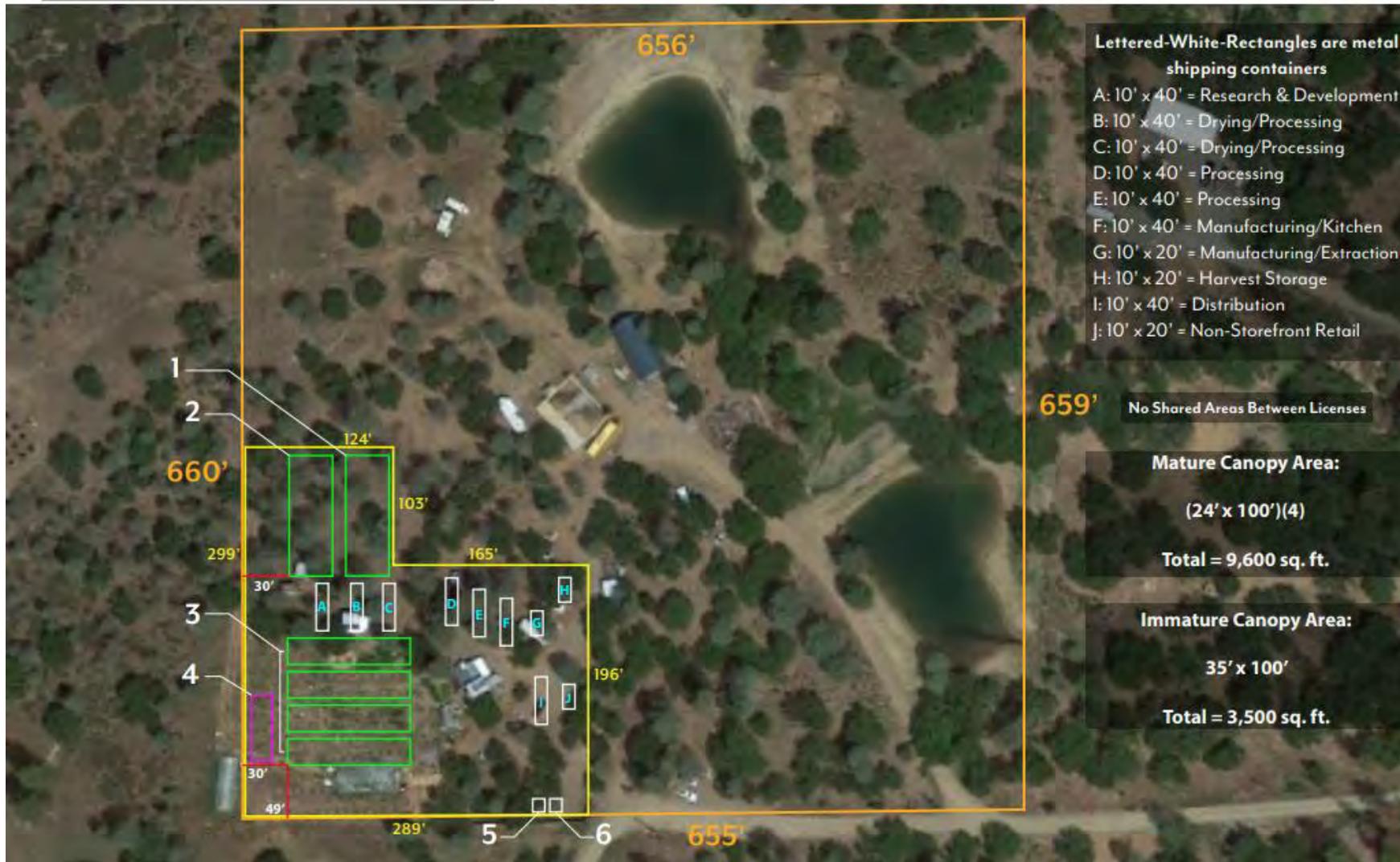


# Figure 2. Project Diagram

- 1.) Proposed 35' x 100' Commercial Nursery
- 2.) Proposed 35' x 100' Greenhouse - Immature Canopy
- 3.) Four 24' x 100' Greenhouses - Mature Canopy
- 4.) 15' x 50' Cannabis Waste Area - Compost
- 5.) Proposed 10' x 12' Building - Ag. Chemical / Pesticide Storage
- 6.) Proposed 10' x 12' Building - Admin Hold Area



APN:  
017-010-80-00  
Remaining Portion of Parcel is  
Unused



## Attachment 1: Preparers Qualifications

### Addendum to Biological Assessment Prepared for Green Beach Ventures, LLC

Marie Petersen is an Environmental Permitting Specialist and owner of Down River Solutions, LLC. She also serves as the Botany Program Manager at the Watershed Research and Training Center. She received a B.S. in Rangeland Resource Science: Wildland Soils from Humboldt State University. After college, she studied under Rosemary Gladstar and Jane Bothwell, earning two Herbal Therapeutic Certificates. Since 2011, she has worked as part of an interdisciplinary inter-agency team, focused on restoring the South Fork of the Trinity River. In 2016, her commitment to restoration, and to a sustainable Trinity County economy, led her to expand her stewardship role and she began working on *Cannabis* permitting projects. Marie currently holds a contract with the Shasta-Trinity National Forest, for botanical surveys, and is gearing up to survey numerous timber sale projects during the 2021 field season. Her long-standing local and regional partnerships are an integral component of the restorative land management strategies she assists her clients and partners with. She is proud to help *Cannabis* farmers work toward environmental compliance and success.



**Marie Petersen**  
P O Box 714  
Weaverville CA 96093  
Email: stellaria.sftr@gmail.com  
Cell Phone: (530) 999-8501

## **JOB OBJECTIVE**

My objective is to continue to use my diverse skillset to conserve and restore natural resources, within Trinity County; while working as part of an interdisciplinary team to increase the capacity for implementation of restorative land management strategies.

## **CAREER EXPERIENCE**

Environmental Permitting Specialist April 2020-Present

### **Down River Solutions, Hayfork CA**

Violation mitigation, turbidity monitoring, revegetation, soil and water conservation, botanical surveys, biological assessments, wetland delineation, cartography, CEQA compliance, and general cannabis farm permitting.

Director of Environmental Services July 2016-February 2020

### **Down River Consulting, Weaverville CA**

Direct environmental compliance program, GIS program management, agricultural surveys, resource protection planning, water quality restoration, monitoring, mitigation, revegetation, soil and water conservation, botanical surveys, wetland delineation, & CEQA Compliance.

Field Scientist/GIS Specialist May 2011-November 2016

### **The Watershed Research and Training Center, Hayfork CA**

Plant biologist, Noxious Weeds Program Coordinator, GIS analysis, cartography, data genesis and management, wilderness work, prescribed burning, wildland firefighting, revegetation, rare plant surveys, NRIS entry, timber sale layout, & educational guest lecturer

## **CAREER TRAINING**

GIS for Cannabis Compliance; December 2019; UC Davis Extension

Thresholds of Significance in Environmental Planning, April 2019; UC Davis Extension

How Managers Become Great Leaders, February 2019; Fred Pryor Seminars  
Successful CEQA Compliance: An Intensive Two-Day Seminar, February 2019; UC Davis Extension  
How to Write Great CEQA Documents May 2018; UC Davis Extension  
Wetland Delineation Training, January 2018; Richard Chinn Environmental Training  
Wetland Regulation and Mitigation July 2017; UC Davis Extension  
Sediment & Erosion Control Training (IECA), September 2016; International Erosion Control Association  
Wildland Firefighter 2 Certification 2012-2016  
Advanced GIS for Hydro Analysis 2013  
Intermediate GIS for Hydro Analysis 2012

## **EDUCATION**

BS degree: **Rangeland Resource Management: Wildland Soil Science**  
Humboldt State University, Arcata CA.  
Graduation Date: May 2009; Degree Date 2020  
3.18 (Overall) G.P.A.

A.A. degree **Transfer Studies**  
College of the Redwoods, Eureka CA.  
Graduated August 2005  
3.24 G.P.A.

## **AFFILIATIONS**

Interdisciplinary Cannabis Advisory Board, Humboldt State University 2020  
California Native Plant Society 2015-Present  
International Erosion Control Association 2016-Present  
Society of Leadership & Success 2007-Present

## **REFERENCES**

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Eric Keyes	Trinity Valley Consulting Engineers
(530) 739-0315	eric@tvce.biz
Josh Smith	The Watershed Research & Training Center
(530) 515-1364	josh@thewatershedcenter.com

**Attachment C**

**Cultural Resources Investigation**

**(CONFIDENTIAL: NOT FOR PUBLIC REVIEW)**

## COVER PAGE

- A. HAYFORK HERRON, TRINITY COUNTY, CA. APN 017-010-80-00, 11-ACRES 22
- B. TRINITY COUNTY COMMERCIAL MEDICAL MARIJUANA LAND USE ORDINANCE (CMMLUO) PERMIT APPLICATION NUMBER: TBD
- C. MICHAEL HERRON
- D. PROJECT DESCRIPTION
  - 1. Archaeological Inventory
  - 2. 11-acres parcel
  - 3. Cannabis permit, potential impacts include cultivation areas, associated roads and infrastructure.
  - 4. Unfettered access to property, good visibility approximately 75-100%
- E. TRINITY COUNTY MEDICAL CANNABIS ORDINANCE PERMIT.
- F. THIS REPORT IDENTIFIES AND INVENTORIES HISTORIC RESOURCES WITHIN THE PROJECT AREAS AND PROVIDES RECOMMENDATIONS FOR MITIGATION OR THE NEED FOR FURTHER ARCHAEOLOGICAL WORK.
- G. RESULTS
  - 1. RESOURCES IN AND OUT OF APE: NONE
  - 2. RESOURCES AFFECTED OR NOT BY PROJECT: NONE
  - 3. SPECIAL CIRCUMSTANCES: VISIBILITY WAS 75-100%
  - 4. REQUESTED ACTION BY SPECIFIC LAW: NO FURTHER ARCHAEOLOGICAL WORK PER CEQA VIA TRINITY COUNTY ORDINANCES.
  - 5. CONTACT: NICK ANGELOFF 707-407-6205; nangeloff.ceo@gmail.com

**A Cultural Resources Investigation of the Hayfork Herron Property  
Final Report**

**Hayfork, Trinity County, California  
Hayfork Summit 7.5' USGS Quadrangle  
Assessor's Parcel Number: 017-010-80-00**

**11-acres**



*Prepared by:*

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*Prepared for:*

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Hayfork, CA 96041  
APPLICATION NUMBER: TBD

May 2019

**CONFIDENTIAL**

## ACRONYMS AND ABBREVIATIONS

AB – (California State) Assembly Bill

APE – Area of Potential Effect

ARSC – Archaeological Research and Supply Company

cal – Calendar years before present

CEQA – California Environmental Quality Act

CMMLUO – Commercial Medical Marijuana Land Use Ordinance

CRHR – California Register of Historic Resources

NAHC – Native American Heritage Commission

NEPA – National Environmental Policy Act

NPS – National Park Service

NRHP – National Register of Historic Places

THPO – Tribal Historic Preservation Officer

Submitted for tribal review

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## 1.0 SUMMARY OF FINDINGS

This report is the result of an archaeological survey of the Herron property, APN 017-010-80-00. The project area includes 11-acres on one parcel located in the vicinity of Hayfork, California. The property is the subject of a medical cannabis permitting project, Trinity County Commercial Medical Marijuana Land Use Ordinance (CMMLUO) permit application number TBD.

### 1.1 Coordination/Background

Background research by the Nor-Rel-Muk, Hupa, Redding Rancheria, Round Valley, and Wintu tribes, upon a request for information, resulted in no comments regarding any known archaeological or cultural sites on the subject property. The Tribal Chairperson for the Nor-Rel-Muk tribe, John Hayward, replied saying their tribe would like to be involved and we are awaiting any further response.

### 1.2 Survey Methods/Dates/Findings

The property parcel was surveyed by Archaeological Technicians Saige Heuer, BA, Abby Barrios, BA, Brianna King, BA, and Elijah Sanderson under the direction of Principal Investigator Nick Angeloff, MA in May 2019 (Figure 1). Survey coverage included all areas of existing disturbance on the parcel, including 600-ft buffers and any slopes less than 35%. Visibility was approximately 75-100%. In areas where visibility was obscured, systematic shovel probes and surface scrapes were employed at 15-meter intervals or as practical. No cultural or historic markers were found.

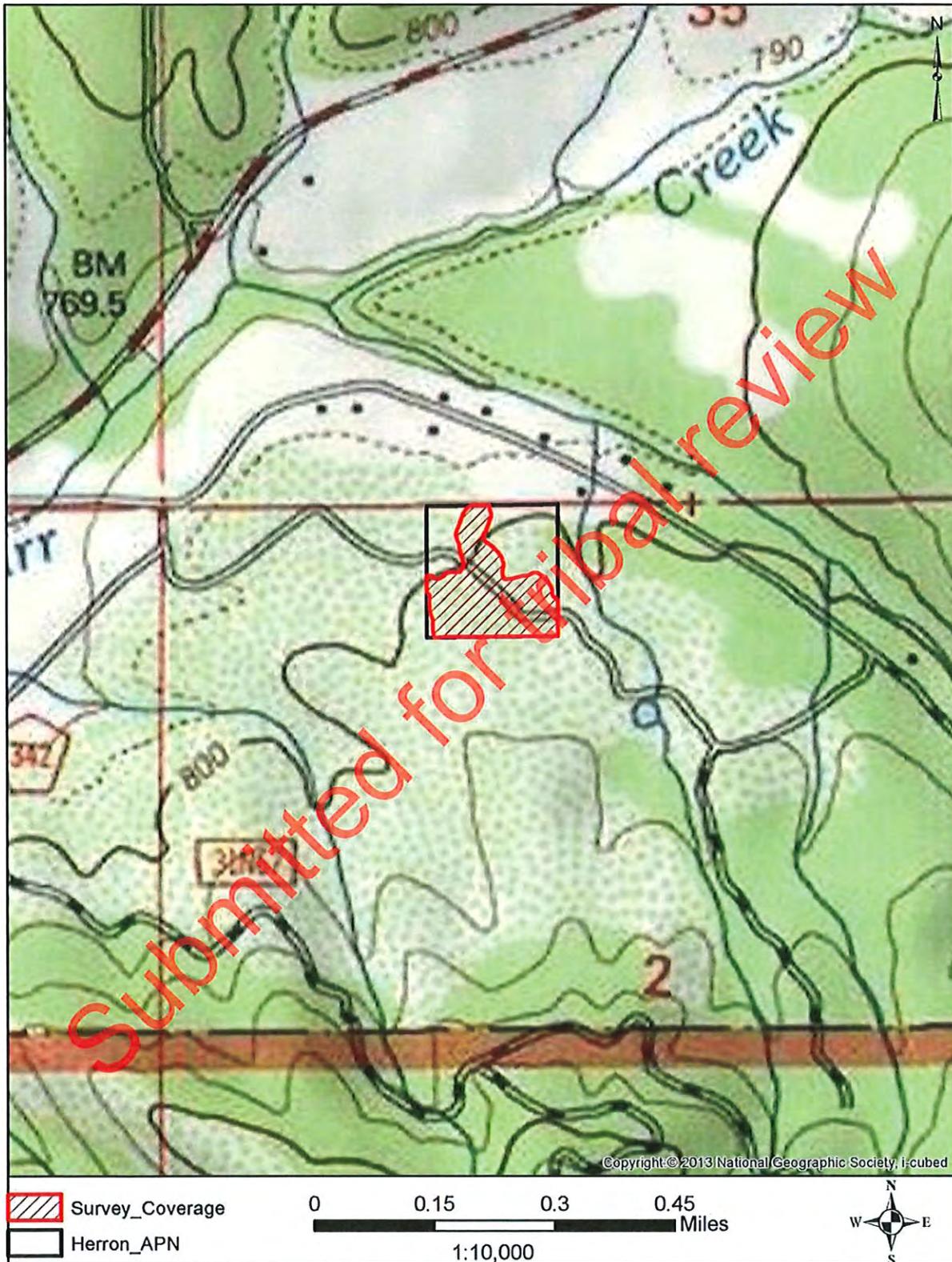


Figure 1 1:10,000 Project Location and Survey Area

**1.3 Affects to Significant Resources**

This project will not affect significant historic or prehistoric resources.

**1.4 Constraints**

There were no constraints regarding this property.

**1.5 Recommendations**

It is recommended that no further archaeological studies be conducted for this property. There is always a potential of finding buried archaeological deposit. If these or any other project conducted on this property inadvertently exposes cultural resources, all work should halt within 100 feet of the find and a qualified archaeologist and tribal representative(s) should be contacted immediately to evaluate the find, as per the attached inadvertent discovery protocol (Appendix A).

**1.6 Field Notes, Photographs, and Report on File:**

Archaeological Research and Supply, 440 Wildwood Ave., Rio Dell, CA 95562.

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## 2.0 INTRODUCTION AND PROJECT DESCRIPTION

### 2.1 Introduction

#### 2.1.1 Contracting Institution, Permit Number

The Archaeological Research and Supply Company survey of the Herron property was initiated by the property owner in April 2018. Permit application number TBD.

#### 2.1.2 Undertaking, Laws, Previous Studies

##### **Undertaking and Regulatory Requirements:**

The undertaking of this project is to permit cannabis cultivation operations in Trinity County in satisfaction of the requirements under Trinity Counties' commercial land use ordinances and Commercial Medical Marijuana Land Use Ordinance (CMMLUO) as guided by the California Environmental Quality Act (CEQA) and Public Resources Code as they pertain to historic resources.

Cultural resources include historic and prehistoric archaeological sites, historic architectural and engineering features and structures, and sites and resources of traditional cultural significance to Native Americans and other groups. The archaeological study was directed by Nick Angeloff, MA, who meets the Standards and Guidelines for Archaeology and Historic Preservation (National Park Service [NPS], 1983) for archaeology. This survey and report are consistent with CEQA compliance procedures and Section 106 of the National Historic Preservation Act (NHPA) set forth at 36 C.F.R. Section 800.

Significant cultural resources (as defined for federal undertakings) include those prehistoric and historic sites, districts, buildings, structures, and objects, as well as property with traditional religious or cultural importance to Native Americans or other groups, which are listed, or are eligible for listing, on the National Register of Historic Places (NRHP), according to the criteria outlined in 36 C.F.R. Section 60.4. Cultural resources that do not meet the NRHP criteria but may qualify as uniquely characteristic of an area are considered under the National Environmental Policy Act (NEPA), and resources that may qualify for the California Register of Historic Resources (CRHR) are considered under CEQA. Any substantial adverse change in the significance of a historical resource listed in or eligible to be listed in the CRHR is considered a significant effect on the environment. Impacts to cultural resources would result from activities that affect characteristics that qualify a property for the NRHP or substantially adversely change the significance of a resource that is qualified to be listed in the CRHR. Therefore, impacts to cultural resources from the proposed project will be considered significant if the project:

- Physically destroys or damages all or part of a property;
- Changes the character of the use of the property or physical features within the setting of the property which contribute to its historic significance; or
- Introduces visual, atmospheric, or audible elements that diminish the integrity of the significant historic features of a property.

With the exception of isolated artifacts or features that appear to lack integrity or potentially important information, all new cultural resource findings would be treated as though they are eligible for the NRHP/CRHR. If possible, all recorded resources should be avoided completely.

However, if avoidance is not possible through project redesign, the significance of the affected resources will be evaluated formally using NRHP/CRHP and/or CEQA criteria and guidelines. If a resource is determined to be significant, avoidance, a data recovery program, or some other appropriate mitigative effort will be undertaken in consultation with the local tribes and the County of Trinity.

The undertaking of this project is to permit cannabis cultivation operations in Trinity County in satisfaction of the requirements under Trinity Counties' Commercial Medical Marijuana Land Use Ordinance (CMMLUO) as regulated per the California Environmental Quality Act (CEQA). CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (Cal. Pub. Res. Code Section 21084.1) and defines substantial adverse change as demolition, destruction, relocation, or alteration that would impair historical significance (Cal. Pub. Res. Code Section 5020.1). Public Resources Code Section 21084.1 stipulates that any resource listed in, or eligible for listing in the California Register of Historical Resources (CRHR) is presumed to be historically or culturally significant. Resources listed in a local historic register or deemed significant in a historical resource survey (as provided under Section 5024.1g of the Public Resources Code) are presumed historically or culturally significant unless the preponderance of evidence demonstrates they are not. A resource that is not listed in or determined to be eligible for listing in the CRHR, is not included in a local register of historic resources, or is not deemed significant in a historical resource survey may nonetheless be historically significant (Section 21084.1; see Section 21098.1). Cal. Pub. Res. Code Section 21098.1 stipulates:

- A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

For the purposes of this section, a historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources, as defined in subsection (k) of Section 5020.1 [see below], are presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the CRHR, not included in a local register or historical resources; or not deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 [see below] shall not preclude a lead agency from determining whether the resource may be a historical resource for purposes of this section. Cal. Pub. Res. Code Sections 5020.1 and 5024.1 provide the following definitions:

- Historic district means a definable unified geographic entity that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.
- Historical landmark means any historical resource that is registered as a state historical landmark pursuant to Section 5021.
- Historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic agricultural, educational, social, political, military, or cultural annals of California.

- Local register of historic resources means a list of property officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.
- Substantial adverse change means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. CEQA requires a lead agency to identify and examine environmental effects that may result in significant adverse effects.

Where a project may adversely affect a unique archaeological resource, Section 21083.2 requires the lead agency to treat that effect as a significant environmental effect and prepare an environmental impact report. When an archaeological resource is listed in or is eligible to be listed in the CRHR, Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. Sections 21083.2 and 21084.1 operate independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. Either of these benchmarks may indicate that a project may have a potential adverse effect on archaeological resources. Cal. Pub. Res. Code Section 21083.2 (g) defines unique archaeological resource to be:

- An archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information,
- (2) has a special and particular quality such as being the oldest of its type or the best available example of its type, or
- (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

Other state-level requirements for cultural resources management appear in the Cal. Pub. Res. Code Sections Chapter 1.7, Section 5097.5 (Archaeological, Paleontological, and Historical Sites), and Chapter 1.75, beginning at Section 5097.9 (Native American Historical, Cultural, and Sacred Sites) for lands owned by the state or a state agency.

California State Assembly Bill 52 (AB 52), which went into effect after July 1, 2015, established a consultation process with all California Native American Tribes on the Native American Heritage Commission (NAHC) list, which includes both federally recognized groups and non-federally recognized groups. AB 52 also established a new class of resources, tribal cultural resources. Tribal cultural resources must be considered when determining project impacts and possible mitigation. Tribal notice and consultation must occur. A Tribal Cultural Resource is a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a Tribe and is either listed on or eligible for the CRHR or a local register. A lead agency may, at its discretion, decide to treat a resource as a Tribal Cultural Resource.

Native American consultation requirements of SB 18 (Chapter 905, Statutes of 2004) applies to all general or specific plan processes proposed on or after March 1, 2005.

The disposition of Native American burials is governed by Section 7050.5 of the California

Health and Safety Code and Public Resources Code Sections 5097.94 and 5097.98, and falls within the jurisdiction of the NAHC. If human remains are discovered, the county coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the coroner determines the remains to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native American so they can inspect the burial site and make recommendations for treatment or disposal. The project will comply with these requirements related to cultural resources through the implementation of mitigation measures described below.

Local Laws and Regulations regarding cultural and historic preservation exist at the county level and are linked with those of cities and with state and federal preservation programs. Ground-disturbing activities have the potential to damage or destroy historic or prehistoric archaeological resources that may be present on or below the ground surface. Damage to or destruction of these resources, as a result of development, should be minimized.

The Trinity County Framework Plan establishes the following policies for the protection of cultural resources, consistent with the federal and state regulatory framework. The identified goal is to provide for the protection and enhancement of cultural resources for the historic, scientific, educational, and social contributions they render to the present generation and to generations that follow by enforcing the following policies:

1. Cultural resources (including but not limited to archaeological, paleontological and architectural sites, grave sites and cemeteries) shall be identified where feasible, assessed as to significance, and if found to be significant, protected from loss or destruction.
2. Concerned citizens, historical organizations and applicable agencies shall be consulted during project review for the identification and protection of cultural resources.
3. Projects located in areas found to have cultural resources shall be conditioned and designed to avoid loss or degradation of these resources.
4. Expert opinions and field reconnaissance at the applicant's expense may be required during environmental assessment to determine the presence, extent, and condition of cultural resources and the likely impact upon such resources.
5. Archaeological and paleontological resources shall not be knowingly destroyed or lost through a discretionary action unless:
  - The site or resource has been found to be of insignificant value by relevant experts and representatives of the cultural resources community, or;
  - There is an overriding public benefit from the project, and compensating mitigation to offset the loss is made part of the project.
6. Mitigation measures shall be required where new development would adversely impact archaeological or paleontological resources.

**Previous Studies:**

The recommendation for archaeological study for this specific project was the result of the research that took place at the Northwest Information Center at Sonoma State University, the Nor-Rel-Muk Nation, Hoopa Valley Tribe, Redding Rancheria, Round Valley, and Wintu Tribe of Northern California, which was assessed by the Trinity County Planning Department, resulting in the requirement to conduct an archaeological inventory of the project areas. The

record search for the projects was conducted by Northeast Information Center (NEIC) staff for Nick Angeloff, MA, in May 2019. The record search at the NEIC revealed seven (7) previous surveys and one (1) previously recorded archaeological site within ½ mile of the property. There were no archaeological resources located during this survey. (Confidential Appendix C).

Additional background research conducted by Mr. Angeloff and Mr. Rohde, MA, revealed nothing further about the property.

### **2.1.3 Undertaking Description**

#### **Project Description**

APN 017-010-80-00 is pre-existing in nature with two (2) large ponds, four (4) 500-gallon plastic water tanks, one (1) 250-gallon plastic mixing tank, and one (1) 191' x 301' outdoor cultivation area (Figure 2).

Submitted for tribal review

Frog Pond Legacy, LLC; Michael Herron; 017-010-80-00

Small Mixed Light Tier 1

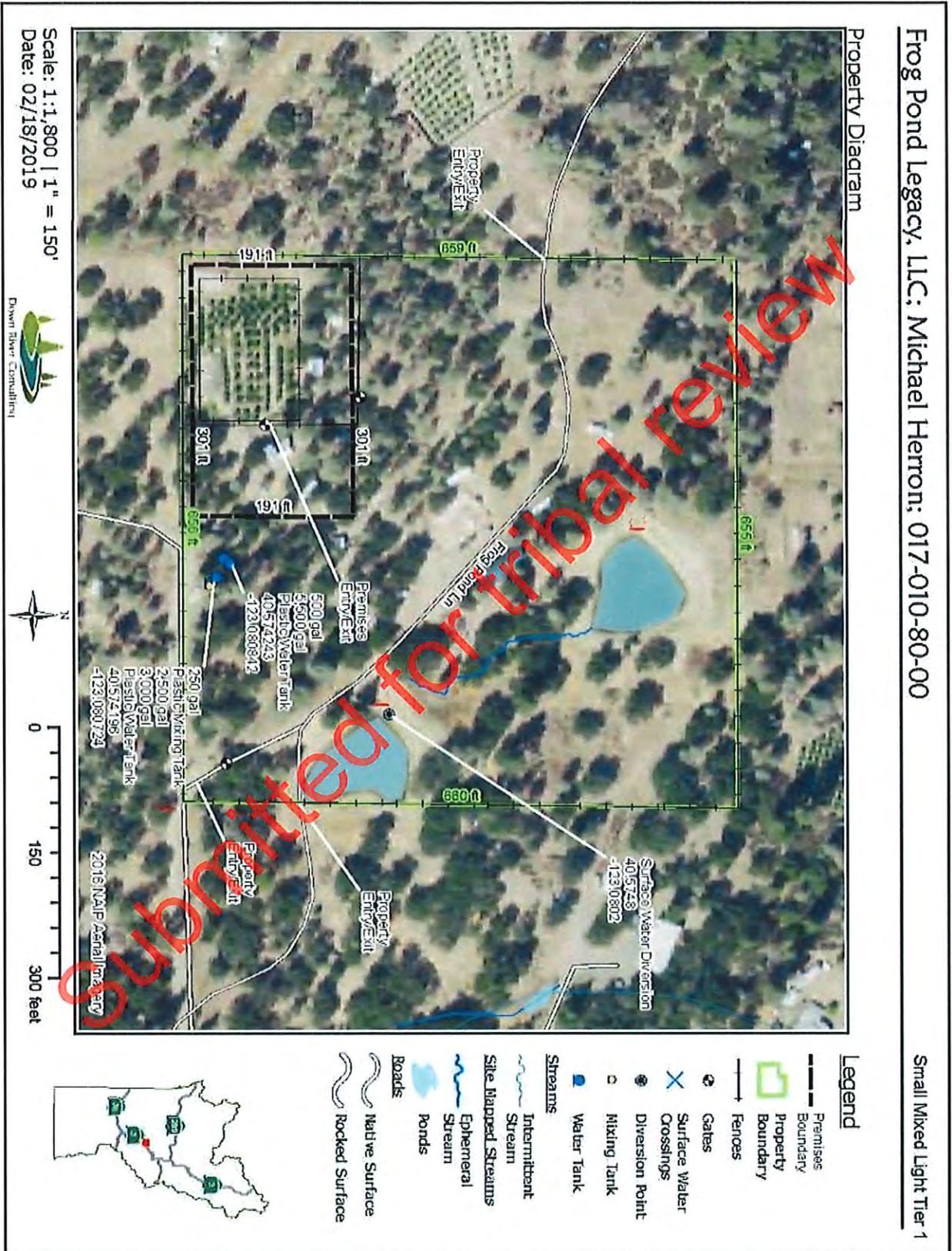


Figure 2 Project Plot Plans

### **Potential Disturbances**

Extent and nature of existing and proposed project infrastructure and cultivation areas include those operations described above.

### **Schedule of Undertaking**

The project will be implemented upon issuance of the county permit.

### **Survey Area**

The property parcel was surveyed by Archaeological Technicians Saige Heuer, BA, Abby Barrios, BA, Brianna King, BA, and Elijah Sanderson under the direction of Principal Investigator Nick Angeloff, MA in May 2019.

Survey coverage included all areas of existing disturbance on the parcel, including 600-ft buffers and any slopes less than 35%. Visibility was approximately 75-100%. In areas where visibility was obscured, systematic shovel probes and surface scrapes were employed at 15-meter intervals or as practical. No pre-existing resources were located on the subject parcel and none will be impacted by this project if the mitigation recommendations are followed.

### **Personnel Description and Duties**

Nick Angeloff, MA, Principle Investigator, coordinated or conducted all background research, interaction with the local Native American tribes, and produced the maps, while Jerry Rohde, MA produced ethnographic material and the historic background.

The level of survey, documentation, and the qualifications of personnel meet or exceed the requirements of local, state and federal law, including the California Environmental Quality Act (CEQA), the National Historic Preservation Act (NHPA) of 1966 as amended, and the National Environmental Protection Act (NEPA), as applicable. The current survey revealed no prehistoric resources within the APE.

### **2.2 Project Location and Description**

The project proponent owns APN 017-010-80-00. The project areas include 11-acres total on parcels located in the vicinity of Hayfork, California identified as the Hayfork Herron Project on the 7.5' USGS Hayfork Summit 1:24,000 Quadrangle map (Figure 3).

The parcel has flat to gently sloping terrain with a high volume of rock in the silty/sandy soil. The property has Ponderosa Pine and Foothill Pine scattered in all directions. The project proposed to the County of Trinity contains pre-existing outdoor medical cannabis cultivation operations and other associated infrastructure.

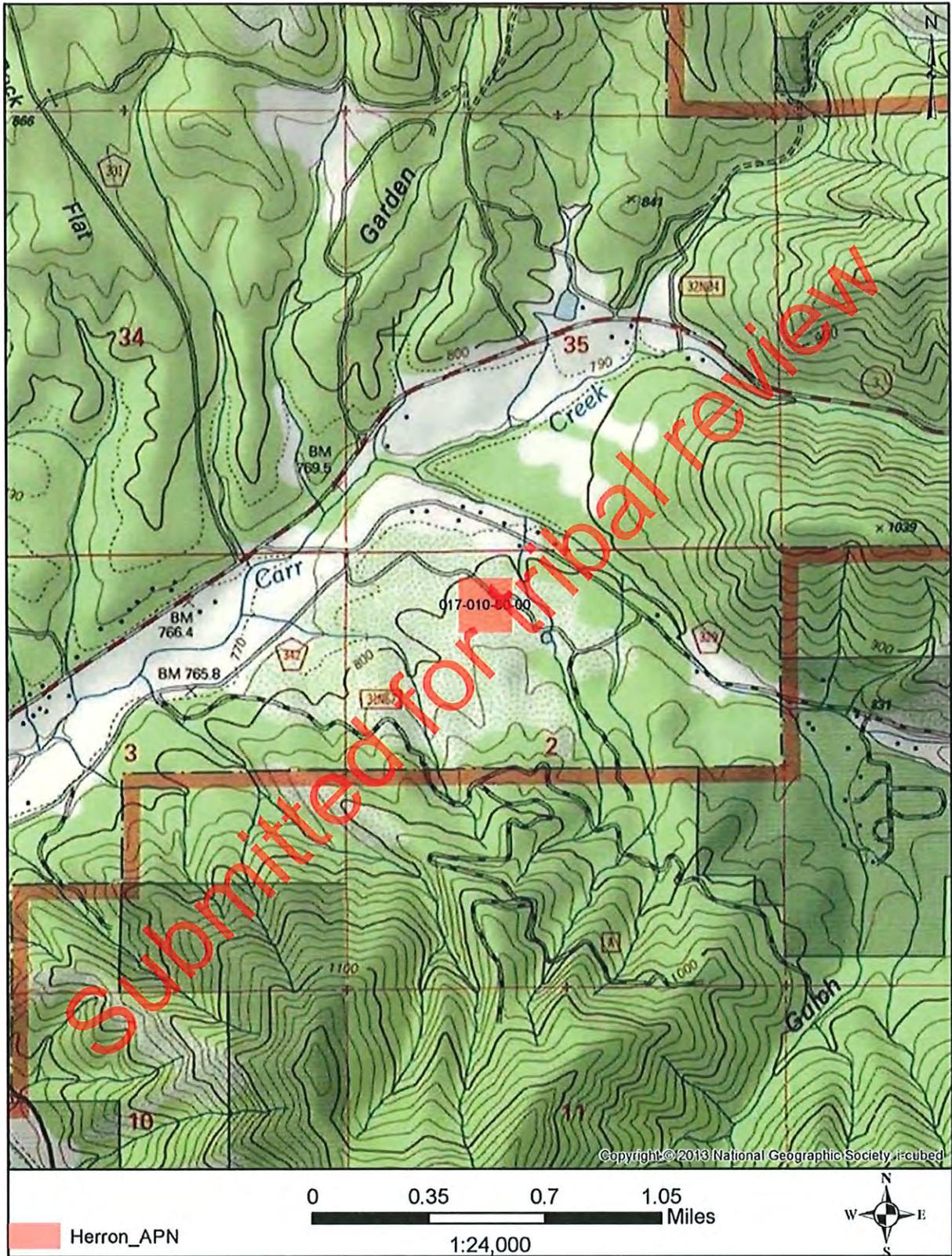


Figure 3 1:24,000 Project Map USGS 7.5' Hayfork Summit Quadrangle

The project is located in Trinity County, California, in the Hayfork area, as identified on the 1:100,000 scale map below (Figure 4).

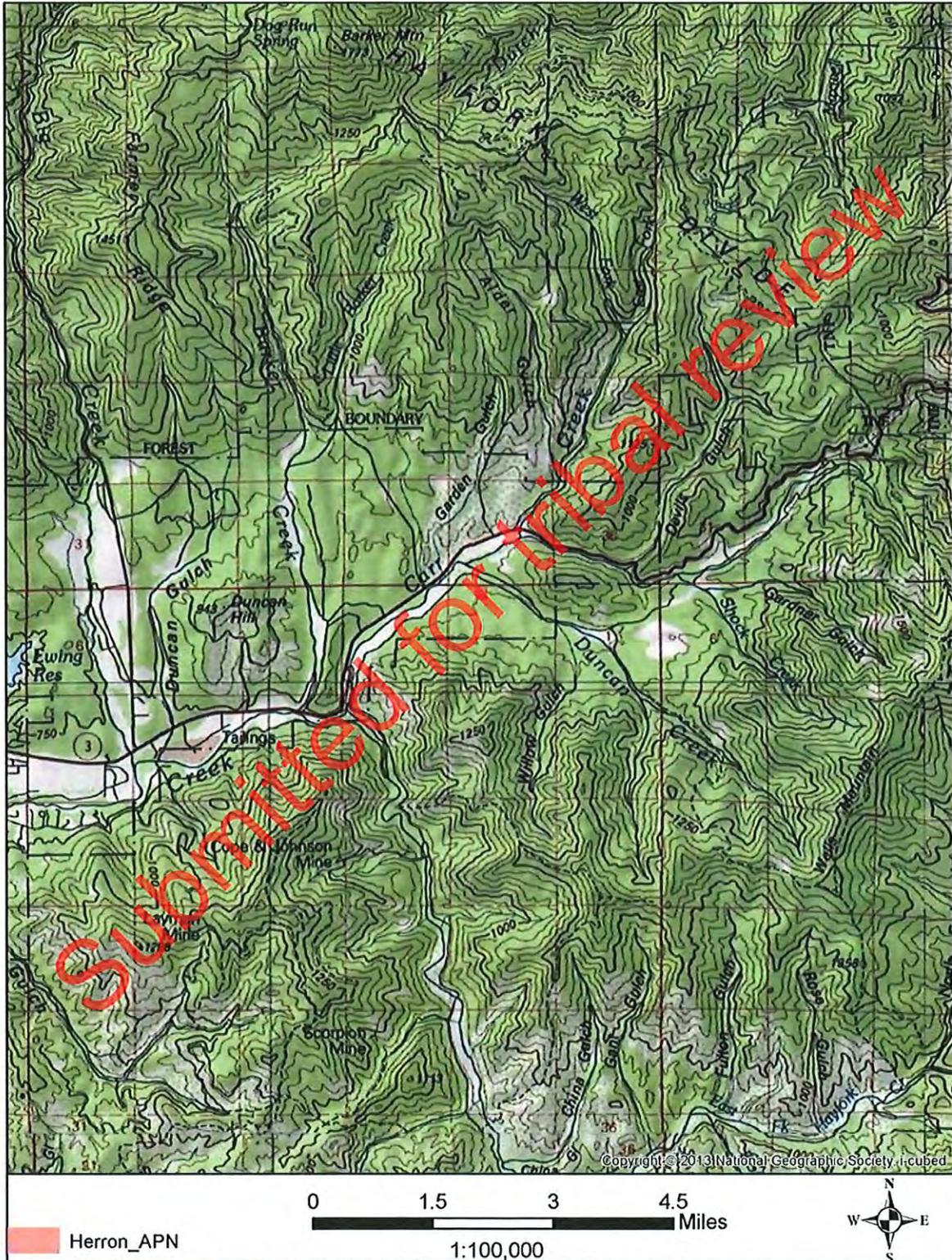


Figure 4 1:100,000 Project Map USGS 7.5' Hayfork Summit Quadrangle

In order to provide a broader geographic understanding of the project location, below is a 1:3,000,000 scale map (Figure 5).



Figure 5 1:3,000,000 Project Location Map

### 3.0 SETTING

#### 3.1 Natural Setting

##### Geography, Geology, Climate, and Hydrology

The regional geology is within the Franciscan Range and incorporates a wide variety of rock types with culturally important types including cryptocrystalline silicate (chert), soapstone and sandstones used for lithic tools. Regional soils are typically acidic clayey loams due to the presence of dense forests throughout time. The open grassland/oak woodland/coast grassland areas generally harbor a more balanced pH clayey loam soil, and coastal areas are typically a sandy loam that is slightly basic. The project area is within a typically balanced open prairie and acidic forested zone of the Franciscan Range.

The regional climate is Mediterranean in nature with warm summers and cool winters. There is variation with the regional micro-climates with coastal areas seeing much more moderate temperatures and precipitation during both winter and summer. Inland areas see snow, and high summer temperatures can reach into the 110-degree Fahrenheit range. The microclimate in Hayfork is characteristic of the inland areas, with measurable precipitation 79 days per year and totaling 65 inches on average. On average, there are 174 sunny days per year. The July high is around 78 degrees Fahrenheit and the January low is typically around 37 degrees.

The hydrology of the area is a result of the high annual precipitation amounts, from 30 inches per year to well over 100 inches. The region is dominated by large rivers with significant numbers of tributaries, all of which harbor Salmon runs today and significantly higher numbers and frequency of these runs in early historic and late prehistoric periods.

##### Flora and Fauna

The project location is populated by non-native, introduced, agricultural pasture grasses (i.e. canary grass (*Phalaris aquatica*), wild oats (*Avena spp.*), soft chess (*Bromus hordeaceus*), and common velvet grass (*Holcus lanatus*)), while the area is populated by native plant species, predominantly Douglas Fir (*Pseudotsuga menziesii*), Cedar (*Chamaecyparis lawsoniana*), Oak (*Quercus spp.*), Redwood (*Sequoia Sempervivans*), Bracken Fern (*Pteridium*), Salal (*Gaultheria shallon*), Blue Blossom (*Ceanothus thyrsiflorus*), Trillium (*Trillium grandiflorum*), Miners Lettuce (*Claytonia perfoliata*), Tanoak (*Notholithocarpus densiflorus*), Manzanita (*Arctostaphylos*), Madrone (*Arbutus menziesii*), Red Alder (*Alnus rubrus*), and California Bay Laurel (*Umbellularia californica*). Examples of other species that are present, or may have been present prior to EuroAmerican settlement with cultural significance include: Cascara (*Rhamnus purshiana*), Clover (*Trifolium microdon*), Deer Fern (*Blechnum spicant*), Sword Fern (*Polystichum munitum*), Big Leaf Maple (*Acer macrophyllum*), Salmonberry (*Scutellaria spp.*), Thimbleberry (*Rubus parviflorus*), Tobacco (*Nicotiana quadrivalvis*), Willow (*Salix spp.*), Stinging nettle (*Urtica dioica ssp. gracilis*), and California blackberry (*Rubus ursinus*).

Within the Hayfork Valley area there are numerous faunal species present with economic and cultural importance, most significantly Salmon (*Oncorhynchus kisutch* and *Oncorhynchus tshawytscha*) and Steelhead (*Oncorhynchus mykiss*), Blacktail Deer (*Odocoileus hemionus*), Roosevelt Elk (*Cervus canadensis roosevelti*), Bobcat (*Lynx rufus*), Mountain Lion (*Puma concolor*), Rabbit (*Oryctolagus cuniculus*), and various other minor and less common species.

### Current Land Use and Condition

The property is currently utilized as rural parcel with various small land-owning activities occurring on a day to day basis.

## 3.2 Cultural Setting

The following provides a synopsis of the cultural and historic setting within the project area. It is intended to be a general overview of an area that is not well studied archaeologically and is certainly not to be interpreted as a defining document regarding the cultural reality of extant local Native American peoples. It must be stated that the tribes identified in this document are represented by living culture and governing bodies that are active in both governance and practice unique cultural activities which self-define contemporary ethnicity both internally and as a projection to the balance of humanity. As with all cultures, there are, and rightfully so, aspects of local Native American ethnic groups that have been and will continue to be the intellectual property of those who live or have lived within the culture, both today and in the past.

### 3.2.1 Ethnography

The project area lies within the traditional territory of the Norrelmuk group of the Wintu tribe (LaPena 1978:324; Merriam 1966:76). The Norrelmuk were the southwesternmost Wintu group, inhabiting the Hayfork drainage and nearby areas (LaPena 1978:324; Merriam 1966:76; United States Department of Agriculture 1920). According to Merriam, the Norrelmuks' eastern boundary was at Brown's Creek, approximately five miles east of the project area (Merriam 1966:76). A list of Wintu villages compiled by Merriam shows Pan-na-wuk-kut as the closest to the project area. It was a "large Wintu village on upper Reading Creek, far above Douglas City" (Merriam 1998:(reel 5)frame 118 right). The part of upper Reading Creek that is closest to the project area is about nine miles to the east. No information has been located that indicates the presence of a village site or other cultural features within or near the project area. Time and space do not permit a detailed discussion of the various possibilities, but it should be mentioned that while ethnographical literature only contains positive statements about the Hayfork area being within Chimariko territory (Golla 2001:1086), the topography of the area suggests that the Tsnungwe were better positioned to claim the Hayfork area, and the Wintun also settled here as well.

#### 1. The Tsnungwes:

The overview of the Tsnungwe that follows is not intended to be comprehensive; rather it is intended to provide a brief introduction and context as it directly relates to the project area. Both the Hupa and the Tsnungwe are living tribes with organized governing bodies and active citizens, practicing both contemporary functions on a day to day basis as any other government, while also practicing traditional cultural functions unique to their identities as distinct ethnic and cultural groups. Information provided concerning the traditional settlement and subsistence patterns serves only to highlight the potential for cultural resources near or within the project area.

East of the ridgetop was the traditional territory of the Tsnungwe tribe. Some sources assign the locale to the Hupa tribe, but Goddard (1903), in his "Life and Culture of the Hupa," states that the Hupas' neighboring tribe to the south lived ". . . along the Trinity River *from Hupa*

*valley* [emphasis added] to the mouth of the Southfork twenty miles above. They have been treated by Stephen Powers under the name Kelta as a separate tribe” (Goddard 1903:7). Under the heading of “tribes tributary to the Hupa,” Powers indicates that “the south fork of the Trinity is the home of the Kel-ta . . .” (Powers 1976:89). The Keltas are more recently referred to as the Tsnungwes. A group called the Tsnungwe Council is attempting to gain federal recognition for the Tsnungwe tribe. Danny Ammon, a Tsnungwe researcher, describes Tsnungwe territory as follows:

*The watershed of the Trinity River from Horse Linto Creek to Cedar Flat and the watershed of the South Fork of the Trinity River from the Trinity River to Grouse Creek, including the watersheds of Horse Linto Creek and Grouse Creek and the top areas of South Fork Mountain and Pilot Ridge* (Ammon 2005).

Based on this information, the northernmost Tsnungwe village would have been Sage-qid, on the west side of the Trinity River about one mile south of Horse Linto Creek. The next sites to the south were in the Willow Creek area, where there was a cluster of four habitation locations near the mouth of the creek (Golla and O’Neill 2001:1006-1007). These latter sites constitute the closest Tsnungwe winter habitation locations to the project area, a distance eastward of about seven air miles. In the 1880s an elaborate trail system was recorded in the vicinity. Whether any of the trails were Indian in origin is unknown, but two of them lead to locations suggestive of an Indian presence—Indian Field Ridge and Indian Butte. These may have been Tsnungwe summer use areas. The trails will be discussed in the history section, below.

The Whilkut tribe occupied the Redwood Creek drainage from its headwaters downstream to about the Tall Trees Grove and also the North Fork of the Mad River (Merriam and Talbot 1974:9). Goddard (1903) identified three Whilkut (Chilula) villages on the east side of Redwood Creek that, because of their proximity, may have used the Indian Field area for hunting and gathering. These are Kinnaxonta’din, north of the confluence with Minor Creek, and Misme and Kaxusta’din, south of Minor Creek (Goddard 1914:276, Plate 38).

A group calling itself the Tsnungwe Council has been active for years in an attempt to gain official tribal status, centering their territory on the ancestral village of Hleldin (Tsnungwe Council 2007a), which was located at the confluence of the South Fork Trinity and main Trinity rivers. Merriam and Talbot, who call the tribe the Tsa-nung-waha, give its boundaries as the “drainage of lower part of South Fork Trinity from junction with Trinity South to Grouse Creek. North boundary—Madden Creek to west and main Trinity east and south to Mill Creek then up it and west to Grouse Creek.” Wallace calls the Tsnungwe the “South Fork Hupa,” claiming that “these people have been so generally classed with the better-known Hupa as to have no accepted name” (Wallace 1978:176) His map of villages shows South Fork Hupa territory extending from the mouth of South Fork up that river to Grouse Creek, along with territory on the main Trinity from about a mile below the South Fork to perhaps three miles above it. (Wallace 1978:170) Powers (1976) calls the Tsnungwes the “Kelta,” which he says is a name “bestowed on them by the Hupa.” He gives their home as the “south fork of the Trinity.” (Powers 1877:89) Kroeber also refers to a division of the Hupa that he calls the “Kelta tribe,” which he locates along the South Fork (Kroeber 1925:129-130). Goddard likewise echoes Powers in referring to the “Kelta,” but indicates that their territory began much farther north—at the southern end of the Hupa Valley (Goddard 1903:7).

## 2. The Hupas:

As indicated above, several authorities see the South Fork Trinity Indians as a southern division of the Hupa tribe. Merriam (1923), however, separates the Hupa from the Tsnungwe, and at one point (1930) he set their boundary at the South Fork: the entire main Trinity drainage downstream from there he puts in Hupa hands, along with the north side of the main Trinity from South Fork up to the divide which marks the New River drainage (Merriam 1930:map) As will be discussed later, however, Merriam (1923) apparently revised this version of the Hupa – Tsnungwe boundary.

## 3. The Chimarikos:

Silver describes this tribe as a “tiny group, numbering only a few hundred people before White contact, [which] was located in a narrow canyon that extends roughly 20 miles along the Trinity River...” (Silver 1978:205). Her map shows Chimariko territory extending along both sides of the Trinity down to and slightly past the South Fork, but not including any land along the latter river (Silver 1978:207). Silver’s map conflicts with Wallace’s, which shows South Fork Hupa (Tsnungwe) territory extending on both sides of the main Trinity both above and below the South Fork. (Wallace 1978:170) The editor of the volume in which both articles appear does not provide an explanation for the discrepancy.

Merriam (in 1930) shows Chimariko (his Chemareko) land beginning at New River, thence running up the Trinity on the northeast side only until Cedar Flat, and then continuing up both sides of the river (Merriam 1930). Dixon places the Chimarikos’ western boundary at the mouth of the South Fork (Dixon 1910:295), thereby coming closest to Silver in granting the tribe lands downstream from the boundaries given by other ethnographers. Dixon, however, then asserts that “there is some evidence...that the Chimariko also extend up the South Fork to a point about fifteen miles above Hayfork,” (Dixon 1910:296) a statement so wildly at odds with other ethnographic reports that it may call into question the reliability of his entire geography for the tribe. Kroeber maps the Chimarikos as starting just upstream from the South Fork and just below a village he calls “Mamsuidji” (Kroeber 1925:110). Silver places “mamsuce,” which is probably her equivalent for Mamsuidji, at Salyer, which is approximately across the river from where Kroeber has his village, indicating however, that its “location...is uncertain” (Silver 1978:207)

## 4. The Tlohmtahhois:

Sometimes known as “Merriam’s lost tribe,” the Tlohmtahhois are often referred to as the “New River Shasta.” Kroeber offers the latter term “in default of a known native name” (Kroeber 1925:280), as does Silver, who places their western boundary at “the forks of New River” and extends the tribe’s territory over the Salmon Mountains into the east and south forks of the Salmon River (Silver 1978:222). This accords almost exactly with Kroeber’s map (Kroeber 1925:110).

Yet elsewhere, Kroeber unwittingly provides a “native name” for the tribe, indicating that the Hupa are called “Tlomittahoi” by the Chimariko (Kroeber 1925:130); although this ascribes the name Tlomittahoi to the wrong tribe, it did help get the word into print. A year earlier, Curtis

began the name garbling, claiming that the Hupas' word for the Konohihu tribe (a group located on the lower Salmon River) is "Tlohmitahwe" (Curtis 1924:219).

It was left to Merriam, by the simple expedient (seemingly unused by other ethnographers) of asking his informants to give "our name for our own tribe" to clarify the confusion. When interviewing a blind Indian named Saxy Kidd in the 1920s, Merriam received as the answer to this question the word "Tlohmtahhoi" (Merriam 1998:reel 34, frames 510, 583). Merriam subsequently published an article in *American Anthropologist* (Merriam 1930:280-293) in which he described his interviews with Kidd and shared the fragment of a vocabulary that Kidd provided. Merriam went to great pains to show that Kidd's vocabulary represented a distinct language. He concluded that of the 35 words Kidd provided,

[a]fter eliminating all words of Chemareko and Shasta flavor there still remain twenty that appear to be quite unlike those of any known tribe—in other words they seem to represent a distinct language—the *Tlo-hom-tah-hoi*—previously unknown save for the seven words of "New River" published by Dixon in 1905. (Merriam 1930:283)

Dixon, in studying the Shasta Indians, had determined that a Shasta-related tribe, the Konomihu, occupied the lower Salmon River, and that

[f]urther investigations suggested by this discovery led to the finding of what seems to be a second new dialect in this region, spoken by the rumored Shasta occupants of the upper Salmon. It seems certain that the upper courses of the two forks of the Salmon River above the Konomi-hu were controlled by a small branch of the stock, speaking a language markedly divergent from the Shasta proper, and that this portion of the stock extended even over the divide, onto the head of New River (Dixon 1905:214-215).

Dixon did not take lightly Merriam's (1998) corrections of his work, and responded to the Tlohmtahhoi article in a subsequent issue of *American Anthropologist*, wherein he challenged Merriam's claim that Kidd's vocabulary represented a language different from that which Dixon identified as the "New River dialect." Dixon compared various vocabularies with Merriam's word list from Kidd, deciding that most of Kidd's vocabulary was related to Chimariko, some to Shasta, and some to "New River" (Dixon 1931:264-267). Merriam and Dixon had previously exchanged letters about the issue (Merriam 1966:244-249) prior to their articles in *American Anthropologist*. Merriam was not a trained linguist, but someone who was, John Peabody Harrington, left "instructions to an assistant making a field recording of Saxy's speech around 1940 indicate that Harrington considered his Hupa forms to be 'Tlo-hom-tah-hoi,' a distinct dialect of Hupa spoken on New River" (Mills 1981:54). In an interview with "Saxy Kidd" in 1928, with Mrs. Zack Bussell acting as interpreter, Harrington learned from Kidd that the "original inhabitants talked both Hupaw [Hupa] and Chim.[ariko]." Mrs. Bussell added that "they talked a little different from Hupa." Harrington's notes then state: "tlohmitaqwe, = New River Indians" (Harrington 1928:reel 24, frame 144 right). A. L. Kroeber recorded "Buck [Saxy] Kidd's mother" in 1901, generating a vocabulary list with correspondences to some of her son's words (Kroeber 1901:frames 413, 426, 427). Linguist Victor Golla is of the opinion that "Buck Kidd's...[mother] spoke New River Shasta," and that "the people of New River were Merriam's Tlohmtahhoi" (Golla 2007).

From the above it seems evident that an Indian group on New River spoke a distinct language, the name of which is the subject of controversy, and, if Saxy Kidd's information is to be credited, had their own distinct name for themselves, which was Tlohmtahhoi. The territorial boundaries for this tribal group are also in dispute, with Silver and Kroeber, as mentioned above, placing its southwestern boundary at the forks of New River and then extending their land

northeastward across the Salmon ridgeline and into the upper Salmon River drainage. Merriam (in 1930), on the other hand, locates the Tlohomtahhoi entirely within the New River drainage, omitting only a small area north of Ironside Mountain and south of Big Creek (Merriam 1930:map). This would place the southwestern boundary at the ridgeline immediately downstream from the mouth of New River, which rises northward to reach Happy Camp Mountain.

That was in 1930. Merriam, with the help of his daughter Zenaida Talbot, continued to refine his ethnogeography of area, utilizing a Forest Service map on which they hand colored tribal areas. A look at this map shows that Merriam believed the area north of the main Trinity between the South Fork and New River was claimed by three different tribes:

- 1) the entire sector is given the green coloration of the Hupa tribe;
- 2) a small band adjacent the north bank of the main Trinity, running from the South Fork to Sharber Creek, contains the green dots used to depict Tsnungwe territory;
- 3) an area east of Quinby [*sic*] Creek below the main east-west ridgeline is given the brown dots used for Tlohomtahhoi country (United States Department of Agriculture 1920)

It appears that Merriam had thus revised his earlier boundaries, reducing the Hupas' territory and enlarging that of the Tsnungwes and Tlohomtahhois. It is unclear from Merriam's field notes how the various boundaries were determined, nor is his rationale for making changes always apparent. But his working map (United States Department of Agriculture 1920) indicates that he eventually reached the conclusion that the boundary between the Tsnungwe and Tlohomtahhoi tribes ran near or through the project area, most probably along the divide between Sharber and Quinby [*sic*] creeks (United States Department of Agriculture 1920).

While it is impossible at this date to determine the exact tribal boundaries in the vicinity, it is difficult to discount Merriam's (1930) detailed, revised descriptions, especially since his working map provides such relatively precise information about the Campbell/Fountain Ranch – Sharber Creek locale. If we accept the information on this map, the project area would lie near the Tsnungwe – Tlohomtahhoi boundary.

### 5. The Wintun

The project area is located within the ethnographic territory of the Wintu, which was the largest nationality of Native Americans in Northern California, and one of the most important California tribes in the development and diffusion of customs prior to European American contact. It is estimated that the pre-contact population was approximately 12,000, and is believed to be less than 1,000 today. Population estimates for the Wintu are difficult because they are often categorized as other groups, such as Shastas, Trinity Indians or Hayforks. The Wintu territory was long from north to south and narrow from east to west, stretching from the west side of the Sacramento Valley from the river up to the crest of the Coast Range. The Wintu territory incorporated portions of present-day Trinity, Shasta, Siskiyou and Tehama counties). According to Lapena (1978), the following nine major Wintu groups existed in this region: *Nomtipom* (in-the-west-ground) from the upper Sacramento Valley; *wenem-em* or *wenemem* (middle water) from the McCloud area; *dawpom* (front-ground) from the Stillwater area; [Symbol] *elpom* (in-ground) from the Keswick area; [Symbol] *'abal-pom* (good (peaceful) ground) from the French Gulch area; *nomsu*[Symbol]*s* (those being west) from the upper Trinity Valley region; *dawnom* (front-west) from the Bald Hills region; *norelmaq* (south-uphill people) from the Hayfork area; and *waymaq* (north people) from the upper McCloud River valley region.

Due to the vastness of the Wintu territory, it is difficult to identify specific cultural traits of the Wintu. Neighboring tribes heavily influenced much of the culture characteristics of the various Wintu groups. The language of the Wintu was closely related to the Nomlaki, the Wintu neighbors to the south and remotely to Patwin. Neighbors to the east included the Yana and Achuymawi, and to the west the Chimariko. To the north, the Wintu adjoined the Shasta and New River Shasta groups. In the North the Whilcut territory merged with the Chilula on Redwood Creek. The Shasta knew the Trinity River Wintu, those in close proximity to the project area, as *Hatukwiwa or Hatukeyn*, and the Chimariko referred to them as *Pachhuai or Pachawe*. The Trinity Wintu, like all northwestern tribes, did not take scalps and are believed to have held war dances in place of this custom. Warfare occurred between neighboring groups over offenses such as murder, theft of women or theft of acorn caches. Small numbers of men typically went to war and few were killed. The weapons used by the Wintu consisted of bows, arrows, clubs, thrusting spears, daggers, and slings. The houses of the Trinity Wintu were typically bark dwellings, where four to several dozen existed per village. The population of villages ranged from 20 to 150 people. In addition, indoor ceremonies were held in round dirt-covered structures that were 15 to 20 feet in diameter. These structures were used for sweating, shaman initiations, and as sleeping places for unattached males. Steam houses and menstrual huts were domed shaped brush shelters.

The family was the basic unit of the Wintu, while the village was the social, political and economic unit. The leadership lineage of the Wintu was patriarchal. Wealth did not necessarily designate leaders in the Wintu tribe. Each chief was expected to be well-informed, charismatic, and good at dancing and singing. Marriage among the Wintu was designated as a man and woman living together; marital residences could be patrilocal or matrilineal as long as the couple established an independent household. Monogamy was the customary tradition of the Wintu, yet men of importance were allowed to have two or more wives. Divorce was permitted in the Wintu culture for instances involving incompatibility or adultery, but not barrenness. Couples desiring a divorce would do so by establishing separate households. Wintu children frequently occupied adults in daily tasks in order to learn life skills. Puberty rituals were more extensive for females than males. Upon first menses, girls were required to stay in seclusion for one to several months, were not allowed to cook for or touch themselves. Their diets were limited to acorn soup. During the seclusion, elders would come to give the girl advice about her future expected behavior, while children would often sing and dance outside her tent. The girls were required to stay awake for the first five days, as dreams at this time could be detrimental to health and sanity. For subsequent menses, women were required to withdraw for the duration of her period to the family menstrual hut. The only recorded puberty rite for males happened after they killed their first deer or salmon. The boy would give his first kill to his parents, was not allowed to eat it, and had to bathe upon return from the hunt or fishing trip.

The Wintu diet consisted of game, fowl and insects, including deer, brown bear, rabbits, quail, gophers, mice, ground squirrels, wood rats, birds, grasshoppers; fish, including Chinook salmon, steelhead, suckers, trout, whitefish, mussels and clams; and vegetation, including manzanita berries, acorns, Indian potatoes, pussy's ears, snake's head, miner's lettuce, skunk brush berries, hazel nuts, pine nuts, wild grapes, sunflower seeds, and cotton flower seeds. Male Wintu were responsible for hunting and fishing, while females were responsible for gathering vegetation.

Upon death, it was customary to bury the dead as soon as the family could assemble, which usually occurred within the same day. The body would be dressed in finery by family members of the same sex and buried approximately 100 yards from dwellings with personal articles, the deceased's dog, and a basket of acorn meal for the soul to drink. The names of the deceased were not mentioned.

According to Lapena, the Wintu, although they were not referred to by name, were encountered by James Dana of the United States Exploring Expedition of 1841 and by John Work of the Hudson's Bay Company in 1883; the first recognition of the Wintu by name occurred in the *Humboldt Times* on November 11, 1854 by G.W. Taggart. Historical accounts of Wintu encounters with Whites are scarce to non-existent.

### 3.2.2 History

The 1981 listing of Trinity County historic sites shows that the closest such feature is the Reggie Morris Ranch, which lies on land claimed by Michael Ruch in 1853. Ruch acquired adjacent parcels from James Stanmore and R. B. Wells and then sold the combined properties to John Carr in 1858. Carr sold to J. S. Hoyt in 1873, who sold to Ed Newman in 1886, who shortly thereafter built the barn and house that was still standing in 1981. Newman's nephew, Reggie Morris, eventually acquired the property (Jones 1981:306). John Carr was the author of *Pioneer Days in California*, a well-respected history of late 19<sup>th</sup> century northwestern California (Amazon 2019).

The Reggie Morris Ranch (Figure 6) lies just northeast of the confluence of Carr and Duncan creeks, which places it about one-quarter mile northwest of the project area on the far side of Summit Creek Road. It is not known if the ranch had earlier included the project area.



*Site 2. Farm buildings at the Reggie Morris Ranch on Carr Creek.*

**Figure 6 Site 2. Farm building at the Reggie Morris Ranch on Carr Creek**

### 3.2.3 Archaeology

#### **Pleistocene-Holocene Transition—The Post Pattern (11,500 to 8000 cal BP)**

The earliest evidence for human occupation of northwestern California is labeled the Post Pattern. This pattern is characterized by fluted projectile points and flaked stone crescents. There has been no evidence for this occupation in the project vicinity or anywhere in Trinity County, California. An isolated fluted point was found on the coast in Mendocino County (Simons et al. 1985). The best evidence for the Post Pattern comes from the Borax Lake site in Lake County. Although no intact cultural strata could be identified at the site, the presence of fluted points, stone crescents, and very large obsidian hydration rim measurements all indicate a Terminal Pleistocene or very Early Holocene occupation.

#### **Early Holocene—Borax Late Pattern (8000 to 5000 cal BP)**

Contemporary archaeological theory posits that the original inhabitants of Humboldt County are represented by Borax Lake Pattern artifacts including the Borax Lake Widestem projectile point, handstones, millingslabs, small serrated bifaces, and cobble spalls. The first Archaic or Early period sites discovered in Humboldt County are CA-HUM-245 and 246 located on Pine Ridge (Flynn and Roop 1975, Jackson 1977). These sites acted to tie this area into the broader Borax Lake Pattern that was known throughout all other areas of northern California during this period. Hildebrandt and Hayes documented artifact assemblages associated with this pattern at sites along Pilot Ridge, to the south of the Pine Ridge area (West? Hildebrandt and Hayes?1984). The

significance of early to mid-Holocene archaeological assemblages in northern California lies in their antiquity and in the physical environment during this period. These assemblages reflect life-ways of 4000-8000 years ago during a warmer and drier climate which caused an expansion of Oak woodlands into higher elevations (West 1984). It has been proposed that this expansion of optimal resource patches resulted in distinct, highly mobile, upland focused subsistence systems represented by unique tool assemblages (West 1984, Hildebrandt and Hayes 1984). The Borax Lake Pattern within far northern California also includes locations in lowland riverine environments as identified by Sundahl and Henn at CA-TRI-1008 on the Trinity River and again in Shasta County at CA-SHA-475 along a tributary of the Pitt River (1993). Although hypotheses regarding environmental change and subsequent highly mobile montane adaptations have been advanced, they have not been tested on a broad scale within the North Coast Range (Fredrickson 1974, Clewett and Sundahl 1983, Hildebrandt and Hayes 1984, West 1984, White 2000) until Angeloff (2011) reported on his analysis of existing collections from Pilot Ridge, Squaw Creek and Cox Bar. Angeloff (2011) identifies distinct tool assemblages along Pilot Ridge at sites CA-HUM-573, HUM-577, and HUM-367, while lower elevation sites contained relatively broad and homogeneous stone tool assemblages. This analysis suggests a relatively sedentary lifestyle in the upland areas associated with specialized use areas and stable village areas potentially relying on an expanded elk and deer population tethered to sparse water sources.

#### **Middle Holocene Gap—Mendocino Pattern (5000 cal BP to cal AD 500)**

During the Middle Period, upland areas of Humboldt County seem to have been virtually abandoned, likely due to a change in environment from a warm and dry middle Holocene to a cooler and wetter late Holocene that reduced the volume of subsistence resources in upland areas. According to G. James West's (1984) palynological analysis of data acquired on Pilot Ridge in Humboldt County, coniferous forests began to encroach on the upland areas during this period, effectively reducing the number of subsistence resources available to human beings. The archaeological record pertaining to upland areas reveals a relatively low artifact count attributable to the middle period (Hildebrandt and Hayes 1984) but this is likely a direct result of the relative dearth of synthesized archaeological information in northwestern California.

Hildebrandt (2007) notes that the transition from the Borax Lake Pattern to the later Mendocino Pattern (3000 cal BP to cal AD 500) through the Middle Holocene is not well understood. There is almost no visible record dating between 5000 and 3000 cal BP, although it is unclear whether this represents a reduction in human population at the time, or simply a lack of well-dated archaeological remains from the region corresponding with this time period.

Use of these upland areas may have been task-specific during the middle period (Cassidy 1992) and therefore concentrated in discrete upland areas but visited just as intensively as the earlier inhabitants who sought a broader array or a more dispersed resource base within the more productive altithermal upland environment. Some coastal sites do provide evidence of occupation during this period, indicating to Hildebrandt (2007) that we may not be recognizing materials from this period.

The Mendocino Pattern first appears around 3000 cal BP and continues in the North Coast Ranges through the Late Holocene until cal AD 500. Sites associated with this period in the region are specialized hunting camps found on ridgetops at higher elevation and generally include concave-base, side-notched, and corner-notched dart points; handstones and

and whether such shifts appear related to natural or social processes.

#### 4.2 Previous Research

**Chronology:** Available data suggest that Trinity County has an extended record of occupation, beginning ca. 8,000 B.P. or earlier and continuing into the historic period. A significant data gap exists in the pre-8,000 B.P. record found both to the north and south of Trinity County but not identified within the geography of Trinity County.

**Subsistence:** Paleoclimatic data from northwestern California suggest significant shifts in the nature and distribution of biotic communities during the Holocene era. Warmer/drier conditions during the Middle Holocene (ca. 7,500-4,000 B.P.) effectively opened up upland areas and replaced conifer-dominated forests with tracts of oak woodland and grass-rich meadows. Levels of resource productivity probably peaked during this interval, when the intensity of upland residential use was perhaps at its zenith. The data lacking regarding subsistence is tied to a broader assessment of archaeological patterns within the project area. Research is limited to the South Fork Mountain/Pilot Ridge project for non-coastal archaeological research.

**Settlement:** The regional data indicates that settlement patterns change throughout time with early patterns reflecting relatively mobile residential bases and later assemblages reflecting sedentary residences. Again, this information is based on a series of four archaeological deposits along a single ridge system in Humboldt and Trinity counties. The data is lacking from a widespread analysis of site types based on known artifact types from interior Trinity County.

**Technology:** Regional technological patterns are relatively clear as described above in the archaeological background section. The regional data regarding artifact types is a little better with regard to the scope of potential data that exists. Many archaeological surveys within Trinity County have documented artifact types and these data can be accessed through thorough records searches from the NEIC. The data gap that exists within this category is a simple aggregation of existing survey level data.

#### 4.3 Hypothesis

**Chronology:** Artifact patterns will reflect technological adaptation to environmental conditions both geographically and chronologically as pertains to changes in climate.

**Subsistence:** Indirect measures, artifact patterns, will reflect changes in technological patterns corresponding to environmental conditions, geographically and temporally.

**Settlement:** Efforts to reconstruct settlement organization within Trinity County will build on subsistence data and involve an assessment of what kinds of sites were used during particular time periods and the extent to which people moved around or remained tethered to particular locations. Levels of residential mobility should also be reflected in the organization of artifact assemblages. Groups moving through the project area on a relatively rapid basis should have had more portable implements, higher rates of non-local raw materials in their tool-kits, and should show greater degrees of artifact curation or retention; conversely, artifacts discarded by less mobile people will tend to be more massive, made primarily from local materials, and should show less concern with reworking and recycling. Artifact assemblages, together with other characteristics of particular sites (e.g., midden development, domestic features, etc.), will also be important in developing functional profiles for each location; determinations that are, in

turn, essential in attempting to sort out how multiple settlements were integrated or linked.

Technology: All formed artifacts will be characterized in terms of production stage, use-wear damage, and condition at the time of discard; samples of chipping waste or debitage will be analyzed to track the nature and intensity of on-site manufacturing activity.

#### 4.4 Expectations

Chronology: The chronological sequence of habitation patterns in Trinity County will generally reflect those of greater California regarding artifact types and function as adaptive technology to environmental conditions. Efforts will be made to flesh-out this record via dating individual sites and site components using associated artifacts, and potentially obsidian hydration, and radiocarbon. Of particular interest are trends in the intensity of occupation over time and whether these correspond to changes in habitat and paleoclimatic conditions.

Subsistence: Artifact assemblages will provide an indirect measure of past subsistence strategies, especially the relative abundance of functionally distinctive tool forms like hunting and plant-processing implements. Past subsistence practices will be approached using indirect indicators.

Technology: It is expected that much lithic material was locally obtained, but that non-local or exotic toolstone will be reflected among some artifact categories and smaller size waste debris; obsidian is an obvious example in this case, necessarily obtained via travel or exchange from quarries in northeastern California / southeastern Oregon or the southern Coast Ranges.

This research will use the definitions found in the standard Department of Parks and Recreation descriptions of historic resources.

#### 5.0 Methods

Key elements of technological organization will be assessed by looking for variation in patterns of toolstone acquisition, manufacturing practices, use profiles, and levels of reuse or recycling. All formed artifacts will be characterized in terms of production stage, use-wear damage, and condition at the time of discard; samples of chipping waste or debitage will be analyzed to track the nature and intensity of on-site manufacturing activity.

All recording methods will utilize California Department of Parks and Recreation standards. Field methods utilized intensive survey techniques with no more than 15 meter transects. The reality of Trinity County survey projects is that much of the area harbors poor visibility; in that light, survey crews will employ shovel probes in 15-meter intervals where necessary. Through the overall project it is expected that no artifacts will be collected, and analyses will occur in the field.

All field notes and photographs are stored at ARSC, 440 Wildwood Ave., Rio Dell, CA 95562.

#### 6.0 Report of Findings

No archaeological resources were located during this survey. An archaeological record check revealed seven (7) previous surveys within ½ mile of this property and one (1) previously

recorded site within ½ mile.

### **7.0 Discussion and Interpretation**

No cultural resources were found during this survey. The record search showed seven (7) previous surveys and one (1) previously recorded archaeological site within ½ mile of the property and will remain unaffected by all project activities. The fact that no prehistoric resources exist on the subject project area indicates that either more amenable landforms to prehistoric habitation existed surrounding the project area, or historic disturbances have cleared the area of any evidence of prehistoric use. While the current project area has been subject to past activities that may have disturbed evidence of prehistoric use, it is highly doubtful that evidence of a significant deposit was completely eradicated by historic use activities and that the ARSC survey missed any remnants of prehistoric activities. It is quite likely that the survey area of this project and others have not included amenable landforms in areas of direct impact and the surrounding 600' buffer area.

### **8.0 Management Considerations**

No further archaeological work is recommended for this project. There is always the possibility of the inadvertent discovery of buried archaeological resources during ground disturbing activities with project implementation. If buried archaeological resources are discovered during project implementation all work should be halted within 100 feet of the find and county officials, a professional archaeologist and tribal representatives should be contacted immediately to evaluate the find. If human remains are discovered during project implementation all work shall be halted and the permitting agency, Trinity County shall be contacted immediately. The County shall contact the County Coroner immediately and the Coroner will evaluate the find to determine the subsequent course of action. Inadvertent discovery procedures are attached in detail as Appendix A.

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**Appendix A: Inadvertent Discovery Tear Sheet**

**If suspected archaeological resources are encountered during the project:**

1. Stop work within 100' of the find.
2. Call the County project representative, a professional archaeologist and representatives from the Hoopa Valley Tribe, Wintu Tribe of Northern California, Round Valley Tribe, Redding Rancheria, and Nor-Rel-Muk Nation.
3. The professional historic resource consultant, Tribes and County officials will coordinate provide an assessment of the find and determine the significance and recommend next steps.

**If human remains are encountered:**

1. All work shall stop and per CA Health and Safety Code Section 7050.5:
2. Call the Trinity County Coroner: (530) 623-3144.
3. The Coroner will determine if the remains are of prehistoric/historic Native American origin. If the remains are Native American, then;
4. The Trinity County Coroner will contact the Native American Heritage Commission within 24 hours.
5. The NAHC is responsible under CA PRC 5097.98. (a) for identifying the most likely descendent (MLD) immediately and providing contact information. Within 48 hours the MLD may contact the landowner, and with landowner permission inspect the location, making subsequent recommendations regarding the most appropriate disposition of their descendent.

**Appendix B: Tribal Communications/Coordination**

1. Native American Heritage Commission
2. Communications Redding Rancheria
3. Communications Wintu Tribe of Northern California
4. Communications Nor-Rel-Muk Nation
5. Communications Hoopa Valley Tribe
6. Communications Round Valley

Submitted for tribal review

**Sacred Lands File & Native American Contacts List Request**

**Native American Heritage Commission**  
1550 Harbor Blvd, Suite 100  
West Sacramento, CA 95691  
916-373-3710  
916-373-5471 – Fax  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

*Information Below is Required for a Sacred Lands File Search*

**Project:** Hayfork, Herron

**County:** Trinity County

**USGS Quadrangle Name:** Hayfork Summit

**Township:** 31 N **Range:** 11 S **Section(s):** 2

**Company/Firm/Agency:** Archaeological Research and Supply Company

**Street Address:** 440 Wildwood Ave.

**City:** Rio Dell **Zip:** 95562

**Phone:** 707-407-6205

**Fax:** 707-202-6949

**Email:** nangeloff.ceo@gmail.com

**Project Description:** Archaeological survey of cannabis cultivation and related operations for a county permit.

Archaeological Research and Supply Company

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To: Redding Rancheria  
Mr. Jack Potter, Chairperson  
2000 Redding Rancheria Road  
Redding, CA 96001  
Tel: 530.225.8979  
Email: [melodieh@redding-rancheria.com](mailto:melodieh@redding-rancheria.com)

From: Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave.  
Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

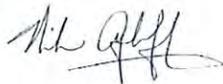
Dear Mr. Jack Potter,

This letter is a request for any information the Redding Rancheria may wish to contribute regarding a property near Hayfork, California that is currently undergoing an archaeological evaluation for a cannabis cultivation operation on 11-acres on APN 017-010-80-00, see attached map, application number TBD. The proposed project includes cannabis permitting. In this light ARSC proposes to survey the entire parcel including the footprint of the indoor cultivation area and all associated infrastructure and road access. The survey will be intensive, using 15-meter transects. If conditions require, extended survey techniques will be employed using shovel probes, surface transect units or other expedient methods to examine soils in heavily vegetated areas such as prairies, or covered in thick duff to determine presence/absence of archaeological sites.

A standard Archaeological Resource Management Report (ARMR) formatted survey report will be developed including recommendations for any identified cultural resources. The report will be submitted to you for review prior to submission to the county to allow for any further insight or recommendations you may wish to incorporate.

In order to develop a complete report and inform the field survey, we are requesting any information that you may have regarding Tribal Cultural Resources regarding the subject parcel. We look forward to continuing this coordinated effort to develop recommendations and a copy of the completed report will be forwarded to you for your records.

Sincerely and with Highest Regards,



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Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave., Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

Archaeological Research and Supply Company

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To: Wade McMaster, Chairperson  
P.O. Box 995  
Shasta Lake, CA, 96019  
Tel: 530.605.1726  
Email: [wintu.tribe@gmail.com](mailto:wintu.tribe@gmail.com)

From: Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave.  
Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

Dear Mr. McMaster,

This letter is a request for any information the Wintu Tribe of Northern California may wish to contribute regarding a property in Trinity County that is currently undergoing archaeological evaluations for cannabis cultivation operations. The individual project is presented in the table below and the attached maps are numerically coordinated with listing in the table. In this light ARSC proposes to survey the APE of each parcel including a 600' buffer.

PROJECT	MAP	APN	AAPS
Hayfork Herron	1	017-010-80-00	TBD

The surveys will be intensive, using 15-meter transects. If conditions require, extended survey techniques will be employed using shovel probes or other expedient methods to examine soils in heavily vegetated areas. A standard Archaeological Resource Management Report (ARMR) formatted survey report will be developed including recommendations for any identified cultural resources. The report will be submitted to you for review prior to submission to the county to allow for any further insight or recommendations you may wish to incorporate.

In order to develop a complete report and inform the field survey, we are requesting any information that you may have regarding Tribal Cultural Resources regarding the subject parcel. We look forward to continuing this coordinated effort to develop recommendations and a copy of the completed report will be forwarded to you for your records.

Sincerely and with Highest Regards,



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Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave., Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

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Archaeological Research and Supply Company

To: John Hayward, Chairperson  
PO Box 1967  
Weaverville, CA, 96093  
Tel: 530.410.1125  
Email: [noremuk@com-pair.net](mailto:noremuk@com-pair.net)

From: Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave.  
Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

Dear Mr. Hayward,

This letter is a request for any information the Nor-Rel-Muk Nation may wish to contribute regarding a property in Trinity County that is currently undergoing archaeological evaluations for cannabis cultivation operations. The individual project is presented in the table below and the attached maps are numerically coordinated with listing in the table. In this light ARSC proposes to survey the APE of each parcel including a 600' buffer.

PROJECT	MAP	APN	APPS
Hayfork Herron	1	017-010-80-00	TBD

The surveys will be intensive, using 15-meter transects. If conditions require, extended survey techniques will be employed using shovel probes or other expedient methods to examine soils in heavily vegetated areas. A standard Archaeological Resource Management Report (ARMR) formatted survey report will be developed including recommendations for any identified cultural resources. The report will be submitted to you for review prior to submission to the county to allow for any further insight or recommendations you may wish to incorporate.

In order to develop a complete report and inform the field survey, we are requesting any information that you may have regarding Tribal Cultural Resources regarding the subject parcel. We look forward to continuing this coordinated effort to develop recommendations and a copy of the completed report will be forwarded to you for your records.  
Sincerely and with Highest Regards,



Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave., Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

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Archaeological Research and Supply Company

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To: Hoopa Valley Tribe  
Ms. Kedueschla Lara-Colegrove  
PO Box 1348  
Hoopa, CA 95546  
Tel: 530.625.4110  
Email: [hvt.thpo@gmail.com](mailto:hvt.thpo@gmail.com)

From: Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave.  
Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

Dear Ms. Kedueschla Lara-Colegrove,

This letter is a request for any information the Hoopa Valley Tribe may wish to contribute regarding a property near **Hayfork**, California that is currently undergoing an archaeological evaluation for a cannabis cultivation operation on 11-acres on APN 017-010-80-00, see attached map, application number **TBD**. The proposed project includes cannabis permitting. In this light ARSC proposes to survey the entire parcel including the footprint of the indoor cultivation area and all associated infrastructure and road access. The survey will be intensive, using 15-meter transects. If conditions require, extended survey techniques will be employed using shovel probes, surface transect units or other expedient methods to examine soils in heavily vegetated areas such as prairies, or covered in thick duff to determine presence/absence of archaeological sites.

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Sincerely and with Highest Regards,

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Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave., Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

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Archaeological Research and Supply Company

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To: James Russ, President  
77826 Covelo Road  
Covelo, CA, 95428  
Tel: 707.983.6126  
Fax: 707.983.6128  
Email: [tribalcouncil@rvit.org](mailto:tribalcouncil@rvit.org)

From: Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave.  
Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

Dear Mr. Russ,

This letter is a request for any information the Round Valley Reservation / Covelo Indian Community may wish to contribute regarding a property in Trinity County that is currently undergoing archaeological evaluations for cannabis cultivation operations. The individual project is presented in the table below and the attached maps are numerically coordinated with listing in the table. In this light ARSC proposes to survey the APE of each parcel including a 600' buffer.

PROJECT	MAP	APN	AAPS
Hayfork Herron	1	017-010-80-00	TBD

The surveys will be intensive, using 15-meter transects. If conditions require, extended survey techniques will be employed using shovel probes or other expedient methods to examine soils in heavily vegetated areas. A standard Archaeological Resource Management Report (ARMR) formatted survey report will be developed including recommendations for any identified cultural resources. The report will be submitted to you for review prior to submission to the county to allow for any further insight or recommendations you may wish to incorporate.

In order to develop a complete report and inform the field survey, we are requesting any information that you may have regarding Tribal Cultural Resources regarding the subject parcel. We look forward to continuing this coordinated effort to develop recommendations and a copy of the completed report will be forwarded to you for your records.

Sincerely and with Highest Regards,



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Archaeological Research and Supply Company  
Nick Angeloff, MA  
440 Wildwood Ave., Rio Dell, CA 95562  
[Nangeloff.ceo@gmail.com](mailto:Nangeloff.ceo@gmail.com)  
707.407.6205

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**Appendix C: Confidential Records Search**

<b>Title</b>	<b>Description</b>	<b>Author</b>	<b>Date</b>
S-008174	“Department of Transportation Archaeological Survey Report for a 20 foot Private Road Approach Accessing Highway 3 near Hayfork”. No cultural markers were identified as a result of this survey conducted ½ mile west of the current project area.	Wiant, Wayne	1987
S-008176	“USDA Forest Service Archaeological Reconnaissance Report for the Chaparral Management Environmental Assessment”. No cultural markers were identified as a result of this survey conducted over ½ mile SW from the current project area.	Hitchcock, John	1980
S-002158	“CDF Project Review Report for Archaeological and Historical Resources for a Control Burn Project”. No cultural markers were identified as a result of this survey conducted ½ mile NW of the current project area.	Charlton, Verne	1996
S-001345	“Cultural Resource Report for the Sierra Pacific Industries and Bureau of Land Management Shasta/Trinity County Land Exchange”. No cultural markers were identified as a result of this survey conducted ½ mile east of the current project area.	Ritter, Eric and Pfilf, Julie	1993
S-009604	“USDA Forest Service Archaeological Reconnaissance Report for China Gulch Timber Sale Addition”. Two historic gravestones were found within our ½ mile buffer and documented (P-12-001408). The site is located over ½ mile south of the current project area and will not be impacted.	Dunn, Geoffrey	1983
S-004579	“Archaeological Survey of the Hall Timber Harvest Area, Trinity County”. No cultural markers were identified as a result of this survey conducted less than ½ mile north of the current project area.	Farber, Alfred	1989
S-012066	“BLM Archaeological Survey of Lands Affected by the Stafford Fire in Hayfork, CA”. No cultural markers were identified as a result of this survey conducted less than ½ mile south of the current project area.	Ritter, Eric	2012

**Table 1 Previous Surveys**

<b>Site Number</b>	<b>Description</b>	<b>Recorder</b>	<b>Date</b>
P-12-001408	A site consisting of two graves, one marked with an upright river cobble and smaller stones while the other one is only marked with small stones. Both were once marked with one large river cobble each, but the site has been disturbed. The current project located ½ mile north will not impact this site.	Dunn, Geoffrey and Hitchcock, John	1983

**Table 2 Resources**