Commercial Cannabis Use Permit

Initial Study / Mitigated Negative Declaration

Rodney Patton

P-18-23

Trinity County

Commercial Cannabis

Application Number P-18-23

Initial Study/Mitigated Negative Declaration

Prepared for:

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Contact:

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Environmental Checklist Overview

Project Title:	Initial Study / Mitigated Negative Declaration for Rodney Patton
Lead Agency: Address: Phone Number:	Trinity County, Department of Planning 61 Airport Road, Weaverville, California 96093 530-623-1351
Report Author: Company: Phone number:	Scott Watkins, MBA MPP Buildaberg 530-953-5763
Project Location:	341 Rattlesnake Road, Peanut, CA 96041 140 State Highway 3, Peanut, CA 96041
Applicant Name: Applicant Address:	Rodney Patton PO BOX 921, Hayfork, CA 96041
General Plan Designation:	Agriculture (A)
Zoning:	Agriculture 40 Acre Minimum (A40)
Surrounding Land Uses	
North: East: South: West:	Agriculture 20 Acre Minimum, Agriculture Agriculture 10 Acre Minimum, Agriculture Agriculture 40 Acre Minimum, Agriculture Agriculture 40 Acre Minimum, Agriculture

Other Public Agencies Requiring Approval:

- Trinity County Department of Environmental Health – Onsite Sewage Disposal System Permit
- Trinity County Building Department – Building/Grading Permit
- CalFire – Compliance with Fire Safe Standards
- ~~California Department of Water Resources~~State Water Resources Control Board - Cannabis General Order Waste Discharge Requirements (WDRs) and Construction General Permit (CGP)
- California Department of Fish and Wildlife – Project designed to avoid CDFW jurisdictional areas
- California Department of Cannabis Control – Cannabis Cultivation License(s)

Tribal Consultation:	Pursuant to AB 52 (Gatto 2014) Native Americans: California Environmental Quality Act, Tribal Consultation will be initiated by Trinity County

Regulatory Requirements

Before the proposed project can be issued a Department of Cannabis Control (DCC) annual licenses to continue their existing and proposed operations, pursuant to the State of California's Medical and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA), it must be in compliance with the following: Trinity County Municipal Code and General Plan (Hayfork Community Plan); DCC's adopted licensing regulations 'California code of regulations title 3. Food and Agriculture Division 8. Cannabis Cultivation Chapter 1. Cannabis Cultivation Program; California Department of Fish and Wildlife's Lake and Streambed Alteration Agreement Program; and the State Water Resources Control Board's Order WQ 2017-0023-DWQ.

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.

Purpose of an Initial Study

CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. An Initial Study is a public document used by the decision-making lead agency to determine whether a project may have a significant impact on the environment. If the agency finds that the proposed project may have a significant impact on the environment, but that these impacts will be reduced to a less than significant level through revisions to the project and/or implementation of specific mitigation measures, a Mitigated Negative Declaration shall be prepared.

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

Cannabis Program EIR

Trinity County adopted an Amended Cannabis Program Ordinance and a corresponding Environmental Impact Report (EIR) (SCH#: 2018122049) on 12/28/20. The proposed project is subject to the Amended Cannabis Program Ordinance and consistency with the Cannabis Ordinance and Program EIR are discussed in relevant sections of this document. As discussed in this document, the project proposes cannabis activities that are consistent with the assumptions and analysis conducted in the EIR and it is not anticipated that any new significant impacts or substantially more severe impacts would occur from implementation of the proposed project. Therefore, the findings of the Cannabis Program EIR are relevant to the proposed project and, where applicable, project-specific analysis and studies are provided to supplement the analysis from the EIR.

Review Process

This IS/MND 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 IS/MND to the State Clearinghouse of the Governor's Office of Planning and Research for distribution and a 30-day review period.

During the review period, the Initial Study will be available on the following websites:

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

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

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

Trinity County
Department of Planning
61 Airport Road, PO Box 2819
Weaverville, CA 96093

Lis Lozier, AICP, Deputy Director of Planning
llozier@trinitycounty.org

Purpose of this Document

This Initial Study/Mitigated Negative Declaration (IS/MND) is being prepared for compliance with the State of California's California Environmental Quality Act (CEQA) for Cannabis Cultivation, Cannabis Nursery, and Cannabis Distribution commercial licenses. This IS/MND will address impacts of the proposed project to the environment and for consistency and applicability to Trinity County plans and in compliance with Trinity County's Municipal Code, General Plan, all relevant Commercial Cannabis Ordinances, and the certified Commercial Cannabis Program Environmental Impact Report.

Pursuant to the California Environmental Quality Act Guidelines, Title 14, Chapter 3, Article 6, Section 15070, a public agency shall prepare an IS/MND when potentially significant effects are identified. Before a proposed IS/MND is released for public review "it must be shown that revisions in the project plans or proposals made by or agreed to by the applicant, would avoid or mitigate the effects to a point where clearly no significant impacts would occur. There must be no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment." This analysis includes both site specific and regional supporting evidence to promote a legally defensible IS/MND.

Throughout this document, there are additional details captured in figures, references to the existing regulatory frameworks from relative agencies as they apply, and appendices to help inform the analysis and ensure supporting evidence is reliable.

Description of Project:

This analysis is conducted to evaluate the environmental impacts associated with the development of real property based on a proposal for a Conditional Use Permit (CUP). The CUP is seeking approval to expand an existing Type 2 "Small Outdoor" commercial cannabis cultivation license, permitted by Trinity County since 2016 into a Type 3 "Medium Outdoor" commercial cannabis cultivation license, as defined in Trinity County Ordinance 315-849, to allow for up to 43,560 square feet (1 acre) of mature canopy split between the two contiguous properties (as described hereafter); as well as convert a Type 13 "Transport-Only" license, under identical ownership/licensure, into a "Type 11" Distribution license for up to 500 square feet; in addition, the applicant is applying to add a Type 4 commercial "Nursery" license, which would include the sale of immature cannabis plants, seeds and auxiliary sales to licensed cultivators and retailers. All three of these actions are considered the "proposed project." This IS/MND evaluates the proposed project's operations and maintenance activities for both existing and proposed activities at full project build out (e.g., when all construction phases have been completed).

The proposed project has applied for a variance concurrently with the conditional use permit from the limitations of location, to site the cultivation area less than five hundred (500) feet from the adjacent property lines concurrently with the Conditional Use Permit and the CEQA IS. The sum of all the areas used for processing, distribution, cannabis cultivation, including gardens, greenhouses, soil staging and material storage areas, ancillary buildings, irrigation system, and access roads is considered the Project Area.

Project Location

The project consists of two adjacent 40 acre parcels located in the unincorporated community of Peanut, in Trinity County. The proposed project is located on a 40 acre parcel (referred to hereafter as "Parcel 1" for APN 019-750-13-00). The physical address of Parcel 1 is 341 Rattlesnake Rd, Peanut, CA 96041; latitude and longitude of the proposed cultivation area on Parcel 1 is 40.465600°, -123.171400°. Parcel 1, has a zoning designation of Agriculture 40 Acre Minimum (A40) and a General Plan designation of Agricultural (A).

The existing Small Outdoor garden is located on a second, adjacent and connected, 40 acre parcel (referred to hereafter as "Parcel 2" for APN 019-750-17-00). The physical address of Parcel 2 is 140 State Route 3, Peanut, CA 96041; latitude and longitude of the Small Outdoor garden is 40.465079°, -123.165522°. The Trinity County Zoning Ordinance and General Plan designate a zoning of Agricultural 20 acre minimum (A20) and Agricultural (A), respectively.

Parcel 2 is being included as part of the project site due to Trinity County's 50-acre limit for a Type 3 "Medium Outdoor" license. The two adjacent and joining 40 acre parcels combine for 80 acres of total land, which qualifies the proposed project location for the 1 acre Medium Outdoor commercial cannabis cultivation license.

Environmental Setting

Parcel 1 consists of a variety of woodlands, riparian vegetation, and non-native grasslands. Slopes on the parcel range from 15-45% on the hillside and 0-5% in the flat, grassy area. Salt Creek flows north along the eastern property line from the southeastern corner of the property before exiting through a culvert under Philpot Creek Road.

Parcel 2 has similar vegetation cover, but is dominated more heavily by conifer forests and woodlands, as well as riparian vegetation. Slopes on Parcel 2 range from 0-20% on the flatter areas below the hillside, and 40-60% on the hillsides themselves. A Class II stream (unnamed) flows through the northwest corner of the parcel before draining into Salt Creek. Parcel 1 is accessed from Rattlesnake Road (county-maintained), which is accessed from SR 3. Parcel 1 has historically been used for agricultural purposes, including cattle and wildlife grazing.

Parcel 1 (APN 019-750-13-00) Project Description

Parcel 1 consists of non-native grasslands, conifer forests and woodlands, and riparian vegetation. Salt Creek enters the southeastern corner of the property and flows in a defined channel north along the eastern property line before exiting through a culvert under Rattlesnake Road. Slopes at Parcel 1, where all development is being proposed, range from 0-5 % in the flat land, and 15-45% on the hillside. The proposed location of activities on Parcel 1, will be on slopes less than 3%, in an area historically used for agricultural purposes. There is currently no development on the subject parcel. Land uses on the parcels surrounding the project site include timber harvesting, grazing, cannabis cultivation, and other agricultural uses. An internal access road, connecting Rattlesnake Road, will be built according to the Handbook for Forest, Ranch, and Rural Roads (Road Handbook) (2015) and provide access to the proposed cannabis area, including,

- Up to 6,000 square foot Commercial Cannabis Nursery
- Up to 10,000 square foot Multi-Use Building, including
    - A shared employee area of 1,500 square feet which will include employee break rooms, bathrooms, and a general office,
    - Distribution Type 11 area of up to 500 square feet and a,
    - Cannabis Post Harvest Area of 8,000 square feet
- Up to one (1) Type-3 Medium Outdoor license, which allows up to 43,560 square feet (1 acre) of mature/flowering cannabis canopy in an outdoor setting as defined by Ordinance 315-849.
- Off-stream Rainwater Catchment and storage pond up to one-half (0.5) of an acre in size
- Up to 120 square foot shed for the storage of petroleum products
- Up to 120 square foot shed for the storage of chemicals and fertilizers
- Up to 400 square foot of cannabis waste area
- Up to three (3) acres of vegetative screening
- Up to 100,000 gallons of water storage in rigid water tanks
- Up to 5,000 gallons of water storage for fire suppression
- Up to 1-acre of rocked parking and roads
- Up to 1-acre of asphalt parking and roads
- Proposed groundwater well(s)
- Proposed gate

The 10,000 square feet multi-use building will include a shared employee area of up to 1,500 square feet, a Distribution Type 11 of up to 500 square feet, and a Cannabis Processing area, 8,000 square feet. The employee facilities will be a shared space accessed by both Cultivation and Nursery employees. This area will include an employee break room and kitchenette, bathrooms, and changing rooms that are shared between the Nursery and Cultivation operation. Shared employee facilities will be secure areas that are accessed only by employees that have been granted permission or by contracted service providers, e.g. security company, equipment maintenance personnel, etc., that are supervised by employees during their work. The Type-3 Medium Outdoor license is planned for a 2-acre area 'licensed premises' of Parcel 1. The proposed licensed premises includes greenhouses (with carbon filters and other odor filters planned to be installed), soil staging and material storage areas, irrigation system, fertilizer and materials storage, and access areas around the mature/flowering cannabis canopy.

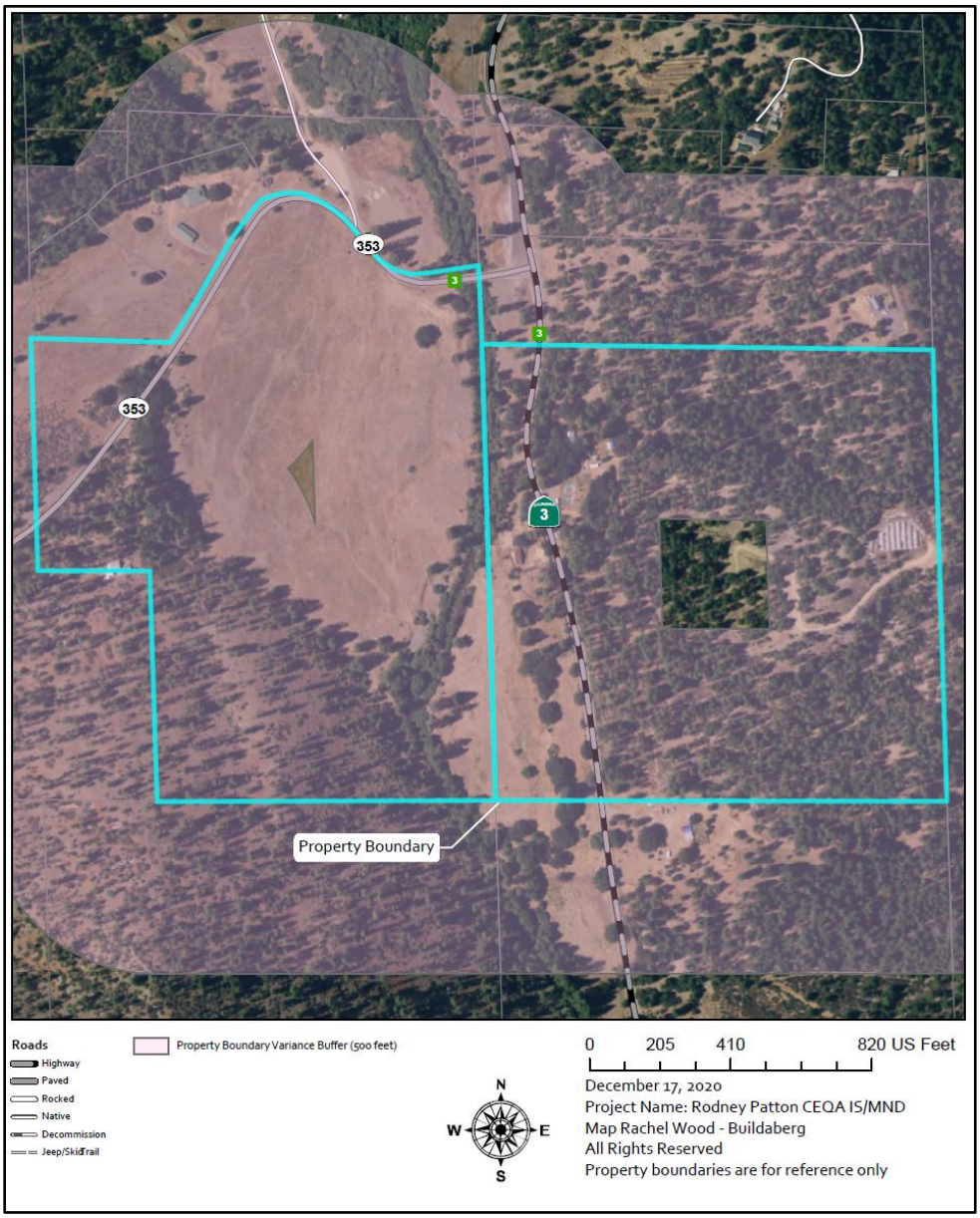

Figure 1 - Medium Cultivation Property Line Setback Map

All cultivation, processing, and nursery activities will be set at least 250 feet away from Salt Creek to the east and 500 feet away from Philpot Creek to the north on the subject property which is more than the 150-foot minimum to meet California State Waterboard Cannabis regulations from Class I streams. Cultivation activities are setback 100 feet from the property line, and in accordance with Trinity County Ordinance 315-849, a variance has been applied for concurrently with the Conditional Use Permit application to allow a reduced setback from the property line. The nearest residences ~~is~~are 380 feet away from the outdoor cultivation premises and 355 feet from the indoor operation of the commercial nursery (see Figure 4). There are no known youth-oriented facilities, residential treatment facilities, schools, bus stops, or churches within 1,000 feet of the proposed project area.

The proposed project includes on-site composting of cannabis waste and/or self-hauling to a facility that accepts cannabis waste. Cannabis plant residues will be composted on-site in a secure compost area as shown on the site map to the southeast of the cultivation area. Materials deemed hazardous by the Trinity County Department of Environmental Services, are planned to be hauled off-site by a licensed third-party waste hauler to a licensed disposal facility no less than once every 60 days, or as frequently as needed. The proposed project does include the use of a small amount of hazardous waste substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers and pesticides).

Parcel 2 (APN 019-750-17-00) Overview - Existing Small Outdoor Garden

Parcel 2 consists of conifer forests and woodlands, with a small portion of non-native grasslands and riparian vegetation. Salt Creek enters on the west side of the property and flows in a defined channel through the most northwestern corner. Additionally, there is a small Class III stream that cuts through the north and central part of the property and sweeps west towards Salt Creek. The slopes onsite are 0-10% in the flat land, and 17-50% in the forested areas.

The Parcel 2 Project includes:

- The existing 7,851 square feet of existing cultivation area is to remain and be subtracted from the 43,560 square feet of the Medium Outdoor mature cannabis canopy as defined by Ordinance 315-849 that is proposed for parcel 1.
- Utilizing the existing multi-use garage that is 864 square feet that includes
    - Up to 200 square feet of Immature Plant Area
    - Up to 200 square feet of Distribution Type 13 Transport Only
    - Up to 464 square feet of Post Harvest Activities
- Up to 120 square foot shed for the storage of petroleum products
- Up to 120 square foot shed for the storage of chemicals and fertilizers
- Up to 100 square feet of cannabis waste area
- Up to 5,000 gallons of water storage for fire suppression
- Utilizing the existing parking
- Utilizing the existing gates
- Utilizing the existing groundwater well (WP2015-210)

The existing Small Outdoor garden has a designated area of 20,000 square feet (with 7,851 square feet of canopy) and is located at the crest of a hill. The road leading up to the Small-Outdoor garden has an average slope of 10%. The road is equipped with three rolling-dip drainages, and outsloping to prevent erosion and direct stormwater according to best management practices found in the Road Handbook.

All cultivation and processing activities are set at least 200 feet away from Salt Creek to the west and 60 feet away from the Class III to the northwest on the subject property, which is more than the minimum setbacks required by the California State Waterboard Cannabis regulations for Class I streams and Class III streams set in the General Order (State Water Resources Control Board 2019a). The project site meets Small Cultivation setbacks according to Ordinance 315-849. There are no known youth-oriented facilities, residential treatment facilities, schools, bus stops, nor churches 1,000 feet of the site. The Small Outdoor garden on Parcel 2 sources water from a permitted well that is 100 feet deep and produces water at 20 gallons per minute (GPM). The Small Outdoor garden includes on-site composting of cannabis waste in a secure compost area, as shown on the site map to the northeast of the cultivation area.

Proposed Project Development

Existing Conditions

Parcel 1 (APN 019-750-13-00)

The land encompassing the proposed project area is in a small valley floor surrounded on the south and west by hillsides and to the east by Salt Creek. The proposed project location was previously disturbed by past property owners, who used the area for agricultural purposes, including the raising of livestock, such as cows, chickens, pigs, and horses.

The proposed project premises encompasses a portion of the existing disturbed area that was occupied by the historic agriculture uses. The proposed project area is an estimated 100,120 square feet of the previously disturbed area on Parcel 1. The Trinity County General Plan has designated the land use for the site as Agricultural 20 Acre Minimum (A20), with a zoning designation of Agriculture (A). Rattlesnake Road connects the property to State Highway 3.

Parcel 2 (APN 019-750-17-00)

State Highway 3 bisects the 40 acre parcel in a north to south direction, near the western edge of the shared parcel boundary with Parcel 1, parallel to Salt Creek. A residential dwelling, and auxiliary buildings are sited behind a commercial grade vehicle gate. One of the auxiliary structures serves as record keeping facilities for the Transport Only license. To the west are hillsides with an existing 10,000 square foot commercial cannabis cultivation site.

The existing commercial cannabis cultivation operation is fully licensed with both Trinity County and the State of California. Furthermore, the site has been registered/licensed with the California Department of Water Resources, California Fish & Wildlife, Trinity County and the Department of Cannabis Control (DCC). The licensed operation has passed all agency inspections.

Proposed Uses

Parcel 1 (APN 019-750-13-00)

The proposed uses of this project are to include one (1) Medium Outdoor Cannabis Cultivation license, one (1) Distribution Type 11 license and one (1) Nursery license

Parcel 2 (APN 019-750-17-00)

The proposed uses of this project are to include the existing cultivation area.

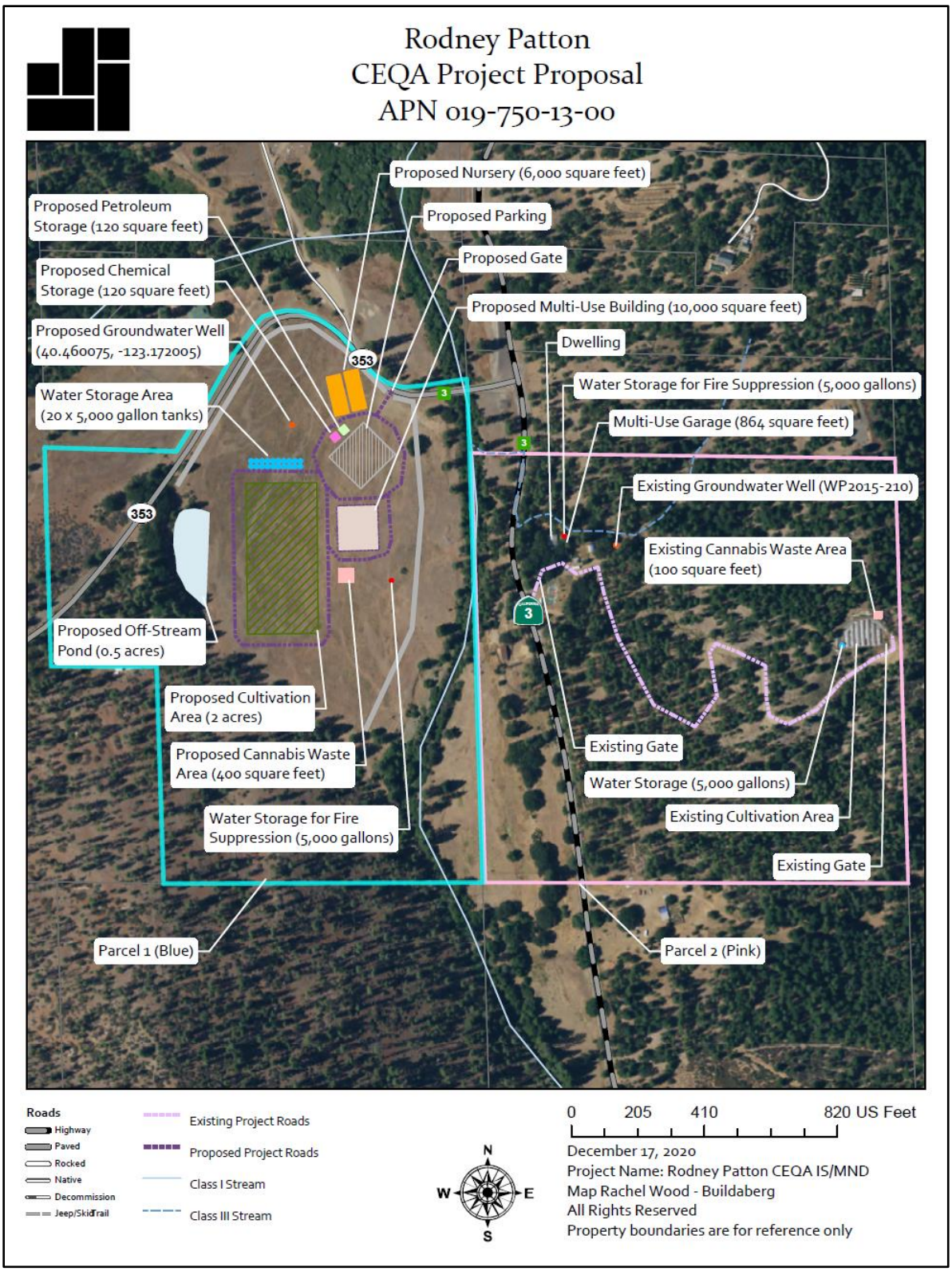

Figure 2 - Project Layout

The licenses will be obtained under Trinity County Cannabis Ordinance 315-849, Trinity County Cannabis Nursery Ordinances 315-826, 827, and 833, Trinity County Cannabis Distribution Ordinances 315-828 and 834, State of California Code of Regulations Title 3. Food and Agriculture Division 8. Cannabis Cultivation Chapter 1, and State of California Code of Regulations Title 16. Division 42. Bureau of Cannabis Control.

Development Activities

Security cameras and motion-detected lighting would be installed throughout Parcels 1 and 2. All outdoor lighting would be light-emitting diodes (LEDs) and would be shielded and facing downward in compliance with Trinity County and Dark Sky standards. Access to the premises would be secured with perimeter security fences, access will be through a secure commercial gate and commercial lock. All gates and entrances will be kept locked when the applicant and/or employees are not on the premises. Guard dogs may be used as an additional security measure.

Parcel 1 (APN 019-750-13-00)

Proposed development under the Type 3 "Medium Outdoor" license would include up to 43,560 square feet (1 acre) of mature cannabis canopy within two (2) acres of designated area of the licensed premises surrounded by a fence and secured with a locked gate. This would also include a 10,000 square feet multi-use building that includes 8,000 square feet for post-harvest activities, 500 square feet. area of Distribution Type 11 and a shared 1,500 square feet. area used for employee facilities. Due to requirements for clone storage, a Type 4 "Nursery" license is being sought for construction of up to 6,000 square feet nursery that is engineered that would be secure against unwanted entry.

Development of the ½ acre pond will require some vegetation removal, which may include the removal of Acmispon glaber, bromus spp, Ceanothus cordulatus, and arctostaphylos patula. Composting would take place on the subject parcel, in a 400 square foot fenced composting site that would serve both the outdoor cultivation, processing, and the nursery. Fertilizers/Chemical materials and petroleum products will be stored in two proposed 120 square foot sheds. The project site would have 28 standard parking spaces and one (1) parking space meeting Americans with Disabilities Act (ADA) standards.

Parcel 2 (APN 019-750-17-00)

Parcel 2 has an existing Small Cultivation license and a Distribution Type 13 license. Post-harvest Activities, the immature cultivation area, and distribution type 13 are all located in the existing garage that is 24 x 36 feet. The cultivation area is located on the top of a hill in an existing disturbed area that was created before 2016. Canopy is housed in hoop houses and light deprivation is currently utilized.

Composting takes place on the subject parcel, in a 100 square foot fenced composting site that serves the cultivation operations. Fertilizers/Chemical materials and petroleum products will be stored in two proposed 120 square foot sheds. Fertilizers, Chemicals, and Petroleum products are currently being stored in the existing garage.

Project Adaptation

This analysis allows was prepared to allow the expansion of the existing Type 2 "Small Outdoor" commercial cannabis cultivation license, permitted by Trinity County since 2016, into a Type 3 "Medium Outdoor" commercial cannabis cultivation license, as defined in Trinity County Ordinance 315-849, to allow for up to 43,560 square feet (1 acre) of mature canopy split between the two properties. The

applicant's intent is to continue operation of the existing cultivation site during the development of parcel 1. In total, the 43,560 square feet of canopy under the Medium Outdoor license will include both parcel 1 and parcel 2 operations. The applicant may ultimately remediate the 7,851 square feet of canopy on parcel 2 and conduct all cultivation on parcel 1. As such, this analysis includes both the existing cultivation area and the total cultivation area on parcel 1. At no time will the canopy area exceed 43,560 square feet.

Construction Activities

Construction activities include construction of hoop houses and/or greenhouses, fences to enclose the Medium Outdoor cultivation area, as well as up to 6,000 square foot area for the proposed Nursery. Power for the Nursery greenhouse would be supplied by Trinity Public Utilities District (TPUD). Additionally, the project site is located within the Critical Water Resource Overlay Zone ("CWR Zone"). The CWR Zone is defined in county regulations as "an area where development may have a detrimental impact on water resources such as those resulting from extractions of ground and/or surface waters, which would be beyond the capability of the resource, or by contamination of ground or surface waters." A rainwater catchment system connected to the proposed nursery greenhouse and processing building roof would reduce groundwater demand. Drip irrigation, on timers, would be included in the design of the nursery greenhouse, which would reduce or eliminate wastewater by only providing watering at rates that avoid or minimize runoff, also called agronomic rates. Agronomic rates are those rates of application of water, fertilizers and other amendments that are sufficient for utilization by the crop being grown, but not at a rate that would result in surface runoff or infiltration below the root zone of the crop being grown. These measures are included in the project design to mitigate CWR Zone impacts.

Construction Schedule

Construction activities are expected to take one construction season for each phase, beginning in the spring (approximately May 1) of the first year and ending in the fall (approximately November 15) of the following year. This analysis evaluates the proposed project development, operations and maintenance activities as they are anticipated at full buildout (e.g., when all project phases have been completed.) The applicant acknowledges that operations would vary across phases of the project (variations in the number of employees hired, vehicle trips, equipment usage, and/or requirements for physical resources (e.g., water, energy). The construction schedule for each phase depends on receipt of funding and necessary permits and approvals. Because these dependencies are not reasonably foreseeable due to circumstances outside the control of the applicant, additional clarification is not available to detail the nuances associated with the project permits and approvals, which is why this document analyzes the full project buildout.

Construction activities that require soil disturbance would not be conducted during the winter months (approximately mid-November through April 30) unless the weather at the beginning and end of the season allows for these activities. Some work on structures, such as digging foundation piers and pouring concrete for proposed structures, may continue as the weather permits.

Construction would occur between the hours of 8 a.m. and 6 p.m. Nighttime construction is not expected to be needed. Occasional work on Saturdays or holidays may be necessary, but no work would occur on Sundays. Construction equipment will be staged reasonably near the work area, on stable ground.

Construction Type	Dimensions	Construction Time	Expected equipment
Hoop-houses/Greenhouses	3,600 sq. ft.	1 month	Auger, concrete mixer, backhoe
Nursery greenhouse(s)	6,000 sq. ft.	1-2 months	Auger, concrete mixer, backhoe
Multi-Use Building	10,000 sq. ft.	1-2 months	Auger, concrete mixer, backhoe, power lift

Table 1 - Parcel 1 construction schedule

Design Criteria

With a maximum building height of forty (40) feet, the existing zoning designation of Agriculture allows an adequate building height for the proposed project. Since the properties are 80 acres in total, all activity would be well under the maximum lot coverage requirements.

The setback for Medium Cultivation under Ordinance 315-849 section (5)(viii) "cultivation shall not be allowed within five hundred (500) feet of an adjacent property line" is not met for this property. The parcel shape confines the usable area outside of setbacks, therefore the site is located in close proximity to existing infrastructure including roads and electrical services. This is situated in an existing disturbed agricultural area. Consequently, an application for a variance has been applied for concurrently with the conditional use permit to reduce the property line setbacks from 500 feet to 100 feet will be applied for in conjunction with the project's Conditional Use Permit.

Proposed Project Operations

Traffic Impact

The anticipated traffic of the project is based on proposed construction activities and on-going operations. Analysis of the traffic impacts related to licensed cannabis operations were limited at the time of this analysis because the standard traffic modeling software used in Initial Studies (California Emissions Estimator Model "CalEEMod"), which sources data from the Institute of Transportation Engineers, does not capture data for commercial cannabis operations. Many of the data land use designations baselines, which are key in developing accurate results for a specific model, are based on out-of-state case studies, some of which were implemented as far back as the 1980s.

As such, the baseline traffic conditions established by CalEEMod do not accurately represent the conditions of the project. However, this analysis used the project's proposed uses and attempted to find standard CalEEMod land use types, as indicated above, that relate as close as possible. Unfortunately, because CalEEMod does not have explicit options for Cannabis businesses, these matches are limited. To further help inform the anticipated traffic impact, we used CalEEMod default values for the most representative Land Use Types as a baseline, and we calculated our own internal formula based on rational assumptions related to number of employees, the percentage of potential licensed cannabis cultivation clients in Trinity County, and delivery of supplies (which includes soil delivery, materials delivery, office supplies etc.). All traffic metrics were converted to daily values based on the number of

anticipated trips per week, month or year, totaled and divided by a 6-day work week.

Proposed Project Uses	CalEEMod Land Use Types	ITE Land Use Code
Post Harvest Activities	General Light Industrial	110 - General Light Industrial
Shared Use / Offices	General Office Building	710 - General Office Building
Commercial Nursery	General Heavy Industrial	---
Cultivation - Mature Canopy	General Heavy Industrial	---
Cultivation - Immature Canopy	General Heavy Industrial	---
Distribution Type 13	Refrigerated warehouse - no rail	150 - Warehousing
Chemical Storage	Unrefrigerated warehouse - no rail	150 - Warehousing
Petroleum Storage	Unrefrigerated warehouse - no rail	150 - Warehousing
Cannabis Waste Area	Unrefrigerated warehouse - no rail	150 - Warehousing
Water Tanks	Unrefrigerated warehouse - no rail	150 - Warehousing
Asphalt Roads + Parking	Unrefrigerated warehouse - no rail	150 - Warehousing
Rocked Roads + Parking	Unrefrigerated warehouse - no rail	150 - Warehousing

Table 2 - Traffic Impact Analysis data Land Use Categories

The anticipated traffic from the construction activities is expected to include pick-up trucks, a backhoe, concrete delivery trucks, and service vehicles. The average daily trips associated with each phase of development are the following.

Phase name	Worker Count	Worker Trip Count
Site Preparation	7	18
Grading	6	15
Building Construction	9	42
Road and Parking Lot Surface Rocking	8	20
Architectural Coating (Exterior and Interior Painting)	1	8

Table 3 - Construction Worker trip count

Employees are anticipated to live nearby, in the greater Hayfork community. The ongoing operations are anticipated to generate minimal traffic related to general deliveries, estimated at 8 vehicle trips per day.

Proposed Activity	Proposed Employees Parcel 1	Proposed Employees Parcel 2	Total Employees
Post-Harvest Activities	8	2	10
Shared Use / Offices	2	-	2
Commercial Nursery	4	-	4
Cultivation - Mature Canopy	8	2	10
Cultivation - Immature Canopy	-	1	1
Distribution Type 11	3	-	3
Distribution Type 13	-	1	1
Total Employees	**25**	**6**	**31**

Table 4 - Proposed Employee per Activity

Although employees may carpool to these sites, it is assumed that each employee would generate two and a half trips per day (one round trip and half a trip for employees to meet their daily needs, i.e. eating out for lunch or going to the local school for childcare). It is assumed that none of the licensed commercial cannabis cultivation operations would provide lodging onsite. Additionally, it is assumed that all licensed commercial cannabis activities would generate an additional eight (8) daily trips per site associated with the delivery of materials. While the cultivation anticipates an average of one and a half (1.5) trips between mature and immature cultivation and the commercial nursery averages three (3) for the average daily trips, when spread across the calendar year, many of the deliveries will be concentrated in the Spring planting season. Unfortunately, this nuance cannot be delineated in the CalEEMod report.

To sync with CalEEMod traffic analysis, we calculated that employees of cultivation of mature canopy would generate 0.707 trips per day per 1,000 square feet (weighted average); Post harvest activities would generate 3.07 trips per day per 1,000 square feet; the Employee Area would generate 3.67 trips per day per 1,000 square feet.

Proposed Uses	CalEEMod Categories	Square footage	Trips per day, per 1,000 square feet	Average Daily trips
Post Harvest Activities	General Light Industrial	8,464	3.07	25.98
Shared Use / Offices	General Office Building	1,500	3.67	5.51
Commercial Nursery	General Heavy Industrial	6,000	2.03	12.17
Cultivation - Mature Canopy	General Heavy Industrial	43,560	0.46	20.18
Cultivation - Immature Canopy	General Heavy Industrial	200	14.90	2.98
Distribution Type 11	Refrigerated warehouse - no rail	500	17.00	8.50
Distribution Type 13	Refrigerated warehouse - no rail	200	17.50	3.50
Chemical Storage	Unrefrigerated warehouse - no rail	240	0	0
Petroleum Storage	Unrefrigerated warehouse - no rail	240	0	0
Cannabis Waste Area	Unrefrigerated warehouse - no rail	500	0	0
Water Tanks	Unrefrigerated warehouse - no rail	1600	0	0
Asphalt Roads + Parking	Unrefrigerated warehouse - no rail	43,560	0	0
Rocked Roads + Parking	Unrefrigerated warehouse - no rail	43,560	0	0
TOTAL		**150,124**	**-**	**78.82**

Table 5 - Traffic data for Operations Average Daily Trips

Parking and Traffic Control

A total of twenty-nine (29) parking spaces are planned for Parcel 1, in accordance with the zoning code parking requirements of Trinity County. The general parking area, which has five (5) parking spots, is 150 feet from the first entrance gate to the property. The cultivation operation has eight (8) parking spaces. The processing building has five (5) parking spaces. The nursery is expected to have ten (10) parking spaces, with one (1) dedicated Americans with Disability Act (ADA) compliant space, in the area surrounding the building. The existing parking on Parcel 2, will remain at existing conditions.

Delivery and vendor trucks that bring cannabis goods to and from the proposed nursery may be of a heavy-duty variety, may use diesel fuel, and may be left idling while products are loaded or unloaded. Trucks which are loaded and unloaded at the project site are only allowed to remain in a idle state for up to five (5) minutes pursuant to Title 13, California Code of Regulations, Section 2485, which applies to idling threshold for heavy-duty diesel vehicles with a Gross Vehicle Weight Rating of 10,000 lbs.

Water Demand

Cannabis Cultivation will conservatively use water at a rate of 347,173 gallons per year for one acre (43,560 square feet) of cannabis canopy according to the Humboldt County Environmental Impact Report (Ascent 2019).

Cannabis nurseries are a relatively new industry, with little in the way of publicly available research to determine water use. If the same water use rates from cultivation are used, which should be higher than vegetative plants and clones that typically use less water than mature flowering canopy, water demand estimates for the 6,000 sq. ft. greenhouse would use approximately 47,820 gallons per year. The immature cultivation area on Parcel 2 of 200 square feet would use approximately 1,594 gallons per year.

Cannabis Processing Areas and Employee areas will also use water. Most of the water use within the building footprint will originate from facility and support services such as restrooms, kitchen uses, and fire safety. According to the US Energy Information Administration, water for offices and similar areas use on average 12.5 gallons per square foot of space per year (US Energy Information Administration 2012).

The total annual water demand for all proposed uses is calculated at 529,887 gallons of water annually. The water needed for commercial cannabis operations is planned to be supplied primarily by rainwater catchment and the proposed groundwater well(s).

CalEEMod was used to calculate the water demand based on the Land Use types available General Heavy Industrial, General Light Industrial, General Office Building, Hardware/Paint Store, and other non-asphalt surfaces. Based on default values, the water demand would be a total of 14.49 million gallons. Because the CalEEMod Land Use Types do not accurately reflect cannabis activities, but instead reflect traditional industrial and retail activities, this number is extremely conservative. This number is not a reliable representation of the total water demand of the proposed project.

Proposed Project Use	Proposed Water Usage per year in gallons
Post Harvest Activities	105,800
Shared Use / Offices	18,750
Commercial Nursery	47,820
Cultivation - Mature Canopy	347,173
Cultivation - Immature Canopy	1,594
Distribution Type 11	6,250
Distribution Type 13	2,500
Total Water Usage per Year	**529,887**

Table 6 - Proposed Water Usage Per Year

Water Availability

The cultivation operation will draw water from a proposed groundwater well (shown on Figure 2) which is planned to be drilled over 100 feet deep. There will be up to 100,000 gallons of storage on site of rigid water tanks plus the rainwater catchment/storage pond. The pond will store water from the proposed rainwater catchment system and well water that is captured in order to mitigate the impact of drawing water from a groundwater well during the summer months. The pond will then fill the rigid storage tanks which will directly serve cultivation needs.

The proposed rainwater catchment system will provide additional water supply and limit groundwater extraction during the dry season. The rainwater catchment system is planned to be installed onto the proposed nursery greenhouse, and multi-use building and feed into a rainwater catchment pond. The nursery greenhouse structure consists of 6,000 square feet, while the multi-use building is up to 10,000 square feet. The rainwater catchment system is planned up to 16,000 square feet.

PRISM Climate Group calculates annual rainfall for the Peanut area at;

Date	ppt (inches)
2009	35.60
2010	60.31
2011	38.91
2012	57.81
2013	14.38
2014	42.31
2015	32.97
2016	59.50
2017	52.94
2018	32.40

Average annual rainfall on the project site is approximately 42.7 inches on average over the last 10 years with the majority falling between October and April (Prism Climate Group 2019). We used 42.7 inches to

calculate the average annual volume of rainwater that could reasonably be harvested from the proposed nursery and processing structures. Based on these calculations, we estimate up to 347,136 gallons of rainwater can be harvested annually from the proposed nursery and the multi-use building's rainwater catchment systems. The lowest volume year in 2013 would produce 124,704 gallons of rainwater.

In addition to the structures harvesting rainwater, the half of an acre or 21,780 square foot rainwater catchment pond itself could collect rainwater. Using the same formula above, we calculate the pond can collect 472,539 gallons of water per inch of rainfall. The lowest volume year in 2013 would produce 169,754 gallons of rainwater.

Totaling all sources of rainwater collection structures, we calculate the average annual rainfall that could be collected with this system to be 819,675 gallons, based on 42.7 inches of annual rainfall. This average volume exceeds the water demand for the project. When comparing the rainwater collection volumes, we also note the annual rainfall for 2013, the lowest among the previous 10 years, would yield a possible 294,458 gallons of rainwater, about half of the volume necessary to meet the conservative water demand. In addition, water will be utilized from proposed groundwater well(s), therefore this project will have sufficient water for drought years.

The County Fire Safe Ordinance 1162 requires buildings created and/or approved after January 1, 1992 to provide a minimum 2,500-gallon water tank. The dedicated 2,500-gallon tank system is for the purpose of water for fire suppression during a wildland fire or a fire originating from within the building. Water for the fire tank will be drawn from the proposed rainwater catchment system, pond, or proposed groundwater well on Parcel 1. This fire suppression tank is planned to be installed in Phase 2, when the processing building is installed. Additional fire suppression systems may be required based on the ultimate occupancy and use of the property. CalFire may determine additional fire suppression equipment specifications in project review.

Water Conservation

Water for all cultivation activities will be agronomically delivered by drip line, which is applied at rates that minimize or avoid runoff. The watering occurs late in the afternoon or evening to minimize water loss through evaporation and maximize water uptake by the plants. Additional conservation is achieved through smart watering techniques that digitally monitor the weather patterns, soil moisture content and nutrient levels to limit the amount of water used to only that which is necessary. Timed and volume drip emitters, straw mulch cover on top of the soil surface to minimize evaporation, and the incorporation of water holding amendments during the initial soil preparation at the start of the cultivation season, are also employed.

These water conservation techniques, which are planned to be part of the licensed cannabis activities, ought to greatly reduce the volume of water necessary to sustain operations. In addition to the cultivation related conservation measures, the employee shared use area is planned to employ high-efficiency toilets, low flow aerator faucets in the bathrooms and kitchenette area and water efficient appliances.

Wastewater Discharge and Management

The cannabis cultivation activities occur within a hoop house with a permeable floor. Nursery activities will occur within a permanent greenhouse with an impermeable floor.

Typical wastewater flow rates from commercial sources USA EPA Table 3-4 [1] estimate daily wastewater flow rates at 7 to 16 gallons/person/day for office employees. None of the other facilities analyzed in the USA EPA Table 3-4 [1] closely match the proposed project uses (U.S. Environmental Protection Agency 2002). Therefore, we utilized flow rates for office uses for our analysis. Extrapolating the office flow rate demand data for the planned 31 employees, equals a septic system that can handle 217 to 496 gallons/person/day. The high end of the estimated daily wastewater flow rates approximately equals a 4-bedroom home.

Hazardous Waste Disposal

The proposed project does include the use of a small amount of hazardous waste substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers and pesticides). All materials deemed hazardous waste by the Trinity County Department of Environmental Services are required to be hauled off-site by a licensed third-party waste hauler to a licensed disposal facility no less than once every 60 days, or as frequently as needed.

National Scenic Byway Programs

The Federal Highway Administration's National Scenic Byway Program and the Forest Service's National Forest Scenic Byways Program are intended to showcase distinct and diverse roads throughout America. The National Forest Scenic Byways Program is designed to showcase the outstanding scenery of NFS lands, while meeting the public's demand for scenic driving tours on safe, well-maintained roads. In addition, the program allows for public interpretation of National Forest management, meets the growing demand for recreational driving opportunities, increases use of National Forests by non-traditional user groups such as the elderly and urban minorities, and creates opportunities for rural economic development.

Scenic Highway Programs

The California Scenic Highway Program designates highways as "scenic" based on characteristics such as the scenic quality of the landscape, presence of development, and how much of the natural landscape can be seen by travelers. There are no highways officially designated as "scenic" under the program. Additionally, in 1974, the County adopted a Scenic Highways Element of the General Plan, but did not identify any highways eligible for Scenic Highway status. In 1986, less restrictive criteria were proposed for a County Scenic Roadways designation, which is separate from an official designation by either the California Scenic Highway Program or the Scenic Highways Element of the General Plan. This designation was incorporated into the Community Plan adoption process to restrict certain activities along designated roadways. Designated County Scenic Roadways have a 50-foot wide Scenic-Conservation overlay zone, which is intended to regulate the placement of structures bordering these roadways to preserve the beauty and rural character of areas along the roadway and areas of unusual scenic beauty in Trinity County.

To date, four County Scenic Roadways have been designated: (LSC Transportation Consultants Inc. 2002)

- Trinity Dam Boulevard (Road 105)
- Canyon Creek Road (Road 401)
- Rush Creek Road (Road 204)
- Sky Ranch Road (Road 412)

*SR 3 is currently considered an Eligible County Scenic Roadway.

Regional Visual Landscape

The visual environment of Trinity County is dominated by rugged mountains, dense forests, rivers, and lakes. The dominant landform in the county is the rugged Klamath Mountains, which include the Trinity Alps and northern Yolla-Bolly mountains. The slopes of the Klamath Mountains in eastern Trinity County are characterized by steep, densely forested slopes, deep ravines, and mountain valleys; south-facing slopes, while similarly steep, tend to be less densely forested and noticeably drier. Primitive, or wilderness, areas are highly prized by County residents and visitors alike and are ranked among the most spectacular areas found anywhere in the continental United States. The scenic quality of Trinity County is vital to the County's communities and residential areas and contributes significantly to its recreational allure. With more than 90 percent of the county being forested and much of the total land area having slopes greater than 10 percent (Hahn, Wise, and Associates Inc. 1973), the visual environment is fairly similar across the county and provides a sense of open space. Nearly three-quarters of the land in the county is under public ownership (e.g., Forest Service, Bureau of Land Management, and Bureau of Reclamation) and is managed for the commercial value, recreational use, and preservation of valuable natural resources. Visual resource values of public lands must be considered during land use planning efforts (USDA Forest Service 1974, U.S. Bureau of Land Management 1999).

Two Forest Service–designated National Scenic Byways cross Trinity County: The Trinity Heritage Scenic Byway (SR 3) and the Trinity Scenic Byway (SR 299). The Trinity Heritage Scenic Byway includes more than 100 miles of SR 3, extending north from Weaverville to Old Highway 99 near Interstate 5 north of Weed. The Trinity Scenic Byway follows SR 299 between Redding and Arcata. This byway is approximately 140 miles long and bisects Trinity County as it parallels the Trinity River. Both SR 3 and SR 299 showcase outstanding National Forest scenery. Dense forests, mountain valleys, deep canyons, and numerous rivers and streams traversed by both highways contribute to the scenic quality of these roads. The extreme variations in topography afford travelers both close-in and panoramic views from the curvilinear highways. These highways, as well as several other local arterial roads (e.g., Trinity Dam Boulevard, Rush Creek Road), have been designated, or are recognized as being eligible for such designation, by the state as Scenic Byways.

The County has also designated several of its roads as County Scenic Roadways, to which a 50-foot wide Scenic-Conservation overlay zone applies (as appropriate) as part of the Community Plan adoption process.

Site Access

In 1920, present day SR 3 was called Route 35, also known as “Peanut Road,” which connected Weaverville to SR 36 by a County Road System (Blow, Ben 1920). In 1933, Peanut Road was converted into a highway that extended from SR 36 to present day SR 299 (California State Assembly 1933).

SR 3 is a major collector that links SR 299 with SR 36 and is the only access to the private lands along the highway. It is the major road serving the Hayfork and Hyampom Communities. It is frequently used by local residents and commercial businesses in the community of Hayfork as a primary route to Red Bluff, Weaverville, McKinleyville, and other areas west and south of Trinity County. It provides an important link for recreational and other users to a vast area of the Shasta-Trinity National Forest. In 2017 SR 3 carries an estimated 2650 vehicles per day. The estimated maximum hourly traffic volume is 360 vehicles (CalTrans 2017). Based on 2016 data, approximately 10.79 percent is truck traffic (CalTrans 2016).

The subject properties vehicle access is an existing encroachment from SR 3, which is the main access road in the area. The proposed driveway, from Rattlesnake road, is planned to be surfaced with rock and maintained in compliance with California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, Article 2 *Emergency Access and Egress 1273.02 Roadway Surfaces.* Ongoing monitoring will determine when and where additional stormwater control measures will be installed.

Proposed Mitigation

Mitigation measures for the following significant criteria areas: air quality, biological resources, cultural resources, and hydrology and water quality can be found under the section titled ‘Mitigation Measures’. The list includes who will be responsible for implementation of each mitigation measure, as well as, those responsible for final clearance.

Potential Environmental Impacts

The following section provides: (1) a summary of the potentially significant environmental impacts of the proposed project, along with proposed mitigation measures; and (2) a completed Environmental Checklist for the proposed project. The description of the affected environment and potential environmental consequences of the proposed project covers 21 separate environmental issues that the lead agency (Trinity County) anticipated could have potential effects on the environment, including mandatory findings of significance. The environmental issues analyzed include the following:

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

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

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

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

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

Evaluation of Environmental Impacts

The Environmental Checklist provides an analysis and discussion of potential environmental impacts that could result from the proposed project. Pursuant to the newly updated CEQA Guidelines, which were adopted by the Secretary in November 2018, and approved by the Office of Administrative Law for use on January 3, 2019, Title 14, Section 15000, there are 21 areas of interest that must be considered when preparing an initial study. These areas include: Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology/Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities/Service Systems, Wildfire, Mandatory Findings of Significance.

In conducting this analysis, the following methodology will be utilized;

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 where 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 off-site as well as on-site, 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, then 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 EIR is required.

4. “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “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 “Earlier Analyses,” as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the 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 they 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 Measures Incorporated," describe the mitigation measures which 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, where 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 less than significance

Aesthetics

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

Setting:

The land encompassing the project area is a flat, grass-covered area that was previously modified by past property owners, and the surrounding hillsides. The historic use of the proposed project is agricultural, which is consistent with surrounding land uses. The project area encompasses existing disturbed areas used by the historic agriculture uses that is 15 acres in total. The project area will take up a portion of this existing disturbed area.

The existing surrounding area includes historic agricultural sites, cannabis cultivation sites that may or may not be permitted, residential buildings, structures used for agricultural operations, water storage tanks, groundwater well storage tanks, barns, and miscellaneous storage buildings.

There are a few oak trees that provide natural screening from passing vehicles. Riparian vegetation is located along Salt Creek, which enters the parcel near the southeast corner and traverses the parcel along the eastern boundary of the subject property. There is up to 3 acres of additional vegetative screening planned to screen the proposed project from the public view on Highway 3.

Pursuant to State of California Highways and Streets Code Division 1, Article 2.5, Section 263.2, there are no listed scenic highways in Trinity County. Sections of state routes 3, 36, and 299 are all eligible State Scenic Highways, but none have been Officially Designated (California Department of Transportation, 2012). The section of State Highway 3 on which the proposed project is located is an eligible State Scenic Highway.

Impact Analysis:

a) Scenic vistas are defined as expansive views of highly-valued landscapes from publicly accessible viewpoints. Scenic vistas include views of natural features such as topography, water courses, outcrops, and natural vegetation, as well as man-made scenic structures. The project site on Parcel 1 is visible from SR 3. There will be no impact to visual resources from the proposed development as the existing vegetation and CalFire's required property line setbacks, which require cannabis not be cultivated or otherwise placed within 30 feet of any property line. Furthermore, the proposed land use is agriculture, which is consistent with the surrounding area land uses. For these reasons, potential impacts on scenic vistas would be **less than significant**.

b) There are no County Scenic Roadways within the project vicinity. As discussed under the aesthetic setting above, and pursuant to State of California Highways and Streets Code Division 1, Article 2.5, Section 263.2, there are no listed scenic highways in Trinity County. Sections of state routes 3, 36, and 299 are all eligible State Scenic Highways, but none have been Officially Designated ~~by the County~~ (California Department of Transportation, 2012). The section of State Highway 3 on which the proposed project is located is an eligible State Scenic Highway. The existing vegetative screening and the additional 3 acres of vegetative screening that is included in the proposed project would screen the proposed project area from the public view from Highway 3. Additionally, the proposed development footprint is a field that was historically used for agricultural purposes and does not contain any scenic resources that would be impacted by the project such as trees, rock outcroppings, or historic buildings. As proposed, the project would not damage any ~~natural~~scenic resources and the development of any related structures would not significantly change the visual character of the area. For these reasons, potential impacts on scenic vistas would be **less than significant**.

c) As discussed above in the impact analysis under Aesthetics subsection A, the proposed project is regulated to be setback from the property line, and is consistent with the visual character and existing structures in the project area. To the east of the flat area, along SR 3, there is a row of oak trees that provide natural screening from passing vehicles. Riparian vegetation is located along Salt Creek, which enters the parcel near the southeast corner and traverses the parcel along the eastern boundary of the subject property. Therefore, the project development would not have any short- or long-term visual effects on the existing visual character or public view. For these reasons, potential impacts on scenic vistas would be **less than significant**.

d) The Trinity County Cannabis Cultivation Ordinance 315-849, Section 6, (l), states that "All lighting associated with the operation shall be downcast, shielded, and/or screened to keep light from emanating off-site or into the sky". 315-849 Section 6 (m) states that "those cultivations using artificial lighting for mixed-light cultivations shall shield greenhouses so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise." Both of these points are echoed and reinforced by DCC Regulations, (Cal. Code Regs. Tit 4 §§ 16304(a)(6), 16304(a)(7)).

No light will be generated from the proposed cultivation activity because the applicant is not proposing to use artificial lighting for cultivation. As discussed elsewhere in this document, the proposed mixed-light cultivation would occur with the use of blackout tarps (light deprivation) to allow the applicant to have multiple harvests during the growing season. To comply with the

DCC and County requirements related to outdoor lighting, all outdoor lighting would be downcast, shielded, and/or screened.

For reference, light pollution occurs when nighttime views of the stars and sky are diminished by an overabundance 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.

With these measures in place, as required as part of the general licensing, visual impacts from substantial light would be **less than significant**.

Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural, land Evaluation and Site Assessment Mode /1997) prepared by the California Dept. of Conservation as on optional model to use in assessing impacts on agriculture and farmland. Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e. Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting:

The proposed project on Parcel 1 (019-750-13-00) is located in a relatively flat grass-covered area (0-5% slopes). The flat was previously used for other agricultural uses as described in Proposed Project Development - Existing Conditions. To the east of the flat area, along SR 3, there is a row of oak trees that provide natural screening from passing vehicles. Riparian vegetation is located along Salt Creek, which enters the parcel near the southeast corner and traverses the parcel along the eastern boundary of the subject property. Slopes increase to 15-45% on the hills to the southwest of the subject property, which are forested. The proposed project does not propose any timber harvest activities and therefore will not be included in the analysis below.

The existing surrounding area includes agricultural use, historic cannabis cultivation sites that may or may not be permitted, residential buildings, structures used for agricultural operations, water storage tanks, groundwater well storage tanks and miscellaneous storage buildings. Based on these site conditions, much of the surrounding visual character and existing uses appear agricultural in nature.

Impact Analysis:

a. The California Resources Agency has not yet mapped important farmland (prime farmland, unique farmland, or farmland of statewide importance) in Trinity County as part of the Farmland Mapping and Monitoring Program. The Natural Resources Conservation Service's Web Soil Survey indicates that the soil types at the project site are classified as "Not prime farmland" (NRCS, 2021). Cannabis is defined by the State of California (Health and Safety Code Section 11362.777[a] and Business and Professions Code Section 26067[a]) as an agricultural product and, therefore, cultivation activities on prime soils would not result in conversion of prime soils to a nonagricultural use. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), to non-agricultural use. Therefore, no impact would result from the proposed project.

b. The proposed project site is not under a Williamson Act contract. The existing zoning of the property upon which the project is proposed is Agriculture 40 acre minimum (A40). Ordinance 315, Section 13 of the Trinity County zoning code includes a list of uses permitted on a parcel in an Agriculture district, they are; *"all agricultural uses, including crop and tree farming, livestock farming, dairies, animal husbandry, aviaries, except that uses indicated in Section 13B shall not be established until a use permit is first secured."* According to Trinity County Cultivation Ordinance 315-849 Agriculture parcels are not included in 'limitations on location' to cultivate cannabis. For these reasons, there is **no impact** to existing zoning for agricultural use, or Williamson Act contract.

c. The subject property is zoned Agriculture, and no less than 3-acre conversion is necessary for this project. For these reasons, there is **no impact** to existing zoning or cause for rezoning of forest land, timberland or timberland zoned Timberland Production.

d. Under California Public Resources Code, Section 12220 (g) and Section 4526 definition of forest and timberland does include characteristics similar to the proposed project. The proposed project does not propose any additional timber harvest activities. Additionally, the land has been zoned agricultural. For these reasons, there is **less than significant** impact to forest land or conversion of forest land to non-forest use.

e. The California Department of Agriculture designates Cannabis as an agricultural crop, which is a similar use and visual character to existing uses within the immediate area of the proposed project. For these reasons, there is **no impact** to agricultural lands and, as indicated in section d above, no expectation of forest land conversion to non-forest use.

Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Setting:

Trinity County is located in the North Coast Air Basin (NCAB), which encompasses Del Norte, Humboldt, Trinity, Mendocino, and northern Sonoma counties. Air quality in Del Norte, Humboldt, and Trinity County is primarily managed by the North Coast Unified Air Quality Management District. The portion of the North Coast Air Basin under the jurisdiction of the North Coast Unified AQMD totals 7,767 square miles, which is approximately 5 percent of the land area of California (North Coast Unified Air Quality Management District 2019).

The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces. Average county temperatures range from 94 degrees Fahrenheit (°F) in the summer months to 27°F during the winter months (Western Regional Climate Center 2019). Predominant wind direction is typically from the northwest during summer months and from the southwest during winter storm events (WRCC 2019). However, wind direction often exhibits a daily pattern in river canyons throughout the county. During morning hours, cool air from higher elevations flows down canyon walls and out toward the Pacific Ocean while in the evening hours, the pattern is reversed and air flows up these canyons. Much of Trinity County is mountainous, and topography varies from high peaks to low mountain valleys. This mountainous terrain, coupled with the locations of air pollutant emissions, results in the distribution patterns of particulate matter in the county.

Concentrations of three types of criteria air pollutants are used to indicate ambient air quality. These are ozone, nitrogen dioxide (NO_2), and two measures of airborne particulate matter (PM2.5 and PM10). Ozone is created by chemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the air. Effects of ozone exposure include cough, pain, shortness of breath, and other

respiratory problems, including the possibility of permanent lung impairment with extended exposure (EPA 2016). NO_2 is a highly reactive gas that is present in all urban environments.

Most NO_2 comes from internal combustion engines, as well as other combustion devices, such as boilers and gas turbines. Excessive NO_2 concentrations can cause coughing, difficulty breathing, headache, vomiting, eye irritation, breathing abnormalities, among other respiratory and circulatory issues (EPA 2016).

PM10 is particulate matter that is emitted directly into the air, and includes soot, smoke, and fugitive dust, as well as particulate matter formed in the atmosphere by reaction of gaseous precursors (California Air Resources Board 2013). PM2.5 is a subgroup of smaller particulate matter that has a diameter of 2.5 micrometers or less. Emission sources for both PM 10 and PM2.5 are primarily dominated by the same area sources, mostly fugitive dust from vehicle travel, farming and construction operations, particles from residential fuel combustion, and industrial sources. Wildland fires also increase regional levels of particulate matter.

While sources of particulate matter are most noticeable at the local level, all sources have a cumulative effect on regional PM10 concentrations (National Academic Press 2010). Trinity County is currently in attainment for some of the US National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), including the state PM10 standard. The California State PM10 Standards are a 24-hour Standard of 50 µg/m3 of particulate material and an annual Standard of 20 µg/m3 of particulate material, neither to be exceeded (State of California Air Resources Board 2013).

Temperature inversions are common when warm air overlies cooler air under stable atmospheric conditions, trapping pollutants near the earth's surface. Inversions are most common between late fall and early spring due to the shorter days and less intense heating from the sun. During the winter, inversions can persist for hours or sometimes days. Despite the potential for inversions to occur, Trinity County's air quality is generally good, with a 24-hour PM2.5 concentrations of 9.4 in 2017, well below the established 24-hour standard NAAQS of 35 (California Air Resources Board 2019). The low population density, limited number of industrial and agricultural operations, and minimal traffic congestion contribute to the good air quality.

Air quality in and near the project area is relatively good and is representative of the rest of Trinity County. The nearest ambient air quality monitoring station to the project area is in Weaverville, approximately 37 miles directly northeast of the subject property. No exceedances of the State or Federal PM10 standards were reported at the station between 2010 and 2012, although exceedances were reported in 2009 during November and January (California Air Resources Board 2013). High PM10 levels are more common during winter months in the air basin because of increased wood smoke emissions from wood stoves.

SR 3 is the main road to Hayfork to the north of the project site, which has a denser population than most of Trinity County, and the communities of southern Trinity County to the south (US Census Bureau 2010). While there is higher traffic along SR 3, the relatively low population density contributes little to mobile source emissions in the local area.

Sensitive receptors (e.g., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects 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 (California Air Resources Board 2019). The project area is located in a highly rural area; the nearest sensitive receptors to the project site are the residences located in proximity to the project. The nearest residences are 380 feet away from the outdoor cultivation premises and 355 feet from the indoor operation of the commercial nursery (see Figure 4). Other sensitive receptors such as schools and churches are located in the community of Hayfork, at least seven miles away.

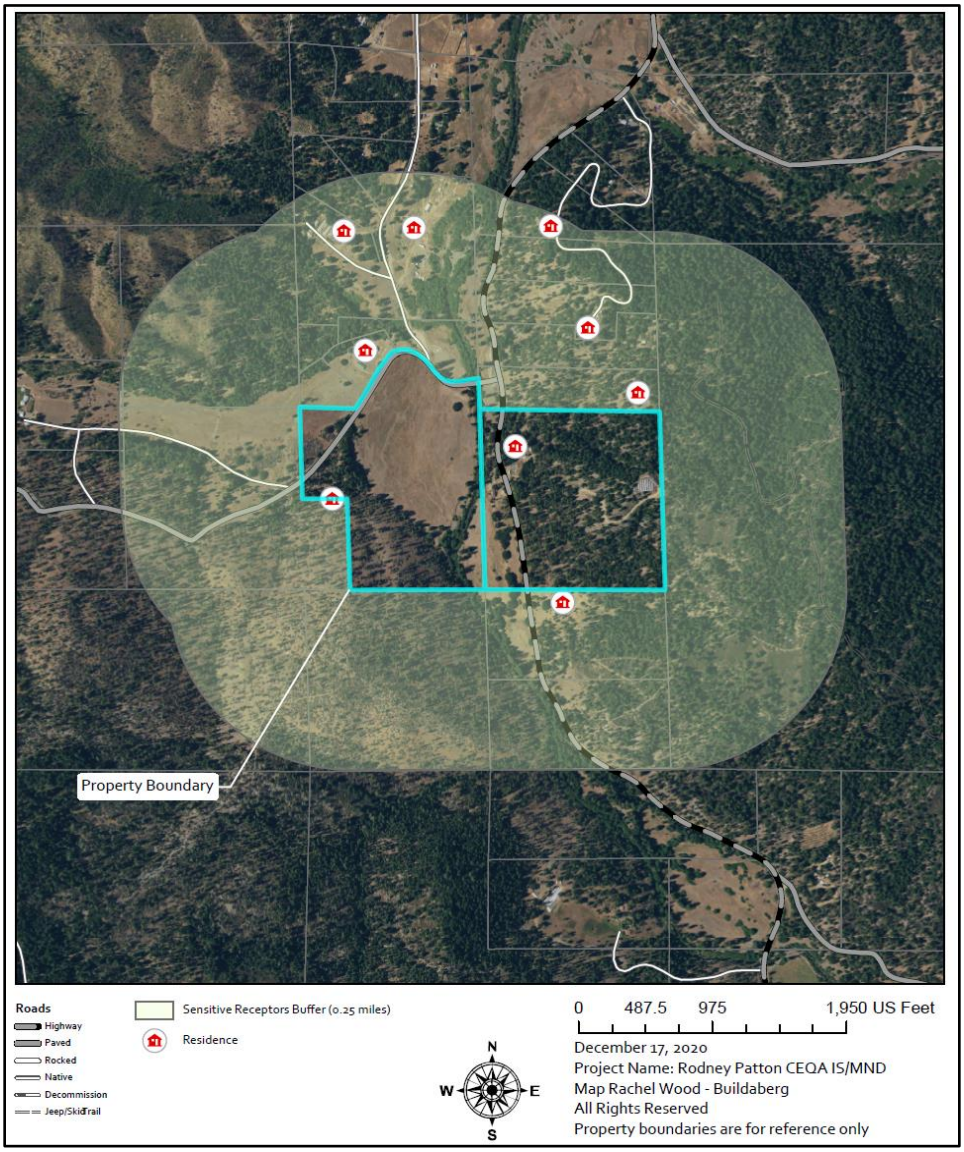

Figure 3 - Sensitive Receptors Map

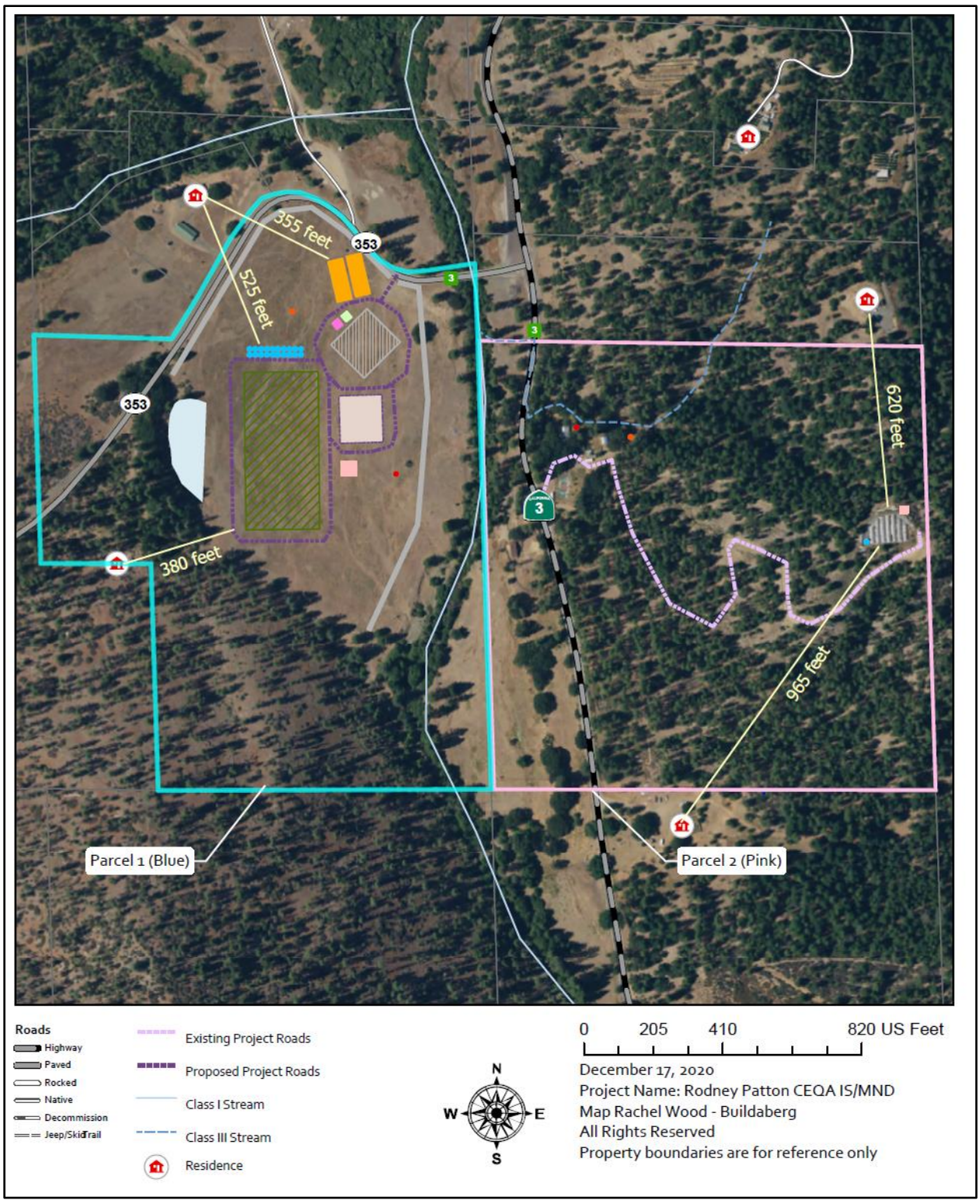

Figure 4 - Distance from proposed project to closest sensitive receptors

Odors are another major concern with regard to air quality for commercial cannabis projects. Although odors are generally regarded as an annoyance rather than a health hazard, a person's reaction to an odor can manifest in ways that range from physiological (e.g. nausea, vomiting, and headache) to psychological (e.g. irritation, anxiety, or anger).

Odor is a complex topic when it comes to assessing impacts, due to the inherently subjective nature in which odor is experienced from individual to individual. Odorants (odor-causing chemicals) are sometimes complex mixtures of differing chemical substances, and can vary greatly with only slight variations in the makeup of their chemical compounds. Additionally, a particular odor may offend one individual, while another may not find any issue with it. It is also important to note that an unfamiliar odor can be detected more easily and is more likely to cause complaints than a familiar one (a phenomenon known as "odor fatigue").

Cannabis presents an especially complex situation when assessing odorous impacts. Odors from cannabis originate from terpenes, which are volatile, unsaturated hydrocarbons found in essential oils of plants, especially conifers and citrus trees.

One way that some researchers measure odor levels is through the use of an "odor activity value" (OAV), which is the chemical compound concentration divided by the chemical compound odor detection threshold (a literature-based value). A more significant odor will produce a higher OAV. However, using this method, the quality of the odor detection thresholds may be low.

Odor detection thresholds based on literature can vary widely (by orders of magnitude) for the same terpene. This suggests that there is not a clear or consistent methodology to develop a numerical threshold to use for cannabis odors. Because of this fact, and the aforementioned subjective interpretation of cannabis odors, it is important to evaluate odors comprehensively and judge the odor as a whole, rather than identify the specific chemical compounds that create the odor.

Results of modeling by other counties have indicated that cannabis compounds may be detectable at a distance of 2 miles or more depending on weather conditions (Kern County 2017). Indoor and enclosed cannabis cultivation operations can result in significant odors within the enclosed space. Cannabis grown in greenhouses may generate odors 30,000 to 50,000 times more potent than clean air. This number implies that untreated indoor air from a greenhouse would need to be diluted 30,000 to 50,000 times with clean air in order for cannabis odor to be undetectable.

The City of Denver prepared a Cannabis Environmental Best Management Practices document (City of Denver 2018), which states that "the rate of VOC [volatile organic compound] emissions from cannabis cultivation facilities are relatively unknown… [T]hese VOCs from the cannabis industry typically do not pose a direct threat to human health." Although research is limited, it is not anticipated that cannabis odors will be concentrated enough to cause a public health hazard for off-property residential receptors.

Naturally occurring Asbestos; according to the Reported "Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California" map, ultramafic rock in outcrops are found in Trinity County, but none are at or near the project site. (USGS 2011)

Hazardous Air Pollutants and Toxic Air Contaminants ~~Toxic air contaminants~~ (TACs), or in federal parlance, HAPs, are a defined set of airborne pollutants that may pose a present or potential hazard to

human health. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. A wide range of sources, from industrial plants to motor vehicles, emit TACs. Although TACs are typically present in minute quantities in the ambient air, even low concentrations of TACs could cause a human health risk. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally.

TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; or short-term acute affects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches. For evaluation purposes, TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 3.3-1). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure. EPA and, in California, the California Air Resources Board (CARB) regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the maximum available control technology or best available control technology (BACT) for air toxics to limit emissions.

Toxic Air Contaminants TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807, Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, Chapter 1252, Statutes of 1987). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review are required before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. Most recently, particulate matter (PM) exhaust from diesel engines (diesel PM) was added to CARB's list of TACs. After a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If a safe threshold exists for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate BACT for toxics to minimize emissions.

The proposed project complies with the conditions for approval which are mandated by the Trinity County Environmental Impact Report. Construction and operation of the permitted cultivation and noncultivation operations may involve the use of diesel powered equipment that emit diesel PM. However, the amount of construction activity at any single location would not be intensive (i.e., approximately one piece of off-road equipment being used at a time) would be temporary and would not take place at the same site for longer than a few months. Operational activities would not include any major sources of TACs and all operations would be subject to comply with setback distances specified in the Cannabis Program (i.e., a minimum 350-foot buffer between operations and existing residential land uses), or receive a variance from the planning commission. Given the minimal construction activities, the lack of major sources of TACs, and the setback requirements, the construction and operation of new cannabis facilities would not expose existing receptors to substantial TAC concentrations.

Impact Analysis:

a. 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) (NCUAQMD, 1995). Since Trinity County is in attainment or unclassified for all federal and state ambient air quality standards, including the standards for particulate matter, the project is not subject to the NCUAQMD Attainment Plan. As such, the proposed project would not conflict or obstruct implementation of an applicable air quality plan. Therefore, impacts from the proposed project would be **less than significant**.

b. Criteria air pollutants have the potential to be generated during both construction and operation of the proposed project. Trinity County is listed as being in attainment for all federal and state ambient air quality standards (AAQS). Although Trinity County is in attainment or unclassified for all federal or state AAQS, it is still appropriate to analyze whether the project would result in a cumulatively considerable net increase, since other counties in the NCAB are nonattainment for PM10.

   The proposed project involves outdoor cultivation, nursery, processing and employee areas. As such, the proposed project could generate both direct and indirect air quality impacts from construction activities, area sources, and mobile (vehicle) sources.

   The NCUAQMD has established thresholds of significance for projects under 'Rule 110 New Source Review and Prevention of Significant Deterioration.' When comparing the Rule 110 thresholds of significance to the CalEEMod results for construction and operational emissions, six (6) types of criteria air pollutants are relevant; including, Carbon Monoxide (CO), Nitrogen Oxides (NOx), Particulate Matter 10 (PM10), Particulate Matter 2.5 (PM 2.5), Reactive Organic Gases (ROG), and Sulfur Oxides (SO2). The tables below list the CalEEMod results for construction and operational emissions compared to the NCUAQMD Rule 110 thresholds.

Maximum Unmitigated Construction Emissions (lbs/day)			
Pollutant	**Proposed Project Emissions**	**Threshold of Significance**	**Exceed Threshold?**
ROG	18.1	50	No
NOx	40.7	50	No
CO	24.2	500	No
SO2	<0.1	80	No
PM10	20.3	80	No
PM2.5	11.9	50	No
Source: CalEEMod June 2021 (see Appendix A)			

Table 7 - Maximum Unmitigated Construction Emissions Table

Maximum Unmitigated Operational Emissions (lbs/day)			
Pollutant	**Proposed Project Emissions**	**Threshold of Significance**	**Exceed Threshold?**
ROG	2.7	50	No
NOx	4.4	50	No
CO	5.6	500	No
SO2	<0.1	80	No
PM10	0.6	80	No
PM2.5	0.3	50	No
Source: CalEEMod June 2021 (see Appendix A)			

Table 8 - **Maximum Unmitigated Operational Emissions Table**

As indicated in the above tables, the construction and operational emissions would be below the daily significance thresholds in Rule 110 (NCUAQMD, 2015; see Table 1.0 – Significance Thresholds, pg. 7-8). Therefore, it is concluded that the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region (e.g., North Coast Air Basin (NCAB)) is non-attainment (e.g., PM10) under a federal or state ambient air quality standard (AAQS).

The project does not propose to use generators as the primary source of electrical service, as the subject property is served by Trinity County PUD. However, generators will be used for back-up power. Generators are required to comply 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.

As such, the project will not result in a cumulative increase of any criteria pollutant for which the region is in non-attainment. For these reasons, potential impacts would be **less than significant**.

c. The project does not expose sensitive receptors to substantial pollutant concentrations. There are less than 10 residences within one-quarter (0.25) of a mile of the property line, ~~at least 500~~ and over 350 feet away from outdoor cultivation. The nearest schools, businesses, and public areas are at least seven miles away. Pesticide applications are normally required to be administered 300 feet from sensitive receptors in the case of dry pesticides and 200 feet in the case of wet pesticides. For Parcel 1, the nearest residence is an estimated 380 feet from the outdoor operation of cannabis cultivation, and an estimated 355 feet from indoor (greenhouse) operations for the commercial nursery (see Figure 4).

The distance between the outdoor operations of the project and the nearest sensitive receptor should be sufficient to reduce harmful impacts from pesticides. However, strong wind gusts could push pesticide residue in the direction of the sensitive receptors. The use of Mitigation Measure AQ-1 reduces the potential impacts of pesticide application by prohibiting application during wind events of over 10 mph. As required by Mitigation Measure AQ-1: The spray application of pesticides (e.g. neem oil, sulfur or other materials) shall occur no closer than 350 feet to adjacent residences. Spraying shall not occur at wind speeds greater than 10 miles per

hour (Fishel and Ferrel 2016). 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 (see Mitigation Measure AQ-1). The applicant, their employees, or a responsible third party professional, are responsible for ensuring these measures are implemented in accordance with the Integrated Pest Management Plan. The Applicant is the main point of contact for a responsible third party professional regarding pest management and ensures staff are familiar with the IPM Plan. The applicant is solely responsible for final clearance.

As indicated in the project description, diesel trucks are often used throughout Trinity County for everyday operations. Delivery and vendor trucks that bring cannabis goods to and from the proposed nursery may be of a heavy-duty variety, and may be left idling while products are loaded or unloaded. Pursuant to Title 13, California Code of Regulations, Section 2485, the idling threshold for heavy-duty diesel vehicles with a Gross Vehicle Weight Rating of 10,000 lbs. is 5 minutes; trucks which serve the project must comply with this requirement. Compliance with this requirement will reduce potential vehicular emissions from the operation of the proposed project.

Therefore, based on the project location and proposed mitigation, the potential exposure to sensitive receptors from substantial pollutant concentrations is considered **Potentially Significant Impact Unless Mitigation Incorporated**.

d. As stated in the EIR prepared for the County's Cannabis Ordinance (pg. 3.3-24): "The potential for detected odors to be considered objectionable and an adverse effect would depend on the size of the cannabis-related operation, the receptor, the strain of cannabis being cultivated/processed, the presence of nearby vegetation, and topographic and atmospheric conditions. As a result, an appropriate buffer distance at which odors could not be perceived is not considered feasible and would depend on site-specific conditions. Generally, the larger the size of the canopy area, the greater the potential for odor to be evident to off-site receptors."

The primary source of odor from cannabis cultivation comes from the flowering plants close to harvest and from processing (e.g., trimming) of mature cannabis flower. The project footprint (spread across both Parcel 1 and 2) includes a mature canopy area of up to 1 ac (comprising a total of 0.0125 (or 1.25%) of the 80 acres which make up the two parcels. Less than ten sensitive receptors (including residences) are located within one-quarter (0.25) mile from the proposed cultivation. The area surrounding the two proposed cultivation areas is forested and hilly. The proposed mature canopy on Parcel 1 would be located in a previously-disturbed flat area, surrounded on three sides by forested hills. It can reasonably be stated that the spread of odors emitted by project operations to surrounding areas will be significantly reduced by topographic conditions. Hoop-houses would also be used in order to mitigate odor being spread. The nearest residences ~~is~~are 380 feet away from the outdoor cultivation premises and 355 feet from the indoor operation of the commercial nursery (see Figure 4). Cannabis Processing and Cannabis Nursery occur indoors and include carbon filters and other odor filters are planned to be installed.

For Parcel 1, The Trinity County Commercial Cannabis Cultivation Ordinance 315-843 requires a 500-foot setback buffer from the property line for Medium Outdoor Cultivation, which is

considered an effective distance to dissipate objectionable odors. The 500 foot property line setback is not met on this property, therefore a variance has been applied for concurrently with the conditional use permit, and additional preventative measures to reduce odors are built into the project design, such as companion plants such as Mint and Rosemary that blend with the cannabis odor and mechanical systems to reduce the odor within the proposed project structures. The parcel shape confines the usable area outside of setbacks, therefore the site is situated in close proximity to existing infrastructure including roads and electrical services. As stated previously, the variance is to reduce the property line setback from 500 ft to 100 ft. While the property line setback is requesting a variance, the setback from the outdoor operation (380 ft.) and the setback from the nursery indoor operation (355 ft.) to the nearest residences, which is considered a sensitive receptor, are more than the 350 ft residential setback required by Trinity County. According to the EIR prepared for the County Cannabis Ordinance, projects "setback a minimum of 350 feet from adjacent residences such that attendant odors would less likely be detectable by people off-site." The variance to reduce the distance of the setback of the cannabis operations to the property line will not significantly impact a substantial number of people.

Many of the nearest sensitive receptors are themselves either cultivating cannabis and/or have immediate neighbors that are cultivating cannabis. As such, their tolerance for cannabis odors may be greater than that of the general public. In addition, one of the purposes of setback requirements for outdoor cannabis cultivation is to reduce potential odor impacts. Once a variance is issued by the County, the variance is evaluated on an annual basis. Should odor from the project become an issue, the County could terminate the variance approval and require relocation of the cultivation activity or require additional odor mitigation measures to be incorporated into the project to reduce the impacts to a less than significant level.

According to Section 17.43G.040.E of Trinity County Ordinance 315-849, an Odor Control Plan is not required for lands zoned Agricultural. Since the project site is zoned Agricultural, an Odor Control Plan is not required.

However, of the 20-22 private parcels within 0.25 miles of the subject property, 8-10 may be used for cultivation of cannabis (based on NAIP 2020 aerial imagery). Most of those 8-10 parcels used for cannabis cultivation are the same as those previously mentioned as hosting residences, which indicates that cannabis is cultivated in the surrounding area in close proximity to sensitive receptors. Additionally, due to the attitude toward cannabis in the area, it is likely that the surrounding receptors are more accustomed to the odor of cannabis flowers than the general public.

The companion plants and the mechanical systems, including carbon filtration will be located within the proposed project structures. 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.

In addition to the project specific measures to reduce odor on the proposed project, the EIR prepared for the County Cannabis Ordinance requires the implementation of an Odor Control Plan for the Growing, Cultivating, Processing, and Handling of Cannabis. Consequently, the 8-10 parcels surrounding the subject property would be required to individually identify and describe odor-emitting activities and controls for reducing/controlling odors on-site. Since this odor control mitigation measure is inclusive of the Trinity County Cannabis program, it is assumed that the adjacent projects would also be required to incorporate odor control measures into their individual projects, which would reduce cumulative impacts in the area.

Because the subject property is in an area with a low density of sensitive receptors, is surrounded by existing cultivation activity, and has topographical and vegetation conditions that would reduce the spread of odors, have additional preventative measures to reduce odors built into the project design, a substantial number of people are not anticipated to be adversely impacted by cannabis odors from the proposed project. Therefore, potential impacts from odors are considered **less than significant**.

Mitigation Measures: The following mitigation measures have been developed, to reduce potential impacts related to Air Quality to less than significant levels:

AQ-1: The spray application of pesticides (e.g., neem oil, sulfur or other materials) shall occur no closer than 350 feet to adjacent residences. Spraying shall not occur at wind speeds greater than 10 miles per hour. 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. The applicant or a responsible third-party professional are responsible for ensuring this mitigation measure is implemented in accordance with the Integrated Pest Management Plan. The Applicant is the main point of contact for a responsible 3rd party professional regarding pest management and ensures staff are familiar with the IPM Plan. The applicant is solely responsible for final clearance.

Biological Resources

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local of regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on state or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community, Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☒

Setting:

A Biological Resources Assessment (BRA) was conducted by Brian Shaw of Klamath Wildlife Resources. The Study Area consists of Parcel 1, since the existing cannabis activities on Parcel 2 are part of the environmental baseline condition. The Study Area is located in the community of Peanut, in Trinity County, CA, which is within the "Dubakella Mountain" 7.5-minute quadrangle. The approximate center of the Study Area is located at latitude 40.465600° and longitude -123.171400° within the Salt Creek Watershed. Elevation ranges between 2,500 and 2,700 feet above sea level.

A list of threatened, endangered and sensitive species list for the surrounding area including Hayfork, Dukabella and adjacent quadrangles; which were reviewed to evaluate the potential was created using the California Natural Diversity Database (CNDDB) out to 1, 5, and 10 miles from the property center. The list showing the species' state and federal listings was created from the data and included in the BRA.

The Study Area consists primarily of undeveloped grasslands, with hills above consisting on mixed-conifer and oak woodlands, and is characterized by mostly flat, grassy terrain. Rattlesnake Road, a paved road, makes up the northern boundary of the Parcel 1. The study area was previously used for agricultural purposes.

The purpose of the BRA was to assess potential for occurrence of special-status plant and animal species and their habitats, as well as sensitive ecosystems such as oak woodlands, wetlands, and riparian communities within the Study Area. Although this assessment did use reconnaissance-level site assessment techniques, it does not include a wetland delineation performed according to the US Army Corps of Engineers standards. During the assessment, information about existing active and non-active raptor nest locations, burrows and any other special habitat features, habitat and vegetation communities was collected, as well as animal species were directly observed.

Biological resources are governed by a myriad of regulations, including both the federal and state endangered species acts, the Migratory Bird Treaty Act, the Clean Water Act, the California Native Plant Protection Act, California Fish and Game Code Special Protections for Birds, lake or streambed alteration agreements administered through CDFW, the Porter-Cologne Water Quality Act, the California Environmental Quality Act, as well as the Trinity County General Plan.

Development of the ½ acre pond will require the removal of some vegetation, which may include the removal of Acmispon glaber, bromus spp, Ceanothus cordulatus, and arctostaphylos patula. There are two watercourses that flow through the subject property. A Class I stream runs through parcel 1 and between parcel 1 and 2 and a Class III stream runs through the northern section of parcel 2. According to the USFWS National Wetland Inventory Mapper, there are no wetlands known to occur on the project site (USFWS, 2021).

Impact Analysis:

a. A Biological Resources Assessment (BRA) was prepared for the project by Brian Shaw of Klamath Wildlife Resources, on May 30, 2018. Within the scope of the BRA, historical occurrence databases were queried to identify listed, proposed, and candidate animal species reported in the vicinity of the study area, and/or that may be affected by construction activities related to the project. These databases include the California Natural Diversity Database (CNDDB) and critical habitat geographic information system (GIS) data maintained by the National Marine Fisheries Service and the US Fish and Wildlife Service. The second stage of the biological resource assessment consisted of a habitat and species field evaluation within and just beyond the bounds of the subject property upon which the study area is located. Based on both this field evaluation and the records review, potential for presence of federally listed, proposed, and candidate animal species in the study area was determined to be minimal. However, a myriad of special-status wildlife species were identified as potentially present within one mile of the Study Area, listed in the table below.

~~This BRA included a botanical evaluation. The botanical evaluation was conducted in a two-stage process as well. The first stage of the evaluation consisted of queries to historical occurrence databases to identify federally listed, proposed, and candidate species reported in the vicinity of the Study Area, and/or species that might potentially be affected by construction activities related to this project. Records queried included U.S. Fish and Wildlife Service species list for the Dubakella Mountain quadrangle and adjacent quadrangles, CNDDB records, and critical habitat data maintained by the USFWS. The second stage consisted of a field visit and evaluation of the natural environment at or near the project site.~~

Species	CDFW	State Listing Status	Federal Listing Status
California wolverine	FP	Threatened	
Western pond turtle		SSC	
Pacific fisher	SSC	SSC	Candidate
Foothill yellow-legged frog	SSC	Endangered	
~~Western pond turtle~~	~~SSC~~		
Golden eagle	SSC		
Tailed frog	SSC		
Summer-run steelhead trout	SSC		
Summer-run chinook salmon	SSC		
Osprey	SSC		
Western yellow-billed cuckoo		Endangered	Threatened
Pallid bat	SSC		
Townsend's big eared bat	SSC		
Grasshopper sparrow	SSC		
Wawona riffle beetle			
Double-crested cormorant	WL		
American badger	SSC		
Northern goshawk	SSC		SSC
Northern spotted owl	SSC	Threatened	Threatened
Gray wolf			Endangered

Table 9 - Potential to occur of endangered animal species

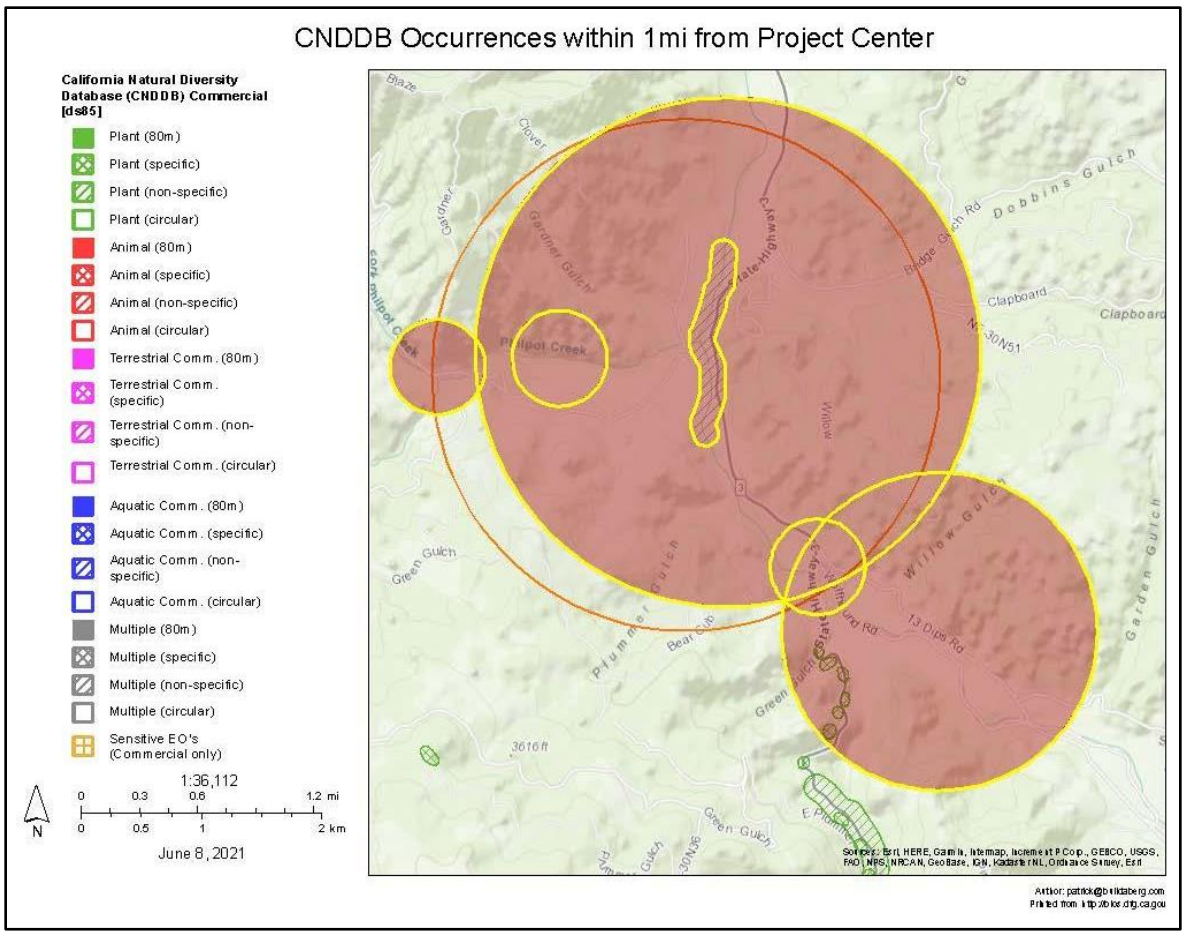

Figure 5 – CNDDB Occurrences within 1 mile from the project site

For the three species stated within the BRA that are federally (USFWS) listed (gray wolf, yellow-billed cuckoo, and northern spotted owl), critical habitat is listed as occurring nearby according to the USFWS records. However, USFWS records further state that "there is no critical habitat for these species" on the property (see Appendix B). Additionally, the subject property was long ago converted to cropland, and remains so today.

The BRA also included a wildlife and avian field survey. According to an independent CNDDB query conducted by Buildaberg on June 8, 2021, the nearest golden eagle nest is approximately four (4) miles away. Red-tailed hawks were visually identified flying over the project area during the survey. To identify potential habitat, a nest search was conducted in the adjacent forestlands and riparian area to the east, surrounding Salt Creek; no nests were found. The field survey also included mammals, frogs, reptiles, insects, as well as a point count bird survey. Since no other specific habitat for TES species were identified, no other protocol surveys were required. Avian and wildlife species observed or detected are listed below:

Reptiles/Amphibians

- Western fence lizard *(Sceloporus occidentalis)*
- alligator lizard *(Elgaria multicarinata multicarinata)*
- foothill yellow-legged frog *(Rana boylii)*

Birds

- yellow rumped warbler *(Setophaga coronata)*
- golden-crowned sparrow *(Zonotrichia atricapilla)*
- Cassin's vireo (formerly solitary vireo) *(Vireo cassinii)*
- hairy woodpecker *(Leuconotopicus villosus)*
- red-tailed hawk *(Buteo jamaicensis)*
- red-breasted sapsucker *(Sphyrapicus ruber)*
- American robin *(Turdus migratorius)*
- Pacific-sloped flycatcher *(Empidonax difficilis)*
- mourning dove *(Zenaida macroura)*
- mountain quail *(Oreortyx pictus)*
- common raven *(Corvus corax)*
- Northern flicker *(Colaptes auratus)*
- Pacific wren *(Troglodytes pacificus)*
- Stellers jay *(Cyanocitta stelleri)*
- dark-eyed junco *(unco hyemalis)*

Additionally, five different species of butterfly were observed.

The BRA also included a botanical evaluation. The botanical evaluation was conducted in a two-stage process as well. The first stage of the evaluation consisted of queries to historical occurrence databases to identify federally listed, proposed, and candidate species reported in the vicinity of the Study Area, and/or species that might potentially be affected by construction activities related to this project. Records queried included U.S. Fish and Wildlife Service species list for the Dubakella Mountain quadrangle and adjacent quadrangles, CNDDB records, and critical habitat data maintained by the USFWS. Four species of sensitive plants were identified within one mile of the study area. These are listed in the table below. The second stage consisted of a field visit and evaluation of the natural environment at or near the project site. ~~Four species of sensitive plants were identified within one mile of the study area. These are listed in the table below.~~

Species	State Listing Status	Federal Listing Status	CNPS Plant Ranking
Nile's harmonia			CNPS 1B
Tracy's eriastrum			CNPS 1B
Hoover's spurge	Threatened		CNPS 1B
Slender orcutt	Threatened		CNPS 1B

Table 10 - Potential to occur of endangered plant species

The conclusion of the BRA states that there are no federally listed, proposed, or candidate plant or animal species that were observed ~~nor listed to be near or~~ within the study area on the subject property. ~~No other habitat or designated critical habitat for federally listed species of EFH for Pacific Salmon are present in the study area.~~ This is mostly due to the lack of natural habitats in the area, as the area has been long ago used as a crop production field.

As noted by CDFW in their comments on the analysis in this section (dated 12/7/21), *"A map was generated showing the CNDDB occurrences of special status species potentially present within 10 miles of the subject property, but the list produced to suggest what species needed further evaluations was limited to a one-mile radius around the subject parcel(s). The CNDDB is a positive occurrence database and does not predict where something may be found. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present. In order to provide an adequate assessment of special-status species potentially occurring within the Project vicinity, the Department recommends the initial search area for CNDDB occurrences include the United States Geological Survey (USGS) 7.5-minute topographic quadrangle where the Project is located and all adjoining 7.5-minute topographic quadrangles. The MND does not discuss why areas beyond a 1-mile radius from the Project may have been intentionally excluded from the list for further evaluation."*

In response to the comments from CDFW, a 9-quad search was completed and identified additional species in the 9-quad search area than were identified in the BRA. The results of the 9-quad search are attached to the BRA, which is Appendix B to this document. Additional sensitive species identified in the 9-quad search include the following:

- chinook salmon – upper Klamath and Trinity Rivers ESU (CDFW Status - SSC)
- Trinity bristle snail (State Status – Threatened)
- Pacific tailed frog (CDFW Status – SSC)
- willow flycatcher (State Status - Endangered)
- southern torrent salamander (CDFW Status – SSC)
- steelhead – Central Valley DPS (Federal Status – Threatened)
- Pacific lamprey (CDFW Status – SSC)

For the additional species noted above that have potential habitat at the project site, it is expected that potential impacts would be reduced to less than significant through the implementation of the mitigation measures identified below and compliance with existing regulatory requirements (for example, County Cannabis Ordinance, SWRCB Cannabis General Order, etc.).

There is the potential for nesting birds to be present onsite during the construction activities for the proposed project. To ensure that no significant impacts occur to nesting birds, the project includes Mitigation Measure BIO-1 which requires that vegetation removal and other ground disturbing activities associated with project construction ~~for project construction purposes~~ take place outside of the bird nesting season (between February 1 and August 31). The inclusion of mitigation measure **BIO-1** addresses potential impacts to nesting bird species.

Once the proposed ½ acre storage pond is constructed, it has the potential to be occupied by invasive American bullfrog *(Lithobates catesbeinus)*, which could cause significant impacts to native aquatic species. Generally, bullfrog tadpoles require two years to develop into frogs, whereas native amphibians only require one year. By draining a pond every two years (or less), bullfrog tadpole development can be handicapped and bullfrog populations can be dramatically decreased. The California Department of Fish and Wildlife (CDFW) should be consulted, and a detailed plan for disposal of the bullfrog-infested water should be developed in conjunction with all agencies with permitting authority, such as the Regional Water Quality Control Board. The inclusion of mitigation measure **BIO-2** addresses this issue.

There are no previously documented special-status plant species in the Study Area, and none of the potentially-present plant species are listed as high-potential species. While one field visit was conducted on May 30, 2018, using the CDFW *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (2009), this protocol typically requires two seasonally appropriate surveys within potential habitat and within the blooming period for Threatened, Endangered, and California Rare Plant Rank 1, 2, 3, or 4 species. Therefore, mitigation measure **BIO-3** is included requiring an additional botanical survey during the late blooming period (June-July) prior to construction activities for the proposed project.

In their comments on the analysis in this section (dated 12/7/21), CDFW indicated that there is the potential for western pond turtle and foot-hill yellow legged frog to be present in the proposed construction area. The applicant is required to comply with Sections 17.43G.030.D and 17.43G.030.E of the County Cannabis Ordinance (No. 315-849), which address special-status amphibians and pond turtles, respectively. These sections require pre-construction surveys to be conducted by a qualified biologist 24 hours before new development activities. If special-status amphibians or pond turtles are located, injury or mortality to these individuals will be avoided by modifying project design, installation of exclusionary fencing, or relocating animals in consultation with CDFW. If special-status amphibians or pond turtles are not detected during the pre-construction survey, further mitigation is not required. The Environmental Impact Report (EIR) prepared for the County's Cannabis Ordinance (DEIR, pgs. 3.4-44 to 3.4-47) determined that the implementation of these measures would reduce impacts to special-status amphibians and pond turtles to a less than significant level. The requirement to conduct pre-construction surveys for special-amphibians and pond turtles per the requirements of the County Cannabis Ordinance, has been included as a condition of approval for the project.

Therefore, with the implementation of mitigation measures **BIO-1, BIO-2, BIO-3** and compliance with the requirements of the County's Cannabis Ordinance, the proposed project would not have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

b. According to the Biological Resources Assessment conducted by Klamath Wildlife Resources (Appendix B), there are no sensitive natural communities previously documented within the Study Area and no sensitive communities were identified as having the potential to occur within

the Study Area based on literature review. As part of the Biological Resource Assessment (BRA) conducted by Klamath Wildlife Resources (Appendix B), a "surface waters" assessment study and evaluation was completed. This assessment included a full walkthrough of the property to evaluate if Class I-IV watercourses, lakes, ponds, artesian wells, springs, seeps, and man-made canals were present. According to Figure 2 - Project Layout, a Class I stream runs through parcel 1 and between parcel 1 and 2 and a Class III stream runs through the northern section of parcel 2. All of the development proposed by the project is outside of the watercourses and associated riparian habitat on the project parcels, in adherence to existing regulations under the State Waterboard Cannabis General Order, including a 150-foot buffer from Class I streams and a 50-foot buffer from Class III streams. As noted under the setting section above, development of the ½ acre pond will require the removal of some vegetation, including low lying plants and grasses, shrubs and nonmarketable trees. The location of the vegetation removal is outside of any riparian habitat on the subject property and outside of the two watercourses that flow through the subject property.

Therefore, the proposed project would have a **less than significant** on riparian habitat or other sensitive natural community identified in local of regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c. As part of the Biological Resource Assessment (BRA) conducted by Klamath Wildlife Resources (Appendix B), a "surface waters" assessment study and evaluation was completed. This assessment included a full walkthrough of the property to evaluate if Class I-IV watercourses, lakes, ponds, artesian wells, springs, seeps, and man-made canals were present. The BRA determined that there were no wetlands on or near the project site. Additionally, according to the USFWS National Wetland Inventory Mapper, there are no wetlands known to occur on the project site (USFWS, 2021). According to Figure 2 - Project Layout, a Class I stream runs through parcel 1 and between parcel 1 and 2 and a Class III stream runs through the northern section of parcel 2. All of the development proposed by the project is outside of the watercourses and associated riparian habitat on the project parcels, in adherence to existing regulations under the State Waterboard Cannabis General Order, including a 150-foot buffer from Class I streams and a 50-foot buffer from Class III streams.

   Therefore, the proposed project would have a **less than significant** impact on state or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d. Due to the small scale of the proposed project, the movement of any native resident or migratory wildlife species or established native resident or migratory wildlife corridors is not anticipated to be significant. The project does not propose to alter any streams or rivers or otherwise impact the movement of fish or other aquatic species. Also, the project site is located on land that has been previously converted for agricultural use (crop production), fenced, and otherwise developed prior to the project proposal. These historic activities may have previously altered deer migration or local travel patterns, but this impact is part of the environmental baseline condition and is not considered an impact from the proposed project. Fencing that may

be required around the cannabis operations represents a small portion of the overall historically impacted area and is not anticipated to be a significant impediment to deer migration or the migration of other mammals. As discussed above, mitigation measures have been required for the project to minimize potential impacts to nesting birds and aquatic species.

Therefore, with implementation of the mitigation measures required for the project and compliance with existing regulatory requirements, the proposed project would not 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. Therefore, impacts from the proposed project would be **less than significant**.

e. The Conservation Element of the Trinity County General Plan discusses the need for the protection and conservation of natural resources including biological resources within the county. Similarly, the Hayfork Community Plan (a part of the General Plan) also discussed biological and timber resources in the Hayfork area. While these plans outline various goals and objectives, there has been no policy developed related to specific biological resources or tree preservation or management that would specifically apply to the project and the lands where the project is located. The project does not propose to remove any trees or otherwise impact significant areas of vegetation at the project site. Therefore, the proposed project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, impacts from the proposed project would be **less than significant**.

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

Mitigation Measures: The following mitigation measures have been developed, to reduce potential impacts related to Biological Resources to less than significant levels:

Mitigation Measures BIO-1. If vegetation removal or other ground disturbing activities associated with project construction cannot occur outside the bird nesting season (generally February 1 – August 31), a qualified biologist will conduct nesting bird surveys within the area of impact and establish a protective buffer for any active nests found.

- Conduct surveys no more than 7 days prior to activities, covering the entire area of potential impact.
- If an active nest is located during the survey, a no-disturbance buffer shall be established around the nest by the qualified biologist, in consultation with California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.
- Establish protective buffers for active nests based on type of project activity to be conducted, habitat, and species of concern.

- Physical protective buffers should be in the form of high visibility fencing, inspected weekly by a biological monitor to ensure stability.
- If project activities are to be conducted while active nest buffers are in place, a biological monitor will be on site during project activities to ensure that no take of migratory birds occurs.

Mitigation Measures BIO-2. To avoid impacts to sensitive native amphibian and fishery resources from bullfrog establishment in the proposed rainwater catchment pond, pond draining should occur in September through October, a minimum of every two years. Careful planning and coordination with CDFW, is necessary to ensure potential impacts to stream resources can be addressed, prior to commencing with pond draining. Discharge of polluted water to waters of the state may require permitting from other agencies with permitting authority, such as the Regional Water Quality Control Board.

Take of bullfrogs is specifically allowed in the California Code of Regulations (CCR), Title 14 (T- 14) section 5.05(a)(28), under the authority of a sport fishing license. There is no daily bag limit, possession limit, or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow, or fish tackle. While draining occurs, direct removal efforts should be employed as described above if possible.

Mitigation Measures BIO-3. To prevent impacts to special-status plant species that have a potential to occur within the project site, at least one additional seasonally appropriate botanical survey should be conducted prior to any ground disturbance activities.

- The survey should occur during the appropriate blooming time for the target species.
- Survey methods should comply with the CDFW rare plant survey protocols and be performed by a qualified field botanist.
- Any populations of special-status plant species that are detected should be mapped. Populations should be flagged if avoidance is feasible and if populations are located adjacent to construction areas.
- The locations of any special-status plant populations to be avoided should be clearly identified in the contract documents (plans and specifications).
- If special-status plant populations are detected where construction would have unavoidable impacts, a compensatory conservation plan should be prepared and implemented in coordination with CDFW. Such plans may include salvage, propagation, on-site reintroduction in restored habitats, and monitoring.

Cultural Resources

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Setting:

The project is a historical agricultural site. Two previous cultural studies have been conducted within 0.5 miles of the project area, and five significant cultural resources were recorded. NAHC's Sacred Lands File was searched to determine if Native American cultural resources were present in the Study Area; it was determined that there were not. The Office of Historic Preservation's Directory of Properties, Historic Property Data File did not identify any resources within the Project Area. Additionally, the National Register Information System did not reveal any significant properties within the Project Area.

Impact Analysis:

a. A Cultural Resource Evaluation was prepared by Wolf Creek Archeology in 2018 at Parcel 1 (WCA, 2019), in compliance with CEQA Sec. 21083.2. The evaluation followed outline for ID of cultural resources as presented in the "Archaeological Resource Management Reports (ARMR): Recommended Contents and Format" (State of California 1990).

   Prior to the field inspection on May 28, 2018, the Northeast Center of the California Historical Resource Information System was consulted for historical records of cultural resources. This search yielded six prehistoric sites and one historic site within one mile of the project area.

   A cultural resource records search and literature review was conducted in Chico, CA on June 18, 2018. The purpose of the records search was to determine the extent of previous surveys in and within a 0.5-mile (800-meter) radius of the proposed Project Area, and whether previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or ethnic resources exist within this area.

   The results of the records search indicate that the Project Area has not been previously surveyed for cultural resources by a professional archaeologist. No previously recorded resources are located within the Project Area.

An Archaeological Reconnaissance Report dated October 2018 was submitted by Mark Arnold, Archaeologist. The field survey was conducted September 25, 2018 which found no new prehistoric or historic archaeological sites were recorded during the reconnaissance survey. New surveyed ground totaled 15.2 acres.

Therefore, the project is considered to have a **less than significant impact** on historic resources.

b. The Cultural Resource Evaluation prepared by Wolf Creek Archaeology (WCA, 2019) did not find any archaeological sites that could be impacted by this 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 as necessary by contacting the appropriate agencies. There is a possibility for the project to have **potentially significant impact unless mitigation is incorporated**. By incorporating **Mitigation Measure CR-1 and CR-2** the proposed project will not cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA §15064.5 and will reduce potential impacts to less than significant.

c. There are no known burial sites on 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. Impacts are considered **potentially significant impact unless mitigation incorporated**. Incorporation of **Mitigation Measure CR-3** will reduce potential impacts to less than significant.

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

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

Mitigation Measure CR-2: If any buried archeological materials or indicators are uncovered or discovered during any cannabis cultivation activities, all ground-disturbing activities shall immediately cease within 100 feet of the find. The applicant will notify the Appropriate Person within 48 hours of any discovery. The Appropriate Person is the County Planning Director.

Prehistoric archeological indicators include, but are not limited to: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars, and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone, fire affected stones, shellfish, or other dietary refuse. Historic period site

indicators generally include, but are not limited to: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails.

In the event that prehistoric archeological materials or indicators are discovered, the applicant will also notify the Native American Heritage Commission within 48 hours of any discovery and request a list of any California Native American tribes that are potentially culturally affiliated with the discovery. The applicant will notify any potentially culturally affiliated California Native American tribes of the discovery within 48 hours of receiving a list from the Native American Heritage Commission.

The applicant will promptly retain a professional archeologist to evaluate the discovery. This will likely be the same archeologist who completed the Cultural Resources Assessment. The applicant will submit proposed mitigation and conservation measures to the appropriate person(s) SWRCB and regulatory agencies, as applicable, for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.

In the event of a discovery of prehistoric archeological materials or indicators are discovered, the applicant will also provide a copy of the final proposed mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving prehistoric archeological resources and tribal cultural resources with appropriate dignity. Ground-disturbing activities shall not resume within 100 feet of the discovery until all approved measures have been completed to the satisfaction of the SWRCB and regulatory agencies, as applicable.

Mitigation Measures CR-3. Upon discovery of any human remains, the applicant will immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98. The following actions shall be taken immediately upon the discovery of human remains:

All ground-disturbing activities in the vicinity of the discovery shall stop immediately. The applicant will immediately notify the county coroner. Ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98 have been met. The applicant will ensure that the area 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.

Per Health and Safety Code section 7050.5, the coroner has two working days to examine human remains after being notified by the person responsible for the excavation, or by their authorized representative. If the remains are Native American, the coroner has 24 hours to notify the Native American Heritage Commission.

Per Public Resources Code section 5097.98, the Native American Heritage Commission will immediately notify the persons it believes to be the most likely descended from the deceased Native American. The most likely descendent has 48 hours to make recommendations to the landowner or representative for

the treatment or disposition, with proper appropriate dignity, of the human remains and any associated grave goods.

If the Native American Heritage Commission is unable to identify a descendant; the mediation provided for pursuant to subdivision (k) of Public Resources Code section 5097.94, if invoked, fails to provide measures acceptable to the landowner; or the most likely descendent does not make recommendations within 48 hours; and the most likely descendants and the landowner have not mutually agreed to extend discussions regarding treatment and disposition pursuant to subdivision (b)(2) of Public Resources Code section 5097.98, the landowner or their authorized representative shall reinter the human remains and items associated with the Native American human remains with appropriate dignity on the property in a location not subject to further and future disturbance consistent with subdivision (e) of Public Resources Code section 5097.98. If the landowner does not accept the descendant's recommendations, the landowner or the descendants may request mediation by the Native American Heritage Commission pursuant to Public Resources Code section 5097.94, subdivision (k).

Energy

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Setting:

Energy Star

The Energy Star program is a voluntary federal program managed by the United States Environmental Protection Agency and the United States Department of Energy. The program was established in 1992 and operates under the authority of the Clean Air Act, section 103(g), and the 2005 Energy Policy Act, section 131 (which amended the Energy Policy and Conservation Act, section 324). The purpose of the Energy Star program is to create a simple, credible and unbiased system for certifying energy efficient products and equipment. The voluntary labeling program was designed to identify and promote energy efficient products, such as computers, servers, appliances, heating and cooling systems, home electronics, lighting and a wide range of commercial and industrial equipment.

The Warren-Alquist State Energy Resources Conservation and Development Act

The Warren-Alquist State Energy Resources Conservation and Development Act, Division 15 of the Public Resources Code, establishes the State Energy Resources Conservation and Development Commission (Energy Commission) and requires it to conduct an ongoing assessment of the opportunities and constraints presented by all forms of energy, to encourage the balanced use of all sources of energy to meet the state's needs, and to seek to avoid possible undesirable consequences of reliance on a single source of energy. (California Department of Conservation 2018)

The 100 Percent Clean Energy Act of 2018

The California Renewables Portfolio Standard program, also known as the 100 Percent Clean Energy Act of 2018, mandates that 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030.

California Environmental Quality Act

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that environmental analysis include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)). Which reads "Mitigation measures proposed to minimize significant effects on the environment,

including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy."

Trinity Public Utilities District

The federal and state policies outlined above have created a major push for utilities to provide renewable energy. Hydroelectricity is the term referring to electricity generated by hydropower; the production of electrical power through the use of the gravitational force of falling or flowing water. Hydroelectricity is a well-developed renewable energy technology that has been used for more than a century. Hydroelectricity uses flowing water to spin a turbine connected to a generator that produces electricity. Hydroelectricity generation is one of the most reliable and cost-effective forms of renewable energy.

Trinity Public Utilities District ("Trinity PUD"), which supplies the majority of Trinity County, has been providing 100% renewable hydro-electricity to Trinity County customers since 1982, when they were able to implement the 1955 Trinity River Division Act. Trinity PUD connects 97% of its load directly to the generators at Trinity Dam, hydroelectricity generation facility (Trinity Public Utilities District 2019). This facility supplies the majority of residents in Trinity County with renewable hydroelectricity.

Fifty-one percent of Trinity County's water passes through four sets of hydroelectric turbines before it is transported to the Central Valley (Trinity Public Utilities District 2019). Water from Trinity Lake is funneled through turbines at Trinity Dam, then through an underground tunnel to Carr Powerhouse at Whiskeytown Lake. From there, the water is transported through tunnels to Spring Creek Powerhouse before flowing through Keswick Dam and then down the Sacramento River to the valley south of Redding.

Impact Analysis:

a. Energy consumption associated with the proposed project will occur during both the construction and operational activities.

Construction

During construction of the proposed project, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, as well as delivery truck trips; and to operate generators to provide temporary power for lighting and electronic equipment.

The manufacture of construction materials used by the proposed project would also involve energy use. Due to the large number of materials and manufacturers involved in the production of construction materials (including manufacturers in other States and countries), upstream energy use cannot be reasonably estimated. However, it is reasonable to assume that manufacturers of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. Furthermore, the applicant has no control over or the ability to influence energy resource use by

the manufacturers of construction materials. Therefore, this analysis does not evaluate upstream energy use.

Any relevant vehicle or machine use associated with the project will be subject to CARB standards. The CARB In-Use-Off-Road Diesel Vehicle Regulation applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulations: 1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; 2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System, DOORS) and labeled; 3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and 4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies, VDECS (i.e., exhaust retrofits). The requirements and compliance dates of the Off-Road regulation vary by fleet size, as defined by the regulation.

There are no unusual project characteristics that would necessitate the use of construction equipment or practices that would be less energy efficient than at comparable construction sites in the region or State. Therefore, it is expected that construction energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than other similar construction projects of this nature.

Operation
During operation, the proposed project will rely on a proposed 400-amp electrical service that would be supplied by Trinity PUD services, which is generated by 100% hydroelectricity. Any additional electrical service needs would be supplied by TPUD or solar, if applicable.

All equipment on-site will be energy efficient, including all site maintenance equipment, smart watering system, and related equipment. The applicant proposes, where feasible, all appliances, computers, and equipment be certified with the Energy Star label. This includes equipment and lighting related to temperature and humidity-controlled curing room, workshop area, lights for immature plants, water pump and smart watering controls. Furthermore, all interior lighting will be dual controlled with switches and occupancy sensors to prevent wasteful, inefficient, or unnecessary consumption of energy resources. Any exterior lighting will be controlled by both motion detectors and sunlight sensors to only be activated at night, by motion.

Therefore, the potential for significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation is considered **less than significant**.

b. On-site renewable energy from TPUD and energy efficiency measures are incorporated into the construction and operation of the project, which align with state plans for energy conservation. For additional information, see analysis in subsection a) above. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and impacts would be **less than significant**.

Geology/Soils

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other X substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publications 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- X or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Setting:

The project is situated in the Hayfork Valley, an area approximately 41.6 square miles in size, nestled in the central metamorphic belt of the Klamath Mountains province. The Hayfork Valley is a flat alluvial basin. The area consists of sedimentary and metamorphic rocks from the Weaverville and Bragdon Formations, the pre-Silurian meta-volcanic schist deposits, and Quaternary alluvium and terrace deposits.

The Dredge Tailings (Xerofluvents) and Carr Creek Gravelly Loam soils families are the soils found underlying the property. The Xerofluvent type is common in the Hayfork valley and a result of all of the historical dredging of large cobbles and gravel during the historic mining operations that occurred in the late-1800's and early 1900's. These soils are evident on the subject property adjacent to Salt Creek. Similarly, the Carr Creek gravelly loam is also a valley soil consisting of deposited alluvial mountain stream channels. Signs of these are found on the slight upland areas just west of Salt Creek on the property. Parcel 2's cultivation area is situated at the top of a hill. There is no additional grading proposed.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 et seq. 1972) was passed by the California Legislature to mitigate the hazard of surface faulting to structures. The purpose of the Act is to prevent the construction of buildings used for human occupancy on or near the surface trace of active faults. Under the statute, the Division of Mines and Geology (California Geological Survey) maintains a mapping program that delineates all active fault traces in California (California Geological Survey 2010).

These maps are used by professional geologists performing earthquake hazard studies. The act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. Local agencies must regulate most development in fault zones established by the State Geologist. Before a project can be permitted in a designated fault zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults

Trinity County General Plan

Section 65302(g) of the California Government Code requires that general plans include an element containing identification and appraisal of seismic and geologic hazards. The Safety Element of the Trinity County General Plan is composed of elements that relate to aspects of the county's natural and human-made environment that pose potential threats to human life or property (Trinity County Planning Department 2009). The Trinity County General Plan includes a section containing identification and appraisal of seismic and geologic hazards with the goal of minimizing the threat to life and property from seismic and geologic hazards. Geologic hazards policies include:

- Policy S-7.1 Geologic Hazards–Subdivisions: Geotechnical reports and/or related studies shall be required for all subdivision proposals in areas of known landslides or other geologic instability.
- Policy S-7.2 Geologic Hazards–Existing Parcels: Geotechnical reports and/or related studies shall be required prior to issuance of a building permit in all identified landslide areas or other geologic instability areas.
- Policy S-7.6 Building Design and Construction: Building design and construction shall consider soil conditions prior to development.

Impact Analysis:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) *Rupture of a known earthquake fault:*
There are no known active fault zones at or near the subject property according to the Official Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist. For this reason, potential impacts from a rupture from a seismic fault is considered **less than significant**.

ii) *Strong seismic ground shaking:*
Although there are no known earthquake faults in the project vicinity, the entire northern California region is subject to the potential for moderate to strong seismic shaking due to distant seismic sources. Seismic shaking can be generated on faults many miles from the project vicinity. Seismic shaking potential is considered minimal and the hazard is not higher or lower at the project site than throughout the region. Standard design and construction practices meeting current California Building Code, where applicable, will provide adequate protection for buildings, pipelines and other facilities anticipated for the project. For this reason, the potential for strong seismic shaking is considered **less than significant**.

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 Seismic-related ground failure, including liquefaction, is considered **less than significant**.

iv) *Landslides:*
The proposed project site is located on a flat area (slopes ranging from 0 - 5 percent) of the subject property. There are no documented landslide hazard areas identified within the immediate vicinity of the proposed project site. For these reasons, potential landslides are considered to have **no impact**.

b. After construction activities, any runoff flowing over newly graded areas would have an increased volume and velocity, and less energy would be required to cause erosion. During all construction phases, BMPs and other project-specific erosion control measures would be implemented in accordance with the SWRCB Cannabis General Order. Although most of the soils in the project area are susceptible to erosion when disturbed, implementation of these measures would reduce the potential for erosion-related impacts and help stabilize the soils during and immediately following soil disturbing activities. Vegetation plantings in disturbed areas outside the permanent roadway would also help stabilize and protect soils over the long term. For these reasons, the proposed project is not expected to result in substantial soil erosion or the loss of topsoil, and therefore is

considered **less than significant**.

c. As outlined in Geology and Soil subsection (a. iv) Landslides, the 0 – 5 percent slope of the subject property indicates extremely low risk of the soil movement. For these reasons, the soil instability is considered **less than significant**.

d. There are no documented expansive soils located at the project site. According to the Soil Survey of Trinity County (NRCS 1998), the shrink-swell potential of the soil types on the project site are low. For this reason, the soil expansive risk is considered to have **no impact**.

e. The existing residential dwelling on Parcel 2 has a legally permitted septic system and leach field. No changes to the demand or increases in capacity are proposed for Parcel 2 existing facilities.

For Parcel 1, the employee facilities have a proposed septic system. Under the County Cannabis Cultivation Ordinance, the applicant must have a septic that meets the requirements of the Trinity County Environmental Health Department.

Wastewater generated as part of the commercial cannabis operations would be strictly monitored to avoid waste and unnecessarily saturate the soil to a point of preventing the soils from adequately supporting the proposed employee shared use septic system. Drip irrigation on timers Irrigation and fertilization occurs at agronomic rates and are monitored using a smart watering system. Agronomic rates are those rates of application of water, fertilizers and other amendments that are sufficient for utilization by the crop being grown, but not at a rate that would result in surface runoff or infiltration below the root zone of the crop being grown. The drip irrigation will include a fertigation system to automatically inject nutrients into the water line according to the label requirements of each individual nutrient/amendment. This system will limit the amount of water the project area soils need to absorb.

A soils search was completed for the property, using the NRCS Soils Search online query; with two soils units found to be present in the study area, which are the Hohmann-Brader and Xerofluvents-riverwash associations (see Table 11 below). The most dominant rock type (xerofluvents) is a riverwash, derived from a bedrock and is alluvial by nature. Thus, the soil in the correct situation can be considered "hydric" in nature. However, the soil type post deposition, is not listed as a hydric soil. The other scantily represented soil (Hohmann) is found on the upslopes from the flat area where the construction will be located, and is an upland rock formation derived from eroded igneous material not considered hydric in nature.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent in AOI
94	Hohmann-Brader families association, 40 to 60 percent slopes.	0.5	1.9%
351	Xerofluvents Riverwash association, 0 to 20 percent slopes.	26.0	98.1%
Total areas for interest		**26.5**	**100.0**

Table 11: NRCS We Soils Survey – Project Site Soil Classifications

The soils on Parcel 1 should support the amount of wastewater generated by the employees and limited access retail nursery.

Typical wastewater flow rates from commercial sources USA EPA Table 3-4 [1] estimate daily wastewater flow rates at 7 to 16 gallons/person/day for office employees. None of the other facilities analyzed in the USA EPA Table 3-4 [1] closely match the proposed project uses (U.S. Environmental Protection Agency 2002). Therefore, we utilized flow rates for office uses for our analysis. Extrapolating the office flow rate demand data for the planned 31 employees, equals a septic system that can handle 217 to 496 gallons/person/day. The high end of the estimated daily wastewater flow rates approximately equals a 4-bedroom home.

For these reasons, potential impacts from soils ability to support wastewater systems are considered **less than significant**.

f. No unique geologic features have been identified in the project area. The underlying geologic units have a low potential to contain paleontological resources, and no fossils or other paleontological resources would be expected to be encountered during construction, despite the limited amount of earthwork. For these reasons, potential impacts affecting a paleontological resource or site or unique geologic feature would be **less than significant**.

Greenhouse Gas Emissions

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

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 (CO2), methane (CH4), nitrous oxide (N20), ozone (03), hydrofluorocarbons (HCFs), perfluorocarbons (PFCs), and sulfur hexafluoride (SFG).

California Global Warming Solutions Act

The California Global Warming Solutions Act of 2006 (Assembly Bill 32) requires the state to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020. In response to this act, state agencies have attempted to reconcile CEQA requirements with the implications of AB 32 regarding a project's impact on climate change.

The State of California has adopted several regulations related to GHG emissions reduction. These include efforts to reduce tailpipe emissions and diesel exhaust produced by fuel-combustion engines. The proposed project would be expected to adhere to statewide efforts aimed at minimizing GHG emissions.

California Air Resources Board (CARB) reports that California contributes about 1% of global emissions. California's GHG emissions are 82% carbon dioxide which are primarily contributed by transportation residential, industrial, and electrical generation. Other GHG emissions include methane (9% of California's GHGs), hydrofluorocarbon gases, and anthropogenic black carbon. Transportation is the largest source of black carbon emissions, with off-road mobile sources accounting for 36 percent, on-road diesel accounting for 18 percent, and on-road gasoline and on-road brake and tires each accounting for 2 percent. Fireplaces and wood stoves account for 15 percent, and other fuel combustion/industrial sources account for 14 percent (California Energy Commission 2018).

California Environmental Quality Act - GHGs

As of August 2007, CEQA lead agencies are required to analyze the potential for a proposed project to produce GHG emissions, which consist primarily of carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) (PRC Section 21083.05). This legislation also required the Governor's Office of Planning and Research to prepare and submit to the Resources Agency proposed amendments to the CEQA Guidelines to provide direction on analysis of GHGs (California Natural Resources Agency 2009).

The following GHGs are now regulated by the state: CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Health and Safety Code 38505(g)). CARB has also adopted vehicle emission standards to reduce GHGs that result from gas combustion (e.g., CO_2), but EPA must approve the standards before they become effective. Implementation of these new standards is set to become effective for vehicles, allowing stricter air quality standards than the Clean Air Act requires. In addition to regulating GHGs from vehicle emissions, the state's Climate Action Team, headed by the California Environmental Protection Agency, set statewide targets for reductions in CO_2 emissions. By 2020, the state aims to reduce current CO_2 emissions by 59 million tons.

Significance Criteria

The project site is located in the North Coast Air Basin (NCAB) and is under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). At this time, neither the NCUAQMD or Trinity County have established thresholds of significance for evaluating a project's GHG emissions. In addition, neither a Climate Action Plan nor GHG Reduction Plan have been developed for Trinity County.

In 2011, the NCUAQMD adopted Rule 111 (Federal Permitting Requirements for Sources of Greenhouse Gases) to establish a threshold above which New Source Review and federal Title V permitting apply, and to establish federally enforceable limits on the potential to emit GHGs for stationary sources. These are considered requirements for stationary sources and are not recommended as a threshold of significance for use in CEQA documents. For reference, Sections D(1)(a) and D(1)(b) of Rule 111 have applicability thresholds of 75,000 metric tons of carbon dioxide equivalent per year (MTCO2e/yr) and 100,000 MTCO2e/yr (NCUAQMD, 2015). The applicability thresholds in Rule 111 are significantly higher than the project-level GHG thresholds adopted by other air districts in the State.

In the absence of quantitative thresholds, a Climate Action Plan, or a GHG Reduction Plan applicable to the proposed project, the NCUAQMD recommends the use of thresholds and guidance provided by other air districts in the State. In the North Coast Air Basin (NCAB), the closest air district to the proposed project that has adopted GHG significance thresholds is the Mendocino Air Quality Management District (MCAQMD, 2010). MCAQMD has adopted an operational emissions threshold of 1,100 metric tons of CO2e per year (MTCO2e/yr) (MCAQMD, 2010). This threshold is also recommended for use by the Bay Area Air Quality Management District (BAAQMD, 2017) and the Sacramento Metropolitan Air Quality Management District (SMAQMD, 2020). The SMAQMD also recommends use of this threshold for analyzing GHG emissions from construction activity. This threshold was developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to GHG emissions reduction goals of AB 32, SB 32, the Scoping Plan, and Executive Orders (SMAQMD, 2018). As such, this threshold has been adopted for use in the NCAB and is one of the most used thresholds in the State for analyzing the potential impacts of construction and operational

GHG emissions. For the reasons noted above, the threshold of 1,100 MTCO2e/yr is used to evaluate the proposed project's construction and operational GHG emissions. If the threshold is exceeded, then the project would have a cumulatively considerable contribution to a significant cumulative environmental impact and would conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing GHG emissions.

Impact Analysis:

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

   The proposed project involves a cannabis operation that would generate both direct and indirect GHG emissions from construction activities, area sources, and mobile (vehicle) sources. Typically, vehicle GHG emissions make up the majority of direct emissions. While indirect GHG emissions are typically generated from electricity generation.

   The California Emissions Estimator Model (CalEEMod) was used to estimate construction and operational GHG emissions from the proposed project. Emissions estimates are provided in metric tons of CO2e per year (MTCO2e/yr).

Maximum Unmitigated Construction Emissions (MTCO2e/yr)			
Emittant	**Proposed Project Emissions**	**Threshold of Significance**	**Exceed Threshold?**
CO2e	277.1	1,100	**No**
Source: CalEEMod June 2021 (see Appendix A)			

Table 12 - CalEEMod Maximum Unmitigated Construction Emissions

Maximum Unmitigated Operational Emissions (MTCO2e/yr)			
Emittant	**Proposed Project Emissions**	**Threshold of Significance**	**Exceed Threshold?**
CO2e	159.0	1,100	**No**
Source: CalEEMod June 2021 (see Appendix A)			

Table 13 - CalEEMod Maximum Unmitigated Operational Emissions

As indicated in the tables above, the estimated GHG emissions from construction and operation of the proposed project would be well below the threshold of 1,100 MTCO2e/yr. Additionally, the subject property is served by Trinity County PUD, which provides 100% renewable energy (hydropower). Due to the limitations of CalEEMod, the reduction in GHG emissions from receiving 100% renewable energy was not factored into the operational emissions calculation. As such, energy use from operation of the proposed project will produce fewer GHG emissions than estimated in the table above.

Therefore, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Therefore, the proposed project would result in a **less than significant** impact related to GHG emissions.

b. The proposed project involves a cannabis operation that would generate both direct and indirect GHG emissions from construction activities, area sources, and mobile (vehicle) sources. Typically, vehicle GHG emissions make up the majority of direct emissions. While indirect GHG emissions are typically generated from electricity generation. As noted in the setting, neither a Climate Action Plan nor GHG Reduction Plan have been developed for Trinity County.

California passed Assembly Bill 32 (Global Warming Solutions Act) in 2006, mandating a reduction in greenhouse gas (GHG) emissions and Senate Bill 97 in 2007, evaluating and addressing GHG under CEQA. On April 13, 2009, the Governor's Office of Planning and Research (OPR) submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for GHG emissions, as required by Senate Bill 97 {Chapter 185, 2007} and they became effective March 18, 2010. As a result of these revisions to the CEQA Guidelines, lead agencies are obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects. A lead agency is not responsible for wholly eliminating all GHG emissions from a project; the CEQA standard is to mitigate to a level that is "less-than-significant" or, in the case of cumulative impacts, less than cumulatively considerable (SMAQMD, 2018).

The Global Warming Solutions Act (AB 32) also directed CARB to develop the Climate Change Scoping Plan (Scoping Plan), which outlines a set of actions to achieve the AB 32 goal of reducing GHG emissions to 1990 levels by 2020, and to maintain such reductions thereafter. CARB approved the Scoping Plan in 2008 and first updated it in May 2014. The second update in November 2017 also address the actions necessary to achieve the further GHG emissions reduction goal of reducing GHG emissions to 40 percent below 1990 levels by 2030, as described in Senate Bill 32 (SB 32). In addition, the 2017 Scoping Plan looks forward to the reduction goal of reducing emissions 80 percent under 1990 levels by 2050, as described in Executive Order S-3-05 (EO-S-3-05). It is noted that according to CARB, in 2019, emissions from GHG emitting activities statewide were 418.2 million metric tons of carbon dioxide equivalent ($MMTCO_2e$), 7.2 $MMTCO_2e$ lower than 2018 levels and almost 13 MMTCO2e below the 2020 GHG limit of 431 $MMTCO_2e$ (CARB, 2021).

The project is subject to a myriad of State and local regulations applicable to project design, construction, and operation that would reduce GHG emissions, increase energy efficiency, and provide compliance with the California Air Resources Board (CARB) Climate Change Scoping Plan

(CARB, 2017). The State of California has the most comprehensive GHG regulatory requirements in the United States, with laws and regulations requiring reductions that affect project emissions. Legal mandates to reduce GHG emissions from vehicles, for example, reduce project-related vehicular emissions. Legal mandates to reduce per capita water consumption and impose waste management standards to reduce methane and other GHGs from solid wastes are all examples of mandates that reduce GHGs.

As noted in the CARB Scoping Plan, quantitative thresholds for the exchange of CO2 between the atmosphere and California's natural and working lands (e.g., natural ecosystems and agricultural lands) have not been developed (CARB, 2017). Typical emission sources considered for quantitative thresholds of significance involve construction and ongoing operational emissions from stationary industrial projects with high rates of combustion emissions (e.g., refineries, power plants, other processing that uses industrial boilers) or the construction and increased power and transportation needs from newly constructed residential or commercial projects.

As discussed in subsection a) above, the estimated GHG emissions from construction and operation of the proposed project would be well below the threshold of 1,100 MTCO2e/yr used by several air districts in the state to determine the significance of GHG emissions from land use projects. Additionally, power service to the project will be provided by the Trinity Public Utility District (TCPUD), which serves most of the customers in Trinity County with 100% renewable hydroelectric energy (Trinity Public Utilities District, 2019). This will significantly reduce GHG emissions from energy use by the proposed project.

Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, impacts from the proposed project would be **less than significant**.

Hazards and Hazardous Materials

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

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 the development of projects can exacerbate hazardous conditions.

Hazardous waste is defined as any waste material that is a potential threat to human health and environment, having the capacity to cause serious illness or death. Hazardous materials are materials considered dangerous to people or the environment. The use, transport, storage, and disposal of hazardous waste and hazardous materials are subject to numerous laws and regulations.

Hazardous waste or materials may be transported along SR 3, and accidental spills could discharge pollutants into Hayfork Creek or the environment. Activities on NFS and private lands could involve the use of hazardous materials, such as fuels, pesticides, and fertilizers.

Health and Safety Code Section 25100 et seq.

Describes the key aspects of hazardous waste management, including identification and classification; sources; transport; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities, including staff training; closure of facilities; and liability issues. The sections define the Hazardous Waste Control Law of 1990 (as amended 1997), which created the California hazardous waste management program, which is similar to, but more stringent than, the federal program under the Resource Conservation and Recovery Act. Regulations associated with this law impose cradle-to-grave requirements for handling hazardous wastes in a manner that protects human health and the environment. (California Health and Safety Code 1982)

California Code of Regulations Sections 1150 to 1194

Regulate the transport of hazardous materials. When a hazardous material or waste spill originates on a highway, the California Highway Patrol is responsible for direction of cleanup and enforcement (Sections 2450-2454b). Highway is defined as a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Under this definition, highways include streets and county-maintained roads, as well as state highways. (Trinity County Planning Department 2009)

Public Resources Code Sections 4428 to 4442

Regulate emergency response in the event of a fire and require the provision of firefighting equipment on or near any forest, brush, or grass-covered land when fire hazards are highest. It also addresses disposal of flammable materials and waste and use of spark arrestors on certain equipment. (California Public Resource Code 1971)

Trinity County General Plan Safety Element

The Trinity County General Plan Safety Element identifies goals to reduce threats to the public health and the environment caused by the use, storage, and transportation of hazardous materials and hazardous waste (Trinity County Planning Department 2009). Applicable objectives and policies for implementing these goals include:

S.3.1 Objective: Proper regulation of transportation and storage. Policy A. Transport of hazardous materials shall be regulated by the California State Highway Patrol under the California Code of Regulations, Title 13:1150-13:1194, and the Code of Federal Regulations, Title 49.

S.3.2 Objective: Ensure adequate cleanup of hazardous materials and hazardous waste. Policy A. The County should encourage cooperation between all agencies involved in the cleanup and regulation of hazardous materials.

State Water Resources Control Board General Order

The California State Water Resources Control Board General Order (General Order) includes provisions for licensing cannabis projects which protect waters of the State of California from impacts due to contamination from hazardous materials, including required setbacks from waterways.

Common Name	Watercourse Class[3]	Distance
Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs[4]	I	150 ft.
Intermittent watercourses or wetlands	II	100 ft.
Ephemeral watercourses	III	50 ft.
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established Riparian Vegetation Zone
All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals	IV	N/A

Table 14 – SWRCB Watercourse and Wetland Setbacks

California Code of Regulations Title 3 Division 8 Chapter 1

The California Code of Regulations Title ~~3 Division 8 Chapter 1~~ 4, section 15000 et. seq. mandate specific pesticide storage and application protocols which are intended to protect sensitive resources and reduce the risk of contamination from hazardous materials, including § 8307 Pesticide Use Requirements, which states:

> *(a) Licensees shall comply with all pesticide laws and regulations enforced by the Department of Pesticide Regulation.*
>
> *(b) For all pesticides that are exempt from registration requirements, licensees shall comply with all pesticide laws and regulations enforced by the Department of Pesticide regulation and with the following pesticide application and storage protocols:*
>
> *(1) Comply with all pesticide label directions;*
>
> *(2) Store chemicals in a secure building or shed to prevent access by wildlife;*
>
> *(3) Contain any chemical leaks and immediately clean up any spills;*

(4) Apply the minimum amount of product necessary to control the target pest;

(5) Prevent offsite drift;

(6) Do not apply pesticides when pollinators are present;

(7) Do not allow drift to flowering plants attractive to pollinators;

(8) Do not spray directly to surface water or allow pesticide product to drift to surface water. Spray only when wind is blowing away from surface water bodies;

(9) Do not apply pesticides when they may reach surface water or groundwater; and

(10) Only use properly labeled pesticides. If no label is available consult the Department of Pesticide Regulation.

Impact Analysis:

a. Construction activities would entail the use of hazardous substances such as fuels and lubricants for vehicles and equipment, paints, solvents, epoxies, and paving materials. The hazardous substances would need to be transported to the work area, where they would be used on site in designated areas. The transport and use of hazardous substances pose a risk to people and the environment, including Salt Creek, in the event of an accident or spill. For example, vehicles could leak or spill fuel, brake fluid, and lubricants during fueling or servicing activities or during delivery of fuels and other substances to work areas. Spills could contaminate soil and surface water or groundwater and potentially result in toxic effects on vegetation, wildlife, fish, workers, and the general public.

During all construction activities, the contractor would be required to comply with applicable state and federal laws, regulations, and requirements pertaining to hazardous materials and hazardous wastes and implement water pollution control measures that conform to the SWRCB Cannabis General Order Best Practices.

These measures include preparing and implementing specific requirements for the handling, storage, and clean-up of an accidental spill of hazardous materials, such as petroleum-based products, cement, or other construction pollutants, and standard measures, including, but not limited to controlling runoff, reducing erosion, minimizing and controlling the use of toxic substances, and preventing and controlling spills. With implementation of appropriate construction measures, the potential for hazardous materials to result in substantial effects on the environment or pose health or safety risks to the public would be minimized.

Some petroleum products and other chemicals would be used in the operation and maintenance of vehicles, yard tools and equipment, but these materials would be stored inside the storage shed and purchased on an as-needed basis to avoid storage over long periods. Fuels for yard tools would be stored according to the material labels and would always be in quantities under 5 gallons in compliance with SWRCB General Order, in 5-gallon spill proof containers and placed

in secondary containment containers with an equal or greater than storage capacity to prevent and contain accidental spills or leaks.

In a similar fashion to those for petroleum products and other chemicals, state and local commercial cannabis applicants are mandated to comply with requirements for fertilizer and pesticides. The current Best Practical Treatment or Control for fertilizer and pesticide management is known as Integrated Pest Management (IPM). IPM is defined by the California Department of Pesticide Regulation (CDPR) as, "an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment." The applicant plans to fully implement IPM into the proposed project, including the use of the following pesticides with active ingredients that are included, but not limited to: Neem Oil, Rosemary Oil, Thyme Oil, Clove Oil, Garlic Oil, Peppermint Oil, Corn Oil, Soybean Oil and Citric Acid. All liquid pesticides kept onsite will be at a volume of less than 10 gallons per product and all dry pesticides will be kept onsite will be at a volume of less than 5 pounds per product. All storage areas shall have appropriate secondary containment to prevent spillage, mixing, discharge, or seepage. Storage containers must be of suitable material and construction to be compatible with the substances stored and conditions of storage, such as pressure and temperature per the SWRCB Cannabis General Order.

Disposal, containment, and spill prevention measures for pesticides and fertilizers are further covered by the SWRCB General Order and other state regulations (CDPH, DCC, etc.). Enrollment in the General Order requires detailed monitoring and reporting throughout all phases of project development and operation as well as compliance with Attachment A of the Water Board Cannabis Policy. Attachment A of the Cannabis Policy contains surface water diversion and waste discharge requirements for cannabis cultivation-related activities. Enrollment further requires the Discharger to comply with any applicable federal, state, and local laws, regulations, and permitting requirements.

Therefore, the proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and therefore would be considered a **less than significant** impact.

b. As indicated in Hazards and Hazardous Materials subsection (a), the proposed project does include the use of a small amount of hazardous waste substances (e.g., petroleum and other chemicals used to operate and maintain equipment, fertilizers and pesticides). Accidental releases of these substances could potentially contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. However, commercial cannabis operations do not generally require intensive use of hazardous materials. Existing

regulations including the SWRCB Cannabis General Order and the specific sections of the California Code of Regulations regarding pesticide application and storage effectively reduce the potential for individual projects to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. Therefore, in compliance with existing laws and regulations, impacts from the proposed project would be **less than significant**.

c. There are no schools within one-quarter mile of the subject property, as such, **no impact** will occur from the proposed project.

d. The Environmental Impact Report (EIR) prepared for the County's Cannabis Ordinance, acknowledged the potential for unidentified hazardous materials contamination to be uncovered during construction activities from the development of new cannabis operations. For this reason, mitigation was included to reduce impacts to less than significant, which required amendment of the County's Cannabis Ordinance to include new standards related to the preparation of environmental site assessments and hazardous materials contingency plans for construction activities. These requirements are included in Sections 17.43G.030.T and 17.43G.030.U of the County's Cannabis Ordinance (No. 315-849). Section 17.43G.030.T requires applications for new cannabis activities on sites that contain existing or previous commercial, business park, or industrial uses to include a site assessment for the presence of potential hazardous materials, including an updated review of environmental risk databases.

   The project site is zoned for agricultural use and has historically been used for agricultural activities. As such, the site is not known to contain existing or previous land uses that would result in significant hazardous material contamination. The environmental risk databases that are referred to in the County's Cannabis Ordinance can be found on the CalEPA website at the following link: https://calepa.ca.gov/sitecleanup/corteselist/. These databases are collectively referred to as the "Cortese List Data Resources" and include the DTSC Envirostor database and SWRCB Geotracker database. As indicated in these databases, no hazardous facilities or sites are present at the project site or in the adjacent area (DTSC, 2021; SWRCB, 2021). Since these environmental risk databases do not indicate the presence or likely presence of contamination at or adjacent to the project site, the County's Cannabis Ordinance does not require the applicant to prepare a Phase I Environmental Site Assessment. The EIR prepared for the County's Cannabis Ordinance (DEIR, pgs. 3.9-14 to 3.9-15) determined that implementation of the above-described requirements (Sections 17.43G.030.T and 17.43G.030.U), would reduce impacts related to known or unidentified hazardous materials to a less than significant level.

   Therefore, the proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment. Therefore, impacts from the proposed project would be **less than significant**.

e. The subject property is not located within an airport land use plan or within two miles of a public airport or public use airport. The proposed project will not result in a safety hazard or excessive noise for people residing or working in the project area. For these reasons, there is **no impact** anticipated from the proposed project.

f. Commercial deliveries of construction materials and operating materials would be primarily handled by the licensee directly, those that are completed by a 3rd party would likely be sourced from businesses based in Weaverville and Redding, California. Deliveries traveling to the subject property would come from SR 299 and then south on SR 3. Due to the ample compacted dirt, rock and paved parking areas and vehicle turnouts meeting County roadway and access design and fire safety requirements set forth in County Code of Ordinances Chapters 8.30 and 12.10 along SR 3, the proposed project would not impair or physically interefere with an emergency response plan of emergency evacuation plan. Therefore, the proposed project would result in a **less than significant** impact.

g. The CAL FIRE Fire and Resource Assessment Program (FRAP) designates lands in three general classifications, “Moderate”, “High” and “Very High” Fire Hazard Severity Zones (FHSZ). According to CAL FIRE, the project parcels are located within a Very High Fire Hazard Severity Zone (CAL FIRE, 2021).

The subject property falls within the Hayfork Fire Department sphere of protection as seen in Figure 6 (Hayfork Fire Department 2015). The Hayfork Fire Department recommends that residents create and maintain a defensible space of at least 100 feet or greater from each building. They also recommend improving fire safety by properly designing and maintaining the landscape by choosing fire resistant plants, ensuring plants are properly irrigated, removing debris, and creating fuel breaks.

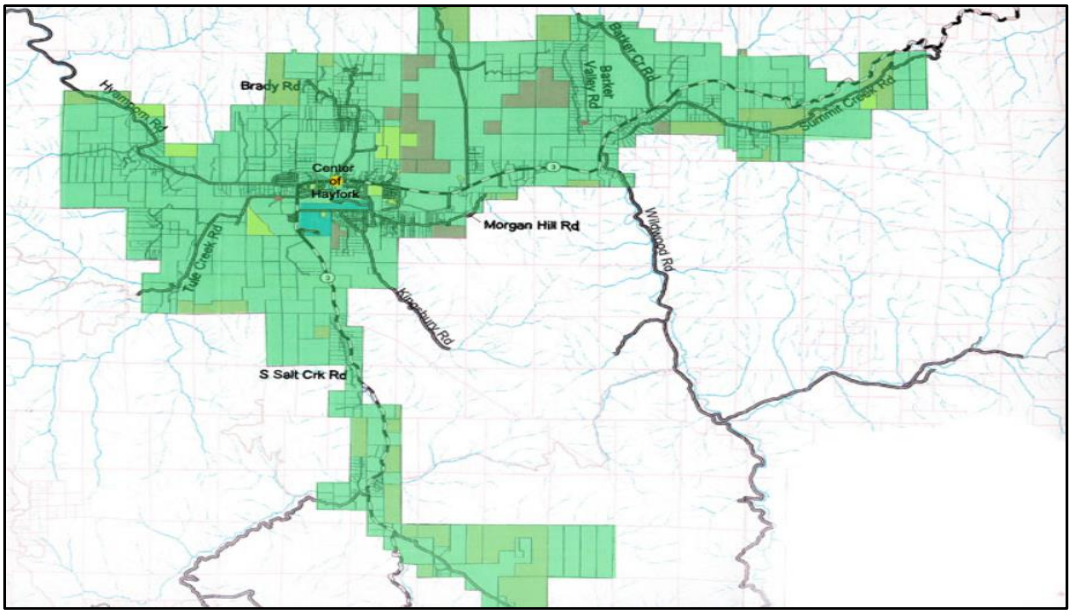

Figure 6 - Hayfork Fire District Boundary Map

In addition to being served by the Hayfork Volunteer Fire Department, the subject property is also within a State Responsibility Zone (SRA). CalFire is the responsible agency with jurisdiction over inspections and managing the fire resources in the area. As such, the subject property is required to maintain a 100-foot defensible space around all structures (CalFire 2005). In addition, the proposed project is required to comply with State Fire Safe Standards for protection of life and property from wildfires through clearing of vegetation, location of appropriately sized water storage facilities, and other actions required for fire protection/suppression actions as may be determined by CalFire. The subject property meets both defensible space requirements of at least 100 feet around each building, as well as, the existing fire breaks along the perimeter of the subject property.

Therefore, the potential for the proposed project to expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires is not substantially worse than for other types of land uses in the same area and would actually be reduced compared to unregulated cannabis cultivation occurring under the baseline conditions. The combination of these existing regulations and protective measures would reduce fire risk impacts from the proposed project to a **less than significant** level.

Hydrology/Water Quality

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	☐	☒	☐	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) Result in substantial erosion or siltation on- or offsite; ii) Substantially increase the rate or amount of surface runoff in a matter which would result in flooding on- or offsite; iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or iv) Impede or redirect flood flows	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Setting:

Clean Water Act

The Federal Water Pollution Control Act of 1972, also known as the Clean Water Act (CWA), is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands (United States Environmental Protection Agency 2017). The objective of the act is "to restore and maintain the chemical, physical, and biological integrity of the nation's waters." The CWA establishes the basic structure for regulating discharge of pollutants into waters of the United States and gives the U.S. Environmental Protection Agency (EPA) the authority to implement pollution control programs such as setting wastewater standards for industry. In certain states, including California, EPA has delegated authority to state agencies.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. The three major components of water quality standards are as follows:

- Designated uses are uses that society, through the federal and state governments, determines should be attained in the water body, such as supporting communities of aquatic life, supplying water for drinking, and recreational uses.
- Water quality criteria are levels of individual pollutants or water quality characteristics or descriptions of conditions of a water body that, if met, will generally protect the designated use of the water.
- The antidegradation policy is designed to prevent deterioration of existing levels of good water quality.

Where multiple uses exist, water quality standards must protect the most sensitive use. In California, EPA has given the State Water Resources Control Board (State Water Board) and the nine RWQCB the authority to identify beneficial uses and adopt applicable water quality objectives.

Section 401 of the CWA requires an applicant for any federal license or permit (e.g., a Section 404 permit) that may result in a discharge into waters of the United States. In California, USEPA has delegated to SWRCB and the RWQCBs the authority to issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and that region's water quality control plan (also known as a Basin Plan). The North Coast RWQCB is the administrative agency for water quality certifications for Trinity County.

Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES). Under Section 402, a permit is required for point-source discharges of pollutants. The State Water Board is responsible for implementing the NPDES permitting process in Trinity County. The SWRCB has issued the Statewide Cannabis Order WQ 2017-0023-DWQ, to provide performance standards and Best Practicable Treatment of Control (BPTC) measures for addressing water quality at commercial cannabis cultivation sites.

The NPDES permit process also provides a regulatory mechanism for controlling nonpoint-source pollution created by runoff from construction. Proponents of projects involving construction activities (e.g., clearing, grading, or excavation) involving land disturbance greater than 1 acre must file a notice of intent with the State Water Board to indicate their intent to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity (Order 2009-0009-DWQ, as amended

by 2010-0014-DWQ 41 and 2012-0006-DWQ – “Construction General Permit”) (State Water Resources Control Board 2010).

This general permit establishes conditions to minimize sediment and pollutant loadings. The Construction 42 General Permit requires the applicant to file a Notice of Intent to discharge stormwater and 43 prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP is intended to help identify the sources of sediment and other pollutants and to establish best management practices (BMPs) for stormwater and non-stormwater source control and pollutant control. Included in a SWPPP is a site map and a description of the proposed construction activities; demonstrate 2 compliance with relevant local ordinances and regulations; and present a list of best 3 management practices (BMPs) that will be implemented to prevent soil erosion and protect 4 against discharge of sediment and other construction-related pollutants to surface waters.

A sediment monitoring plan must be included in the SWPPP if the discharges would occur directly to a water body listed on the Section 303(d) list for sediment and ensure that BMPs are implemented correctly and are effective in controlling the discharge of construction-related pollutants.

Porter-Cologne Water Quality Control Act

Effective in January 1970, the Porter-Cologne Act (California Water Code Division 7) created water quality regulation on the State level, establishing the SWRCB and dividing California into nine regions, each overseen by an RWQCB. The act establishes regulatory authority over waters of the State, defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (State Water Resources Control Board 2019b). More specifically, the SWRCB and RWQCBs have jurisdiction over any surface water or groundwater to which a beneficial use may be assigned. Following enactment of the federal CWA in 1972, the Porter-Cologne Act assigned responsibility for implementing CWA Sections 303, 401, and 402 to the SWRCB and RWQCBs.

The North Coast RWQCB (2011) developed the Basin Plan (Water Quality Control Plan) for the North Coast Region to protect surface water and groundwater quality. The act also authorizes the RWQCBs to issue waste discharge requirements (WDRs) for discharges to waters of the state, including NPDES permits. Any activity, discharge, or proposed activity or discharge from a property or business that could affect California’s surface water, coastal waters, or groundwater will (in most cases) be subject to a WDR. The California Water Code authorizes the SWRCB and RWQCBs to conditionally waive WDRs if this is in the public interest. Discharges made under the commercial cannabis program may be subject to WDR requirements.

Fish and Game Code Section 1602

Section 1602 of the Fish and Game Code requires an entity to notify the California Department of Fish and Wildlife of any proposed activities that may substantially modify a river, stream, or lake. These activities include a substantial diversion or obstruction of a water body, using or changing any material from the bed or channel, and depositing or disposing of any debris or waste into a water body. If the Department of Fish and Wildlife determines that the proposed activities may adversely affect fish and wildlife, a Lake or Streambed Alteration Agreement is prepared.

Pesticide Contamination Prevention Act

The Pesticide Contamination Prevention Act, approved in 1985, was developed to prevent further pesticide contamination of groundwater from legal agricultural pesticide applications. The act defines pesticide pollution as “the introduction into the groundwaters of the state of an active ingredient, other specified product, or degradation product of an active ingredient of an economic poison above a level, with an adequate margin of safety that does not cause adverse health effects.” CDPR has compiled a list of pesticide active ingredients on the Groundwater Protection List that have the potential to pollute groundwater. These various pesticides are reviewed and their use is modified when they are found in groundwater (California Department of Pesticide Regulation 2001). Groundwater Protection Program CDPR implements the Pesticide Contamination Prevention Act through its Groundwater Protection Program, which is coordinated with SWRCB under the California Pesticide Management Plan. The Groundwater Protection Program evaluates and samples pesticides to determine whether they may contaminate groundwater, identifies areas sensitive to pesticide contamination, and develops mitigation measures to prevent the movement of pesticides. CDPR adopted regulations to carry out these mitigation measures.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), passed in 2014, became law in 2015, and created a legal and policy framework to manage groundwater sustainably at a local level. The SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental conditions and needs and establish new governance structures, known as groundwater sustainability agencies (GSAs) (State of California 2015). The SGMA requires that a groundwater sustainability plan (GSP) be adopted for groundwater basins designated as high and medium priority (127 out of 515 basins and subbasins) under the California Statewide Groundwater Elevation Monitoring program (described below) by 2020 for basins with critical overdraft of underground aquifers (California Department of Water Resources 2015).

As with other local regulatory requirements, GSP requirements may apply to licensed cultivators located within the boundaries of a GSA and using groundwater as a source; the source could include on- or off-site wells, as well as supplies from water purveyors or water delivery services that have groundwater as some component of their supply.

Basin Plans

Each RWQCB must adopt a water quality control plan, or Basin Plan, intended to protect water quality in its region. A Basin Plan is unique to each region and must identify beneficial uses, establish water quality objectives for the reasonable protection of the beneficial uses, and establish a program of implementation for achieving the water quality objectives. Each Basin Plan must conform with the California antidegradation policy (California Department of Water Resources 2015).

Salt Creek and Hayfork Creek Hydrology

The project area is in the Trinity River Hydrologic Unit as defined by the Basin Plan and the Middle Hayfork Creek watershed. The Trinity River Hydrologic Unit is one of five hydrologic units within the Klamath River Basin of northern California. Each of the hydrologic units is divided into smaller units called hydrologic areas and subareas. The project area is located within the Hayfork Valley hydrologic subarea, which is within the South Fork Trinity hydrologic area.

Hayfork Creek originates south of the project area in the Yolla Bolly Mountains and flows north through the project area, before turning west near Hayfork, California. Hayfork Creek drains 234,000 acres and is a main tributary of the South Fork Trinity River in the Klamath River Basin. The South Fork Trinity River flows into the Trinity River, which flows into the Klamath River before reaching the Pacific Ocean. (Nelson, Cross, Ranken 1998)

Salt Creek drains a 56.8 square mile area, flowing north into Hayfork Creek. The major tributaries to Salt Creek are Philpot Creek, Ditch Gulch, Dobbins Gulch, Salt Gulch and Deer Gulch. The headwaters originate on Salt Mountain at around 5800 feet. In the middles (URS Greiner Woodward Clyde, 2001). It is classified as a Class I according to the State Waterboard Cannabis Order (State Water Resources Control Board 2019a).

Flood Hazards

According to the FEMA Flood Insurance Rate Map (Panel No. 06105C1400E; dated 1/20/2010), flood hazard zones in the vicinity of the project are classified as Zone D, which is the area where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted (Federal Emergency Management Agency 2010). The only potential flood hazards are areas around Salt Creek, which is unmapped.

Water Quality

The Basin Plan designates specific beneficial uses for the Hayfork Valley hydrologic subarea, including municipal; agricultural; industrial service supply; industrial process supply; groundwater recharge; freshwater replenishment; contact and non-contact recreation; commercial and sport fishing; cold freshwater habitat; wildlife habitat; rare, threatened, or endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development of aquatic organisms (North Coast Regional Water Quality Control Board 2011).

The Basin Plan has established narrative or numeric limits that are intended to meet water quality objectives to ensure that beneficial uses of the water body are protected. It specifies limits for the following water quality parameters: boron, bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, hardness, oil and grease, pH, pesticides, radioactivity, salinity, sediment, settleable material, specific conductance, tastes and odors, temperature, toxicity, total dissolved solids, and turbidity (North Coast Regional Water Quality Control Board 2011).

Impact Analysis:

a. The subject property is located on private land and Salt Creek, a tributary to Hayfork Creek, flows through the middle of the subject property. Salt Creek and Hayfork Creek are both within the Lower Hayfork Creek Priority Watershed. Because of this, the project will use a groundwater well in order to cultivate cannabis. Additionally, the applicant is proposing the installation of a rainwater catchment system on the nursery greenhouse and multi-use building. The proposed improvements for Parcel 1 are setback over 150 feet from Salt Creek in accordance with the SWRCB Cannabis General Order setbacks for Class I watercourses. The cultivation area consists of low gradient slopes both within the designated area and adjacent to them.

   Pursuant to 3 CCR § 8102 and Section 17.43.020.D of the County Cannabis Ordinance, the applicant will be required to provide evidence of enrollment and compliance with the SWRCB Cannabis General Order, or any subsequent water quality standards, to the California Department of Cannabis Control (DCC). This will require the project to implement best practical treatment or control (BPTC) measures listed in Attachment A of the State Water Resources Control Board (SWRCB) Cannabis General Order. These measures include, but are not limited to, site maintenance, erosion control, drainage features, access road maintenance and improvements, chemical storage, spill prevention, and waste management. Compliance with the requirements of the Cannabis General Order will minimize the potential stormwater runoff and water quality impacts from the proposed cannabis operation.

   Pesticide use for the proposed cultivation activities would be required to comply with the regulations of the California Department of Pesticide Regulation (CDPR). This includes using pesticide products that CDPR has approved for use on cannabis and complying with the pest management practices for cannabis growers (CDPR, 2021). The proposed project would also be required to comply with 3 CCR § 8307, which among other requirements, includes pesticide application and storage protocols that would be effective for protecting surface water and groundwater. Other hazardous materials that may be used by the proposed project (e.g., petroleum and other chemicals used to operate and maintain equipment and generators, fertilizers, etc.), will be required to be stored, handled, and used in compliance with applicable federal, State, and local regulations. Adherence to existing regulations would prevent the substantial degradation of surface or groundwater quality.

   For these reasons, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, impacts of the proposed project would be **less than significant**.

b. Salt Creek, a tributary to Hayfork Creek, runs through the east side of Parcel 1 and the west side of Parcel 2. The project site will use both a proposed groundwater well, and a rainwater catchment system in order to cultivate cannabis.

PRISM Climate Group calculates average annual rainfall for the Peanut area at;

Date	ppt (inches)
2009	35.60
2010	60.31
2011	38.91
2012	57.81
2013	14.38
2014	42.31
2015	32.97
2016	59.50
2017	52.94
2018	32.40

We used 42.7 inches to calculate the average annual volume of rainwater that could be harvested from the proposed nursery and processing structures. Based on these calculations, we estimate up to 819,675 gallons of rainwater can be harvested annually from the proposed nursery, multi-use and offstream pond rainwater catchment system on average.

As indicated in the project description, the proposed project is located within a Critical Water Resource Overlay Zone ("CWR Zone"). The CWR Zone is defined in county regulations as "an area where development may have a detrimental impact on water resources such as those resulting from extractions of ground and/or surface waters, which would be beyond the capability of the resource, or by contamination of ground or surface waters."

A rainwater catchment system connected to the proposed nursery greenhouse and processing building roof would supply water into the ½ acre pond and be used throughout the summer to reduce groundwater demand. Drip irrigation, on timers, would be included in the design of the nursery greenhouse, which would reduce or eliminate wastewater by only providing watering at rates that avoid or minimize runoff, also called agronomic rates. Agronomic rates are those rates of application of water, fertilizers and other amendments that are sufficient for utilization by the crop being grown, but not at a rate that would result in surface runoff or infiltration below the root zone of the crop being grown.

The use of rainwater collection systems and the ½ acre pond is to reduce the impact on water resources, including extractions from the ground and/or surface waters – which is the primary impact being addressed in a CWR Zone. The incorporation of the rainwater catchment system, ½ acre pond and additional above ground water storage tanks is to ensure the project does not contribute to a cumulative impact of water supply in the area, which could be a concern given the 8-10 cannabis cultivation sites identified earlier in this analysis.

The EIR prepared for the County Cannabis Ordinance evaluated whether the Cannabis Program could result in groundwater supply impacts. The water sources (well and rainwater capture) and estimated use proposed by the project (~530,000 gallons annually) are consistent with the assumptions and analysis in the EIR. To reduce potential groundwater impacts from implementation of the Cannabis Program, mitigation was included requiring the reporting of

annual monitoring of groundwater conditions to the County as part of the annual inspections required under the ordinance. This monitoring is intended to identify if on-site well operations are resulting in groundwater drawdown impacts and what adaptive measures would be implemented to recover groundwater levels and protect adjacent wells. Because implementation of this mitigation measure would be required as part of annual commercial cannabis operations permit renewals (see Cannabis Ordinance Section 17.43G.030.X), it would provide ongoing protection of local groundwater resources. Thus, implementation of this requirement of the Cannabis Program would reduce this potential impact to a less-than-significant level. Compliance with Section 17.43G.030.X of the County Cannabis Ordinance has been included as mitigation measure HWQ-1 for the proposed project.

Because of the potential significant impacts to hydrology and groundwater supply in the project area, **mitigation measure HWQ-1** will be incorporated into the proposed project to conduct groundwater monitoring and adaptive management to reduce and/or lessen impact to groundwater supplies.

Therefore, the proposed project would result in a **Potentially Significant Impact Unless Mitigation Incorporated**.

c. No alteration of a course or stream is proposed as part of the project and the project site is not connected to an existing stormwater system. The cultivation area consists of low gradient slopes both within the designated area and adjacent to them. A rainwater catchment system from the processing building, as well as, a rainwater catchment system on the greenhouse would reduce the flow of water coming off the new development. Following the implementation of the proposed construction and development of the proposed project, measures to contain runoff to prevent ~~infiltration~~ discharge into nearby watercourses include sediment basins, berms, and infiltration ditches, which would contain and control surface runoff.

Pursuant to 3 CCR § 8102 and Section 17.43.020.D of the County Cannabis Ordinance, the applicant will be required to provide evidence of enrollment and compliance with the SWRCB Cannabis General Order, or any subsequent water quality standards, to the California Department of Cannabis Control (DCC). This will require the project to implement best practical treatment or control (BPTC) measures listed in Attachment A of the State Water Resources Control Board (SWRCB) Cannabis General Order. These measures include, but are not limited to, site maintenance, erosion control, drainage features, and access road maintenance and improvements. Compliance with the requirements of the Cannabis General Order will minimize the potential for erosion or siltation, flooding, and polluted runoff.

All development will be buffered from Salt Creek in compliance with the 150-foot required setback in the SWRCB Cannabis General Order. The proposed project will be continuously monitored as required by the California State Waterboard Cannabis Program for erosion, sedimentation, and stormwater discharge to prevent the degradation of riparian features and water quality. The project as designed and mitigated, would result in **less than significant** impacts.

d. According to the FEMA Flood Insurance Rate Map (Panel No. 06105C1400E; dated 1/20/2010), flood hazard zones in the vicinity of the project are classified as Zone D, which is the area where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted (Federal Emergency Management Agency 2010). The only potential flood hazards are areas around Salt Creek, which is unmapped. While the possibility of flooding can occur from Salt Creek, which flows through the subject property, the 150-foot Class I setback will minimize any site flooding and inundation of the proposed improvements. The project parcels are not mapped within a dam failure inundation area. The project parcels are located will inland from the coast and, therefore, are not at risk from a tsunami. The project parcels are also not located near a large body of water capable of producing a seiche. As such, there is a low risk that the proposed project will locate structures or materials at risk of releasing pollutants in areas subject to inundation. Therefore, the proposed project will not risk releasing pollutants due to project inundation within flood hazard, tsunami, or seiche zones. Therefore, impacts would be **less than significant**.

e. The potential for impacts to water quality are addressed in Hydrology/Water Quality subsection (a). As indicated in Hydrology/Water Quality subsection (b), with the approval of this project, a rainwater catchment system and water storage is planned to be installed to limit groundwater extraction during the dry season.

   Because of the potential significant impacts to hydrology and groundwater supply, **mitigation measure HWQ-1** will be incorporated into the proposed project to conduct groundwater monitoring and adaptive management to reduce and/or lessen impact to groundwater.

   Therefore, potential impacts of the project would be **Potentially Significant Impact Unless Mitigation Incorporated**.

Mitigation Measures: The following mitigation measures have been developed, to reduce potential impacts related to Hydrology and Water Quality to less than significant levels:

Mitigation Measures HWQ-1. Prior to the commencement of on-site operations that require groundwater resources, the project application shall provide the County Department of Environmental Health and State Waterboard with groundwater monitoring data for the existing on-site production well that documents the existing production and water recovery rate. Each month thereafter, the project applicant shall provide the Trinity County Department of Environmental Health and State Waterboard with water well recovery rate data. Should the County Department of Environmental Health or the State Water board identify potential drawdown impacts data based on this data, the project applicant shall develop adaptive management measures to allow for recovery of groundwater levels

Adaptive management measures may include forbearance (e.g., prohibition of groundwater extraction from the months of May to October), water conservation measures, reductions in on-site cannabis cultivation, alteration of the groundwater pumping schedule, or other measures determined appropriate. Adaptive management measures will remain in place until groundwater levels have recovered based on annual monitoring data provided to the County as part of subsequent annual inspections.

Land Use and Planning

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Setting:

The proposed project is located in the central area of Trinity County in Peanut, CA near the Community of Hayfork. The Hayfork Valley is a small valley with an elevation of 2,310 feet about 20 miles southwest of the Trinity Alps Wilderness and is surrounded by the Shasta Trinity National Forest. The Subject Property is located just over seven miles from the Hayfork Airport and Downtown Hayfork. Trinity County encompasses more than 2 million acres and is one of the original 27 California counties created in 1850 (Trinity County 2004). The majority of the land within the county (76 percent) is managed by the federal government as part of National Forests or wilderness areas. The STNF encompasses a large portion of the county. Land uses in the county are best characterized as accommodating tourism, outdoor recreation (e.g., hiking, hunting, and fishing), and forestry and timber production; the latter being the predominant private use, although it has declined significantly since the 1990s (Trinity County 2012).

The county is primarily rural and contains several small, scattered communities with no incorporated cities. The most populous communities are concentrated in the Weaver Basin, the Hayfork Valley and Lewiston Valley. In addition to concentrated development, valleys are used for agriculture, including hay crops and livestock grazing. In 2010, the total population of Trinity County was 13,786 persons (U.S. Census Bureau 2011), making it one of the least densely populated California counties.

Surrounding the proposed project area are neighboring private lands which are zoned Agriculture in the Trinity County General Plan. Agricultural lands are regulated by Trinity County Zoning Ordinance 315, Section 13, which includes a list of permitted uses within the Agriculture zoning. These are all agricultural uses, including crop and tree farming, livestock farming, dairies, animal husbandry, aviaries. There are activities that must obtain a Conditional Use Permit such as, but not limited to, commercial farms, stands for the sale of products, and summer camps.

Both the Trinity County General Plan and Zoning Ordinance did not specifically anticipate development of cannabis cultivation, nursery, nor processing facilities when these land use plans and zoning districts were developed. In response to California State Law that allows cannabis cultivation, nursery, distribution, and processing, under permitted and controlled conditions, Trinity County developed county-specific ordinances to regulate commercial cannabis operations.

Impact Analysis:

a. The proposed project does not involve the construction of roads, utility transmission lines, construction of storm channels, water dams or other waterway diversions that would typically be associated with the division of an existing community. Because the proposed project does not have the potential to physically divide an established community, it is considered to have **no impact.**

b. Commercial cannabis is one of the most regulated agricultural uses in the State. The proposed cannabis project will be required to comply with a myriad of federal, State, and local regulations that are designed to protect public health and safety and minimize potential impacts to the environment. The proposed projects compliance with applicable regulations and the resulting reduction in potential impacts is discussed throughout this document. In all instances where potentially significant impacts have been identified, mitigation is provided to reduce each impact to less than significant levels. This was necessary in the following sections of this document:

- Air Quality
- Biological Resources
- Cultural Resources
- Hydrology and Water Quality

As discussed in the Project Description, the proposed project will require a variance form the 500-foot property line setback in Ordinance 315-849 for medium cultivation. The Trinity County Commercial Cannabis Cultivation Ordinance requires a 500-foot setback buffer from the property for Medium Outdoor Cultivation, which is considered an effective distance to dissipate objectionable odors. The 500-foot property line setback is not met on this property; therefore, a variance has been applied for concurrently with the conditional use permit. The parcel shape confines the usable area outside of setbacks; therefore, the site is situated in close proximity to existing infrastructure including roads and electrical services. As discussed in the Air Quality section, because the subject property is in an area with a low density of sensitive receptors, is surrounded by existing cannabis cultivation activity, and has topographical and vegetation conditions that would reduce the spread of odors, a substantial number of people are not anticipated to be adversely impacted by cannabis odors from the proposed project. As such, the approval of a variance from the 500-foot setback is not anticipated to result in significant impacts.

The proposed project therefore is considered **less than significant impact**.

Mineral Resources

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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. 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.

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.

Impact Analysis:

a. 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. The proposed 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. For this reason, there is **no impact**.

b. As indicated in Mineral Resources subsection (a), 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. For this reason, there is **no impact**.

Noise

Would the Project result in:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Setting:

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound typically associated with human activity and that interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response is annoyance. Noise sources can include vehicles on roads, loud music, heavy machinery, large generators, construction, industrial and commercial operations. An adverse human response to noise often is influenced by the type of noise, time of day, perceived importance of the noise, sensitivity of the individual, the noise's appropriateness in the setting, and the type of activity during which the noise occurs.

The US Environmental Agency (USEPA) has published guidelines that specifically address issues of community noise (United States Environmental Protection Agency 1972). In this report, the USEPA has outlined goals for noise levels affecting residential use: less than 55 dBA for exterior levels and less than 45 dBA for interior levels. However, the guidelines also indicate that a noise level up to 65 dBA can also be considered acceptable.

Occupational exposure to noise is regulated by 29 CFR Section 1910.95. This regulation outlines employer responsibilities to protect employees from excessive exposure to noise. Among the controls described within this document are providing personal protective equipment to employees who are exposed to noise levels exceeding an average of 90 dBA for an 8-hour period.

Groundborne vibrations impact levels are associated with three categories, as they pertain to human annoyance;

- Buildings where vibration interferes with interior operations
- Residences and buildings where people normally sleep
- Institutional land uses with primarily daytime usage

Typically, groundborne vibration impact levels are associated with risk of damage to buildings and typically associated with heavy vehicle traffic (including railroads) and heavy equipment operations.

California Building Code

Title 24, Part 2, Section 1207.4 of the California Building Code established a uniform minimum noise insulation performance standard to protect persons from the effects of excessive noise, including hearing loss or impairment and interference with speech and sleep. Title 24 states that interior noise levels attributable to exterior sources are not to exceed 45 dBA in any habitable room (California Building Code 2016).

Trinity County General Plan

The Trinity County General Plan Noise Element contains goals, objectives, and policies designed to minimize and reduce noise conflicts (Brown-Buntin Associates Inc. 2003). The County acknowledges that the regulation of noise sources such as traffic on public roadways is preempted by federal and/or state regulations, meaning that these sources may not be addressed by a local government noise ordinance. The goals of the Trinity County Noise Element are:

- To protect the citizens of the County from the harmful and annoying effects of exposure to excessive noise.
- To protect the economic base of the County by preventing incompatible land uses from encroaching upon existing or planned noise-producing uses.
- To preserve the tranquility of residential areas by preventing noise-producing uses from encroaching upon existing or planned noise-sensitive uses.

The County established acceptable noise exposure levels for land uses in the county and identified a policy to mitigate transportation-related noise to achieve the acceptable levels for noise-sensitive land uses. The maximum day/night average sound level (Ldn) for residential uses is 60 decibels (dB) at the residential property line and 45 Ldn dB in the interior space. As part of the Noise Element update, a Noise Ordinance was proposed that would have allowed construction-related noise sources to exceed the acceptable levels, provided that they were implemented after 7 a.m. and before 8 p.m. Monday through Saturday. However, the Noise Ordinance was never adopted.

Existing Noise Environment

The existing noise environment is primarily influenced by the proximity to SR 3 vehicle traffic. SR 3 ~~is~~ dissects the subject property. The ambient outdoor sound level in the project area is a blend of natural environment sounds and that of the rural environment. The character and existing uses of the project area appear agricultural in nature, which influence the noise environment with light duty trucks, tractors, and agricultural activities.

The population in the area is common to that of a rural setting with dispersed residential homes on parcels over 5 acres. The nearest sensitive receptors to the project site are adjacent residential developments, which number less than ten within a half mile of the subject property. The neighboring residences are located 500 feet or more away from the proposed project locations.

Impact Analysis:

a. The proposed project includes new cultivation hoop-houses, processing building, nursery greenhouse, rainwater catchment system and road improvements. As such, there will be noise impacts that will permeate from the subject property during construction. The noise generated from construction activities are similar in noise impacts to that of agricultural use and considered temporary. The EIR prepared for the County Cannabis Ordinance analyzed potential construction impacts from development of new cannabis operations or the expansion of existing operations (pgs. 3.12-8 to 3.12-10). To mitigate potential noise impacts from construction activity, mitigation was required limiting outdoor constructing activity to the hours of 7:00 a.m. to 7:00 p.m. (see Cannabis Ordinance Section 17.43G.040.I). The EIR determined that with the implementation of this requirement, potential impacts to sensitive receptors from construction noise would be reduced to a less-than-significant level. Therefore, with the implementation of Section 17.43G.040.I of the County Cannabis Ordinance, construction noise impacts from the proposed project would be less than significant.

The operation of the proposed project brings additional noise impacts, primarily sourced from noise generating equipment. Of the noise generating equipment expected to be used by the proposed project, below is a noise reference level used to determine noise impact from the proposed project's operations.

Equipment type	Noise reference level at 50 feet (dBA)	Potential Frequency of Use
Chainsaw	76.3 – 95.39	Temporary
Irrigation Pump	67.2 – 76.3	Permanent
HVAC unit	56.9 – 69.9	Permanent
Loaded Truck	88.0	Temporary
Ventilation Fan	29.9 – 50.9	Permanent

Source: Noise levels at a distance of 50 feet from the equipment source were estimated from varying reference level distances. These estimates were sourced from the DCC PEIR and are not meant to be exhaustive of all equipment used by the proposed project.

Table 15 – Project Operational Equipment Noise Reference Levels

The nearest sensitive receptors to the project site are adjacent residential developments, which number less than ten within a half mile of the subject property. The nearest residence is approximately 380 feet away from the outdoor cultivation premises and 355 feet from the indoor operation of the commercial nursery (see Figure 4). Temporary equipment operated at the subject property may be heard by the nearest adjacent neighbor's property line, but are not likely to exceed 65 decibels (dB) at the subject property boundary due to the dispersed setting of properties in the vicinity.

Likewise, permanent equipment used at the proposed property, including the groundwater well pump, HVAC equipment and ventilation fans may produce noise above the existing ambient noise environment, but these noise generation sources are not considered significant, as noise from SR 3 is more significant as it is located an estimated 900 feet from the neighboring residences as the proposed project and has a higher noise generation level (FTA, 2006). Estimated sound levels from a similar source as SR 3 from 50 feet away during the daytime is 65 dBA and 75 dBA at nighttime (Federal Transit Administration 2018). The EIR prepared for the County Cannabis Ordinance analyzed potential non-transportation operational noise impacts from development of new cannabis operations or the expansion of existing operations (pgs. 3.12-10 to 3.12-13). The EIR determined that non-transportation operational noise from implementation of the Cannabis Program would not exceed the noise standards in the County General Plan due to the temporary and period nature of cannabis activities and the setback requirements in the Cannabis Ordinance (e.g., minimum 350 feet from neighboring residences).

Considering the estimated noise levels along SR 3 (>60 dBA), and the limited amount of traffic that would be generated by the proposed project (approximately 79 daily trips), it is not anticipated that the proposed project would result in significant transportation noise related impacts for sensitive receptors along SR 3.

For these reasons, the proposed project's generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project are considered **less than significant**.

b. Ground borne vibration is typically associated with heavy vehicle traffic (including railroads), heavy equipment operations, and certain construction techniques (e.g., pile driving). The proposed project does not involve the use of this type of equipment and these types of construction techniques. The greatest potential for groundborne vibration or groundborne noise levels is during construction activity. The noise generation from equipment used for construction of the proposed buildings, road improvements, and on-stream pond improvements are outlined below:

Equipment	Noise reference level at 50 feet (dBA)	Potential Frequency of Use
Cement Truck	85	Temporary
Tractor	84	Temporary
Loader	85	Temporary

Source: Federal Highway Administration, 2006

Table 16 – Project Construction Equipment Noise Reference Levels

According to the practical Spreading Model, to determine the decrease in intensity of noise away from the source, attenuation occurs at a rate of 4.5 dBA per doubling of distance. For example, a cement truck noise level of 85 dBA at 50 feet away dissipates to 80.5 dBA at 100 feet.

Due to the type, size and duration of equipment being used during construction, the distance to the closest receptors, no ground borne vibration is expected to impact nearby sensitive receptors once construction activities are completed and the ambient conditions return to normal. For these reasons, the proposed projects generation of excessive ground borne vibration or ground borne noise levels, are **less than significant**.

c. The proposed project is not within 2 miles of an airstrip. For this reason, **no impact** would occur.

Population/Housing

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Setting:

Trinity County encompasses more than 2 million acres and is one of the original 27 California counties created in 1850 (North State Resources, Inc. 2014). The majority of the land within the county (76 percent) is managed by the federal government as part of National Forests or wilderness areas. The STNF encompasses a large portion of the county. Land uses in the county are best characterized as accommodating tourism, outdoor recreation (e.g., hiking, hunting, and fishing), and forestry and timber production; the latter being the predominant private use, although it has declined significantly since the 1990s. The county is primarily rural and contains several small, scattered communities with no incorporated cities. In 2010, the total population of Trinity County was 13,786 persons (U.S. Census Bureau 2010), making it one of the least densely populated California counties.

Housing in the Hayfork area is rural residential and agricultural, with homes, cabins, mobile and manufactured homes. Parcels in the vicinity of the project are mostly agricultural with lot sizes ranging from 10 - 120 acres.

In 1996, the neighboring community of Hayfork, California published the Hayfork Community plan, which recognized a shortage of rental housing and limited number of properties for sale. This trend was exacerbated by the “Green Rush” of cannabis cultivators flooding the Hayfork and outlying communities from 2011 through 2016. The majority of these cannabis cultivators were operating under the protection of Proposition 215 and were marginally regulated.

With the passage of Proposition 64 and the legalization of recreational cannabis, coupled with the sunsetting of Proposition 215 operators, recent real estate trends in the area have seen a large number of real estate listings come onto the market. With the stringent regulations developed and implemented by DCC and the Bureau of Cannabis Control, a number of the former Proposition 215 cultivators are beginning to shutter their businesses and relocate out of Trinity County. As a result, the influx and drastic reduction in property values has created an influx of available housing options and a decrease in pressure of available properties.

Impact Analysis:

a. Implementation of the proposed project would result in the development of new cannabis facilities. There is no new housing being required or developed.

   The exact number of construction workers needed for the project would be determined by the contractor and would depend to a large extent on the construction schedule. Between 2 and 5 people are expected to work on the construction activities at any one time, depending on the activities being performed. Cannabis activities are proposed to employ up to 31 full time employees. All employees are anticipated to live nearby in the Hayfork community. For these reasons, the proposed project is not expected to induce a substantial population growth and impacts are considered **less than significant**.

b. The proposed project would not displace a substantial number of existing residents or housing necessitating the construction of replacement housing elsewhere. Employees are anticipated to live nearby, in the Hayfork Community. For this reason, **no impact** will occur.

Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Fire Protection?	☐	☐	☒	☐
b. Police Protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

Setting:

Trinity County encompasses more than 2 million acres and is one of the original 27 California counties created in 1850 (Trinity County 2004). The majority of the land within the county (76 percent) is managed by the federal government as part of National Forests or wilderness areas. The Shasta-Trinity National Forest Land encompasses a large portion of the county and is adjacent to the subject property.

Hayfork Valley is a small valley with an elevation of 2,310 feet about 20 miles South West of the Trinity Alps Wilderness and is surrounded by the Shasta Trinity National Forest. The subject property is located just over three miles from the Hayfork Airport and Downtown Hayfork.

Fire Protection

CalFire has primary responsibility for fire protection for the project site. CalFire is the responsible agency with jurisdiction over inspections and managing the fire resources in the area. The Hayfork CalFire Department is located at 1 Wizard's Way, Hayfork which is approximately 6.8 miles north of the project site.

In addition, the site also falls within the Hayfork Volunteer Fire Department jurisdiction which covers about 84 square miles. The Hayfork Volunteer Fire Department responds to all fires, medical calls, car accidents, and public assist calls within their fire district. The Department's headquarters is located in Hayfork on Hyampom Road approximately 7 miles north of the project site.

The Trinity County Fire Safe Ordinance #1162 (1991) requires buildings created and/or approved after January 1, 1992 to provide a minimum 2,500-gallon dedicated water tank. The dedicated 2,500-gallon tank system is for the purpose of water for fire suppression during a wildland fire or a fire originating from within the building.

Police Protection

The Hayfork community is served by the Trinity County Sheriff's office, based in Weaverville, an estimated 27 miles from the subject property for all private property concerns. The County Sheriff's office covers the large, sparsely populated Trinity County and, therefore, has longer response times for their service area. The Trinity County Sheriff's office is staffed in accordance with standards for response time and service ratios (Trinity County Sheriff's Department 2019).

The California Highway Patrol (CHP) is responsible for enforcing vehicular and traffic laws on state highways, such as the case with SR 3. The CHP officers regulate the transport of goods, and serve as emergency responders to incidents on the state's highway system (California Highway Patrol 2019).

Schools

Hayfork Elementary and Hayfork High school are the closest schools to the subject property and are an estimated 3 miles West. SR 3 is on a local bus route for the Mountain Valley School system.

Parks

The nearest park is Hayfork Park which is an estimated 4.5 miles from the project site. Hayfork Park is a day only park which contains a playground, picnic areas, sports field, and community pool.

Other Public Facilities

Trinity Public Utilities District (PUD) supplies 100% renewable hydro-electricity to the Hayfork community. Trinity PUD currently sets an electrical service cap of 400 amps on all parcels that are not Industrial (I), Commercial (C2, C3), or can show the legitimate need for additional amperage (Trinity Public Utilities District 2019). A community initiative, known as Hayfork Connect, is currently in development to gather information about increasing electrical service to Hayfork. A positive outcome of this initiative may result in the 400 amp cap being raised or removed.

Impact Analysis:

a. The subject property falls within the Hayfork Fire Department jurisdiction. The subject property is required to maintain 100 feet of defensible space around all structures per the Trinity County Fire Safe Ordinance. The existing residence has a fire suppression system installed and an accompanying 2,500-gallon tank system. In addition, the proposed project is required to comply with State Fire Safe Standards for protection of life and property from wildfires through clearing of vegetation, occupancy measures (e.g., fire exit signs), and other actions required for fire protection/suppression actions as may be determined by the County, the Hayfork Fire Department, or CalFire. (Trinity County 1991)

   Consequently, the potential for the proposed project to expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires is not substantially worse than for other types of land uses in the same area and would actually be reduced compared to unregulated cannabis cultivation occurring under the baseline conditions cited under the DCC PEIR. The combination of these existing regulations and protective measures would reduce the need for additional fire protection to a **less than significant** impact.

b. The DCC PEIR concluded that while some crime associated with licensed cannabis cultivation activities is likely to continue, no information has been found that indicates licensed cultivators with DCC would increase law enforcement needs overall compared to the baseline existing conditions. If anything, demand for law enforcement services, according to DCC, may decrease due to a larger number of lawful cultivators and their coordination and cooperation with law enforcement authorities.

   While DCC anticipates a reduction in overall law enforcement and police protection, the applicant has already installed security cameras, and have multiple locked gates to deter criminal activity. The applicant will also implement procedures to prevent trespassing and other crimes. The combination of these existing regulations and protective measures would reduce the need for additional police protection to a **less than significant** impact.

c. Based on the type of use (cannabis operation) and the fact that the project does not proposed housing, there is very limited potential to impacts local schools. As such, **no impact** would occur from the proposed project.

d. The proposed project will not increase the intensity of land use, impacts to parks, nor 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 of expansion of recreational facilities. For these reasons, **no impact** will occur.

e. No other public facilities will be impacted by the proposed project, as such, **no impact** will occur.

Recreation

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Setting:

The Hayfork Park which is located approximately 6.8 miles from the subject property is a day-use only park which contains a playground, picnic areas, sports field, and community pool.

Ewing Reservoir, which is approximately 8.2 drive miles from the project site, is a popular destination for jogging, dog-walking, fishing, and enjoying the outdoors, Ewing Reservoir is currently the most popular outdoor community space in Hayfork. The Ewing Reservoir is the reservoir that feeds the Trinity County Waterworks District #1. The trails around Ewing Reservoir are maintained by Friends Enjoying Ewing Trails (FEET).

Impact Analysis:

a. Based on the type of use (cannabis operation), the proposed project will not increase the impacts to parks and recreational facilities in the project area. The use of Hayfork Park and Ewing Reservoir would remain at existing conditions. For these reasons, **no impact** will occur.

b. The proposed project does not propose recreational facilities or require the construction of expansion of recreational facilities. For this reason, **no impact** will occur.

Transportation

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b): i) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. ii) Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. iii) Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact. iv) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate. v) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions	☐	☐	☒	☐

to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.				
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

Setting:

National Scenic Byway Programs

The Federal Highway Administration's National Scenic Byway Program and the Forest Service's National Forest Scenic Byways Program are intended to showcase distinct and diverse roads throughout America. The National Forest Scenic Byways Program is designed to showcase the outstanding scenery of NFS lands, while meeting the public's demand for scenic driving tours on safe, well-maintained roads. In addition, the program allows for public interpretation of National Forest management, meets the growing demand for recreational driving opportunities, increases use of National Forests by non-traditional user groups such as the elderly and urban minorities, and creates opportunities for rural economic development (LSC Transportation Consultants Inc. 2002).

California Department of Transportation

The California Department of Transportation (Caltrans) manages the state highway system and ramp interchange intersections. Caltrans is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance. Caltrans requires transportation permits for the movement of vehicles or loads exceeding the limitations on the size and weight contained in California Vehicle Code section 35551 (CalTrans 2019).

Bureau of Cannabis Control

Some commercial cannabis business activities that generate vehicular traffic under baseline conditions would continue under the Proposed Program, and therefore may result in zero impact. Vehicular traffic from transportation related to cannabis business operations, however, would also occur in new locations. In those new locations, the baseline level of traffic from commercial cannabis transportation would be zero and, therefore, a greater impact may result.

Many of the activities that would be regulated under the Proposed Program are already ongoing. The impact analysis presented in this IS/MND considers these ongoing activities to be a part of the baseline environmental conditions. This baseline includes existing testing, transport, distribution, and retail sale of medicinal cannabis and medicinal cannabis products (i.e., medicinal cannabis goods).

Transportation may not be done by aircraft, watercraft, rail, drones, human powered vehicles, or unmanned vehicles. Distributors are the only commercial cannabis license type that may transport cannabis and cannabis products between licensees, except for testing samples, which will be transported by a testing laboratory employee. (Bureau of Cannabis Control 2019)

In general, the shifts that would occur as cannabis businesses come into compliance with the Proposed Program would have a beneficial impact on many environmental factors, given the environmentally protective standards of the Proposed Program and the monitoring and enforcement efforts that would be conducted related to the Proposed Program. This comparison against the baseline, wherein many cannabis business operations need not and do not comply with such environmentally protective standards, is a core premise of the impact evaluation in the IS/ND.

Definitions of the types of distribution licenses:

Distribution - Distributor
A licensed distributor shall distribute only cannabis goods, cannabis accessories, and licensees' branded merchandise or promotional materials.

Distribution – Transport Only
A licensed distributor transport only licensee may transport cannabis goods between licensees; however, they shall not transport any cannabis goods except for immature cannabis plants and seeds to a licensed retailer or licensed microbusiness authorized to engage in retail sales.

Distribution – Self-Transport
A distributor transport only licensee who is licensed to engage in self-distribution and whose licensed premises will be on the same property as their licensed cultivation ~~or licensed manufacturing~~ premises shall not be required to comply with the security provisions contained in Chapter 1, Article 5 of this division. (Bureau of Cannabis Control 2019)

Senate Bill 743 (Steinberg, 2013)

SB 743 was signed in 2013, with the intent to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." When implemented, SB 743 "traffic congestion shall not be considered a significant impact on the environment" within California Environmental Quality Act (CEQA) transportation analysis.

Traffic congestion, commonly measured by Level of Service (LOS), is the amount of automobile delay or similar measures of vehicular capacity of a road serving a proposed project. SB 743 required The Office of Planning and Research (OPR) to develop a new metric for identifying and mitigating transportation impacts within CEQA.

OPR established and then implemented on July 1, 2020 criteria for models used to analyze transportation impacts to ensure models are accurate, reliable, and consistent with the intent of SB 743. In doing so, Vehicle Miles Traveled (VMT) is used as the key metric in determining a project's impact on the environment. VMT measures how much actual auto travel (additional miles driven) a proposed

project would create on California roads. OPR states that lead agencies may apply thresholds at their discretion (Section 21099).

VMT Threshold #1

The first screening threshold of VMTs exceeding an *"applicable threshold of significance"* has been interpreted to include two metrics that are relevant to Trinity County.

One is in rural areas of non-MPO counties, OPR's Technical Advisory states that *"clustered small towns and small-town main streets may have substantial VMT benefits compared to isolated rural development, similar on a percent per capita reduction basis as transit-oriented development described above. Therefore, evaluating per capita VMT is still recommended."*

OPR further states in their Technical Advisory that *"In cases where the region* (or jurisdiction) *is substantially larger than the geography over which most workers would be expected to live, it might be appropriate to refer to a smaller geography."* In Trinity County, where vast areas of forests and wilderness which make up close to 80% of the County, Census Block Groups (CBGs) provide an appropriate geographically subdivided representation of where workers are expected to live. This threshold is applicable for low VMT zones. Low VMT zones are determined by the daily per capita VMT totals of the CBG in which a project is proposed compared to the per capita VMT totals for the local jurisdiction, which in this case is Trinity County. A project within a low VMT zone is considered to be screened out from needing additional VMT analysis.

The second metric that sets an "*applicable threshold of significance"* is a vehicle trips per day count. Projects that generate few trips will also generally tend to generate low vehicle miles traveled. Absent substantial evidence indicating that a project would generate a potentially significant level of vehicle miles traveled, projects that generate fewer trips than the threshold of 110 vehicle trips per day generally may be assumed to cause a less than significant transportation impact.

VMT Threshold #2

The second screening threshold of 'proposed projects near existing transit (e.g. high quality transit corridors or major transit stops)' does not apply in Trinity County and therefore is not reviewed.

VMT Threshold #3

The third screening threshold indicates that "*Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact."* OPR's Technical advisory finds, *"absent any more project-specific information to the contrary, that per capita or per employee VMT fifteen percent below that of existing development may be a reasonable threshold."*

Note: Caltrans has developed a statewide VMT reduction target in its Strategic Management Plan. Specifically, it calls for a 15 percent reduction in per capita VMT, compared to 2010 levels, by 2020.

VMT Threshold #4

The fourth screening method indicates a proposed project's VMTs can be analysed qualitatively. OPR's Jeannie Lee provided guidance during OPR's Weekly Office Hours, stating, *"where there isn't a model or*

methodology to quantitatively assess VMT, they can be assessed qualitatively - as long as the conclusions can be supported with substantial evidence." During the same office hours, OPR stated, "*the purpose of CEQA is not to limit growth but rather to grow efficiently*"

In the absence of local policy, OPR's Technical Advisory identifies screening thresholds to indicate when projects' level of environmental impact should be considered less than significant. The four VMT thresholds are included in the checklist above for reference.

As an illustration, assessing the total change in VMT for a nursery built in an area with no other nurseries available to serve (otherwise known as a clone desert) existing licensed commercial cultivations, that diverts trips from more distant nurseries, could reveal a net VMT reduction. Any analysis that relies on a net VMT reduction needs to address the full area over which the project affects travel behavior, even if the effect on travel behavior crosses census block group/county boundaries.

In summary, based on Trinity County's rural nature there are three essential screening criteria for a project concerning VMTs for this project, as outlined by OPR.

1. Is the daily per capita VMT totals of a CBG of a proposed project less than the per capita VMT totals for the local jurisdiction (which in this case is Trinity County)?
2. Does the project have less than 110 trips per day?
3. Does the project create a 15% reduction in VMTs?

If any one of these three criteria are met the project has a less than significant impact based on OPR's guidance.

Trinity County General Plan Circulation Element

The Trinity County General Plan Circulation Element identifies several goals, objectives, and policies to improve and maintain the transportation network in the county (LSC Transportation Consultants Inc. 2002). The primary goal is to provide for the long-range development of Trinity County's roadway system to ensure consistency with adopted land use patterns and environmental and circulation objectives; to ensure the safe and efficient movement of people and goods; and to implement funding strategies for construction, improvement, and maintenance of existing and new roadways.

Key objectives focus on ensuring compatibility of road improvements with the land uses the roads serve, protecting the environment while ensuring public safety, considering social and economic issues when evaluating the impacts of road projects, using available funds for highest priority improvements, and reducing travel time while improving traffic safety on collector and arterial roads (Trinity County DOT 2011).

No VMT as part of Trinity County Circulation Element. Therefore, there are no applicable thresholds of significance for Vehicle Miles Traveled "VMT" have been established by Trinity County at the time of this analysis.

The Trinity County Circulation Element does contain Policy 1.6.A, sets a minimum acceptable Level of Service (LOS) standard for roadways and intersections in Trinity County as D.

Unsignalized Intersection LOS Criteria		
LOS	**Description**	**Average Delay (seconds per vehicle)**
A	No delay for stop-controlled approaches	0 to 10
B	Operations with minor delays	> 10 to 15
C	Operations with moderate delays	> 15 to 25
D	Operations with some delays	> 25 to 35
E	Operations with high delays and long queues	> 35 to 50
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers	> 50

Source: 2010 Highway Capacity Manual, Transportation Research Board, 2011

Table 17 – Level of Service Standards

Trinity County Regional Transportation Plan

The Trinity County Regional Transportation Plan (RTP) was derived from the General Plan Circulation Element and was designed to identify regionally significant transportation improvements needed to efficiently move goods and people across the county "over the next 20 years" (through 2030) (Fehr and Peers 2011) (Trinity County Transportation Commission 2017). The plan incorporates policies from the Circulation Element and documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system, with an overall goal to "provide a safe, reliable, accessible, cost-effective and efficient transportation system consistent with socioeconomic and environmental needs within Trinity County. The RTP serves as the guiding document for transportation investments in the county involving local, state, and federal funding over the next twenty years (Trinity County DOT 2017). The goals, objectives, and policies identified in the plan were considered when planning this project, and the proposed project is identified as a transportation system improvement project in the 2011 Regional Transportation Plan (Trinity County DOT 2011).

Overview of SR 3

In 1920, present day SR 3 was called Route 35 also known as "Peanut Road" which connected Weaverville to SR 36 by a County Road System (Blow, Ben 1920). It was not until 1933, when Peanut Road was created into a Highway that extended from SR 36 to present day SR 299 (California State Assembly 1933).

The only access to the private lands along the highway is SR 3 - a major collector highway that links SR 299 with SR 36. It is the major road serving the Hayfork and Hyampom Communities. It is frequently used by local residents and commercial businesses in the community of Hayfork as a primary route to Red Bluff, Weaverville, McKinleyville, and other areas west and south of Trinity County. It provides an important link for recreational and other users to a vast area of the Shasta-Trinity National Forest. In 2017 SR 3 carries an estimated 2650 vehicles per day. The estimated maximum hourly traffic volume is

360 vehicles (CalTrans 2017). Based on 2016 data, approximately 10.79 percent is truck traffic (CalTrans 2016) .

Impact Analysis:

a. Project approval would allow for the development of medium outdoor and small cannabis cultivation sites, wholesale commercial cannabis nursery, distribution type 11, transport only licenses, as well as cannabis processing on previously disturbed agricultural lands in Hayfork. The proposed project expects to generate traffic from employees, licensed cultivators and distributors visiting the cultivation sites, and delivery vehicles with supplies for the proposed activities. This traffic is expected to access the subject property from SR 3. The majority of traffic will source from the Hayfork community. A marginal amount, including general supply deliveries and distribution related deliveries, will extend beyond the community of Hayfork.

   The Trinity County circulation element identifies SR-3 as part of the Hayfork Pedestrian Paths and Bikeways network in the Hayfork community. The portion of SR-3 adjacent to the project is a class III Bike Route, where bikes share the shoulder with vehicles and are designated by signage only. The wide roadways and shoulders along SR-3 allow plenty of space for bicycles to operate safely. Additionally, the proposed project would not affect Trinity Transit bus routes or stops.

   As noted under the Trinity County General Plan Circulation Element outlined above, the Trinity County LOS minimum standard is D. Because the Regional Transportation Plan (RTP) was derived from the General Plan Circulation Element, it echoes the LOS standard D as the minimum standard. Recent regulatory updates to CEQA's Guidelines, specifically section 15064.3, subdivision (b), updated the metric used for transportation impact analysis from LOS to VMT.

   Trinity County's General Plan Circulation Element solely focuses on LOS as the metric to determine environmental Impact of traffic from proposed projects, as was the standard when the Circulation element was last updated, in 2002. As such, there are no VMT thresholds as part of Trinity County Circulation Element. Therefore, there are no applicable thresholds of significance for Vehicle Miles Traveled "VMT" have been established by Trinity County at the time of this analysis. Because SB 743 mandates that jurisdictions can no longer use automobile delay, commonly measured by Level of Service (LOS), in transportation analysis under CEQA to determine the level of environmental Impact of proposed projects, we have intentionally omitted any LOS analysis from this analysis, to be in compliance with the most recent guidance overriding considerations from the Governor's Office of Research and Planning (OPR).

   Based on the above analysis, the impacts from development of this project are considered **less than significant**.

b. According to OPR's Technical Advisory (referenced above), comparing project characteristics with project screening thresholds can be a good starting point for an adequate analysis of the proposed project's consistency with CEQA Guidelines section 15064.3. Section 15151 of the

CEQA Guidelines states the following regarding standards from which adequacy is judged (City of Los Angeles Planning 2006):

> *"An EIR (*or Initial Study*) should be prepared with a sufficient degree of analysis to provide decision- makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts have not looked for perfection but for adequacy, completeness, and a good faith effort at full disclosure."*

The screening thresholds noted under the SB 743 summary are the starting point for this analysis.

i) Our analysis sets the "applicable threshold of significance" equal to the per capita VMT for employees in Trinity County in 2019 and 110 vehicle trips per day. The project site is estimated to have 78.82 vehicle trips per day.

   We sourced the VMT per capita from Streetlight Data, which is calculated by machine learning algorithms that leverage user data in aggregate via smartphones as sensors to measure activity on all streets, 24 hours a day, for 365 days a year. Comparing the per capita VMTs for Trinity County (9.2), for all days in the year, with the per capita VMT of the census block (Hayfork Census Block number 061050003003) of the proposed project (4.3), we find the proposed project location is in a low VMT zone, and is below the first metric's screening threshold.

   To analyze the proposed project's vehicle trips per day, expressed as average daily trips, we used the statistical model CalEEMod. Using CalEEMod software (referenced in the Project Description), the project's average trip rates are based on the Institute of Transportation Engineers (ITE) 9th edition of the Trip Generation Manual. CalEEMod's traffic modeling relies on data that does not directly relate to Cannabis operations. Many of these baselines, which are key in developing accurate results for a specific model, are based on out-of-state case studies, some of which were implemented as far back as the 1980s.

   As such, the baseline traffic conditions established by CalEEMod do not accurately represent the conditions of the project. ITE provides traffic counts for 110-General Light Industrial, 816-Hardware/ Paint Store, and 710-General Office Building. Unfortunately, no traffic data is available with the CalEEMod dataset to quantify and analyze traffic volumes for limited-access wholesale cannabis nurseries or row crops/cannabis cultivation. CalEEMod does not estimate emissions from primarily agricultural activities, as they generally do not generate substantial amounts of air pollutants. Our analysis utilizes the General Heavy Industrial Land use designation for cannabis cultivation activities in CalEEMod.

Proposed Project Uses	CalEEMod Land Use Types	ITE Land Use Code
Post-Harvest Activities	General Light Industrial	110 - General Light Industrial
Shared Use / Offices	General Office Building	710 - General Office Building
Commercial Nursery	General Heavy Industrial	---
Cultivation - Mature Canopy	General Heavy Industrial	---
Cultivation - Immature Canopy	General Heavy Industrial	---
Distribution Type 13	Refrigerated warehouse - no rail	150 - Warehousing
Chemical Storage	Unrefrigerated warehouse - no rail	150 - Warehousing
Petroleum Storage	Unrefrigerated warehouse - no rail	150 - Warehousing
Cannabis Waste Area	Unrefrigerated warehouse - no rail	150 - Warehousing
Water Tanks	Unrefrigerated warehouse - no rail	150 - Warehousing
Asphalt Roads + Parking	Unrefrigerated warehouse - no rail	150 - Warehousing
Rocked Roads + Parking	Unrefrigerated warehouse - no rail	150 - Warehousing

Table 18 - Proposed Project Uses with representative CalEEMod Land Use Types

To help inform the anticipated traffic impact, we contacted traffic engineers and industry experts to calculate a custom formula (qualitative traffic model). Our goal was to modify CalEEMod to accurately reflect a good faith effort at full disclosure and provide a nuanced and place-based approach to understanding traffic impacts from the proposed project.

Our traffic model estimates a mix of trip types and input those into the CalEEMod statistical model to make the analysis relevant to the project location and proposed activities. In doing so, we were careful to avoid double counting and noted each time the model defaults were modified for transparency of analysis. We included any type of trips that would be reasonably feasible, including; the number of licensed companies that may conduct business with the proposed uses; a percentage of the total number (530) Trinity County licensed cultivators frequenting the wholesale commercial nursery, the volume of traffic from employees, licensed cultivators and manufacturers visiting the distribution facility, and delivery vehicles with supplies for the proposed activities (which includes soil delivery, materials delivery, office supplies etc.). All traffic metrics were converted to daily values based on the number of anticipated trips per week, month or year, totalled and divided by a 6 day work week.

As discussed previously in this analysis, the proposed project estimates 31 employees for full operations of all proposed licensed activities. Each employee is assumed to generate a daily

round trip, plus an extra half trip per employee, per day, to meet their personal daily needs. In addition, daily round trips were estimated for general supply deliveries, as well as the activities outlined above.

Proposed Uses	CalEEMod Categories	Square footage	Trips per day, per 1,000 square feet	Average Daily trips
Post-Harvest Activities	General Light Industrial	8,464	3.07	25.98
Shared Use / Offices	General Office Building	1,500	3.67	5.51
Commercial Nursery	General Heavy Industrial	6,000	2.03	12.17
Cultivation - Mature Canopy	General Heavy Industrial	43,560	0.46	20.18
Cultivation - Immature Canopy	General Heavy Industrial	200	14.90	2.98
Distribution Type 11	Refrigerated warehouse - no rail	500	17.00	8.50
Distribution Type 13	Refrigerated warehouse - no rail	200	17.50	3.50
Chemical Storage	Unrefrigerated warehouse - no rail	240	0	0
Petroleum Storage	Unrefrigerated warehouse - no rail	240	0	0
Cannabis Waste Area	Unrefrigerated warehouse - no rail	500	0	0
Water Tanks	Unrefrigerated warehouse - no rail	1600	0	0
Asphalt Roads + Parking	Unrefrigerated warehouse - no rail	43,560	0	0
Rocked Roads + Parking	Unrefrigerated warehouse - no rail	43,560	0	0
TOTAL		**150,124**	**-**	**78.82**

Table 19 - Proposed Project Uses Internal Average Daily Trips

As indicated above, the ADT from all of these activities is estimated at 78.82, below the 110 ADT screening metric that sets an "*applicable threshold of significance*" of vehicle trips per day count.

As shown in the table below, the proposed project would generate 6.87 vehicle trips in the AM Peak Hour (7 - 8 AM) and 6.78 vehicle trips in the PM Peak Hour (3 - 4 PM) for the land use types provided in ITE Peak Hour data.

ITE Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use (Peak Hour) Default Data							
Land Use Type	Size	AM Peak Hour (7 - 8 am)			PM Peak Hour (Noon -1 PMM)		
		In	Out	Total	In	Out	Total
Canopy - Mature Cultivation	43,560	1.75	0.27	2.02	0.11	1.53	1.64
Canopy - Immature Cultivation	200	0.26	0.04	0.30	0.02	0.23	0.24
Commercial Nursery	6,000	2.25	0.35	2.60	0.75	1.66	2.42
Distribution Type 11	500	0.43	0.12	0.54	0.30	0.55	0.85
Distribution Type 13	200	0.41	0.22	0.62	0.23	0.43	0.66
Shared Use / Offices	1,500	0.40	0.10	0.49	0.43	0.55	0.98
Post-Harvest Activities	8,484	0.14	0.16	0.30	0.00	0.00	0.00
Total		**5.62**	**1.25**	**6.87**	**1.84**	**4.95**	**6.78**

Table 20 - Traffic Hourly Distribution for ITE Default Data

ii) The second screening threshold of 'proposed projects near existing transit (e.g. high quality transit corridors or major transit stops)' does not apply in Trinity County and therefore is not reviewed.

iii) The third screening threshold for a project, a 15% reduction in VMT from the current conditions. According to Best Practices of CEQA analysis, the current conditions of a proposed project are the applicable baseline to compare a proposed project to.

Since many of the commercial cannabis cultivation sites in proximity to the project area must already transport their individual crops to state licensed manufacturers and distributors, transportation vehicles must currently travel to their individual cultivation sites and return to their licensed premises. By centralizing a distribution ~~and manufacturing center~~ facility in Hayfork, the number of trips and VMTs existing commercial cannabis cultivation operations would have traveled to more distant rural properties in the area or urban properties outside of Trinity County to conduct these activities to purchase immature plants, bring their harvested cannabis material to manufacturers, packaging, and/or distribution is greatly reduced. While this analysis is qualitative, there is enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion that the proposed project would reduce VMTs compared to the existing conditions.

Based on the above analysis, we find the proposed project can reasonably be assumed to have a **less than significant** impact and is consistent with CEQA guidelines 15064.3.

c. The project will not substantially create hazards due to a geometric design feature nor would it be incompatible with the existing conditions, as the project will be using the existing driveway which was designed for Agricultural operations. For these reasons, the proposed project is considered to have a **less than significant** impact.

d. As required for SRAs, the subject property complies with California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, Article 2 Emergency Access and Egress 1273.01 Road Width, which states; "*All roads shall be constructed to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping. These traffic lanes shall provide for two-way traffic flow to support emergency vehicle and civilian egress,…*" There is existing access from SR-3 and Rattlesnake Road, and there are proposed 10' lanes in the internal driveway system that provide access to operations.

   Furthermore, the proposed project does not change the existing access point to the subject property from Rattlesnake Road; 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. For these reasons, the proposed project is not expected to result in inadequate emergency access and is considered **less than significant**.

Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.l(k), or	☐	☐	☒	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Setting:

The land encompassing the project area is in a small valley floor that was previously modified by past property owners. The historic use of the proposed project, in addition to cannabis cultivation, is agricultural, with the raising of hay, livestock, including goats, chickens, pigs and horses. The licensed premises primarily encompass the existing disturbed area that was occupied by the historic agriculture uses.

The existing surrounding area includes historic agricultural sites, cannabis cultivation sites that may or may not be permitted, barns, residential buildings, structures used for agricultural operations, a radio tower, water storage tanks, groundwater well storage tanks and miscellaneous storage buildings.

The immediate geology in the project area is alluvium of Holocene and Pleistocene age. Soil on the property is brown to light brown with 1-20 cm rounded gravels. Surrounding soil on site is a brown gravelly loam, 40% gravel and cobbles.

Vegetation within the APE is largely an oak woodland shrub mix with areas of ponderosa pine and Douglas-fir. Shrub species include poison oak (Salix lasiandra), wedge leaf ceanothus (Ceanothus cuneatus), manzanita (Arctostaphylos manzanita), Himalayan blackberry (Rubus armeniacus), California hazel (Corylus cornuta), mountain willow (Saliz eastwoodiae). The overstory includes Douglas-fir

(Pseudotsuga menziesii), white oak (Quercus alba), black oak (Quercus kelloggii), incense cedar (Calocedrus decurrens), and ponderosa pine (Pinus ponderosa).

Based on Forest Service archaeological work and previous university studies, human use of this area goes back between 7,000 and 10,000 Before Present (BP) years. This early phase is characterized by the Borax Lake stemmed projectile points. This point style has clear similarity to what is now being called the Western stemmed tradition with documented use from Northern California through the Northern Great Basin. Sites in Oregon and Idaho have dated this point style back 13,000 to 14,000 years. This cultural phase was centered on big game hunting utilizing atlatl and spear. There is an initial utilization of seed and nuts and the use of mano and metates.

Each new facility, outdoor grow, pond and road locations planned were intensively surveyed. Because, most of the APE is high probability ground for cultural resources. Parallel transects 5 to 10 meters apart were walked across the various project areas in a zigzag pattern. If cultural material was observed the spacing was reduced. Weather during the survey was clear and sunny with temperatures in the mid 80's.

The project area at first glance shows potential promise in having at least some prehistoric resources since it is near Salt Creek within a nearly level small valley floor. However, the pastures where most of the facilities will be constructed have been heavily modified.

Impact Analysis:

a, b) As part of the cultural resource review of the proposed project under California Environmental Quality Act (CEQA), local Native Americans must be contacted to provide an opportunity to submit any information about cultural resources that may be in close proximity to the proposed project, especially Tribal cultural resources as defined in Public Resources Code (PRC) section 21074.

Mark Arnold, Archaeologist, sent out a request for comments for the proposed project on October 5, 2018 to the following Tribes:

i. Hoopa Valley Tribe: Chairperson, Ryan P. Jackson
ii. Nor-Rel-Muk Nation: Chairperson, John Hayward
iii. Redding Rancheria: Chairperson, Jack Potter Jr. and Cultural Resources Program Manager, James Hayward Sr.
iv. Round Valley Indian Tribes of the Round Valley Reservation: President, James Russ
v. Wintu Tribe of Northern California: Cultural Director, Kelli Hayward
vi. Tsnungwe Council: Chairperson, Paul Ammon

In Appendix B of the Archaeological Resource Evaluation prepared for the project (WCA, 2019) is a consultation log of responses that were initiated by the Archaeologist, which show that there are no concerns about onsite tribal cultural resources. In addition, no new prehistoric or historic archaeological sites were recorded during the reconnaissance survey. Trinity County provided requests for AB 52 consultation to the local Tribes and did not receive any responses or requests for consultation.

Therefore, impacts from the proposed project would be **less than significant**.

Utilities/Service systems

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Require or result in relocation or the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statuses and regulations related to solid waste?	☐	☐	☒	☐

Setting:

For background information on:

- Water rights and supplies, refer to the Hydrology and Water Quality section.
- Wastewater treatment or stormwater drainage, refer to the Geology and Soils and Hydrologya and Water Quality sections.
- Utilities and electrical power, refer to the Energy section.

California Health and Safety Code – Hazardous Waste and Hazardous Materials

Several sections of the California Health and Safety Code deal with hazardous waste and hazardous materials. Division 20, Chapter 6.5 addresses hazardous waste control and contains regulations on hazardous waste management plans, hazardous waste reduction, recycling and treatment, and

hazardous waste transportation and hauling. These requirements and how the proposed project implements them can be found in the Hazards and Hazardous Materials section.

California Integrated Waste Management Act

The California Waste Management Act of 1989 (Public Resources Code Division 30, requires all cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by 2000 (PRC 41780). The State, acting through the California Waste Management Board, determines compliance with this mandate. Per capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

Impact Analysis:

a. The proposed project will not require the addition of natural gas, or telecommunications infrastructure. It will require the addition of electric infrastructure and a new septic system for employee bathrooms.

   The rainwater catchment system from the greenhouse reduces the flow of water coming off the new development and limits the amount of new stormwater associated with the proposed project. The proposed project will be continuously monitored as part of the SWQCB requirements for erosion, sedimentation and stormwater discharge to prevent the degradation of riparian features. In addition, the applicant is required to renew and report to the SWQCB on a yearly basis. All of the development associated with the proposed project will occur on previously disturbed land.

   The infrastructure improvements proposed by the project would result in physical impacts to the project site, which has been previously analyzed under the appropriate resource sections of this document. The project has been designed and mitigated to reduce impacts to less than significant. Mitigation was required for the proposed project as discussed in the following resource sections of this document:

   - Air Quality
   - Biological Resources
   - Cultural Resources
   - Hydrology and Water Quality

   No additional mitigation measures beyond those already identified would be required for the proposed projects.

   Therefore, the proposed project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts would be **less than significant**.

b. As noted in the Hydrology and Water Quality section, the proposed project includes a rainwater catchment system, and water storage facilities, which will be sited on previously disturbed land. The addition of the water storage and rainwater catchment system will ensure the proposed

project has sufficient water supplies available during normal, dry and multiple dry years. For this reason, the impacts of the proposed project are considered **less than significant**.

c. As outlined under existing conditions, the existing wastewater treatment facilities on parcel 2 includes a legally permitted septic system and leach field. An additional septic system will be installed for employee use on Parcel 1 meeting standards set forth by the Trinity County Environmental Health Department. For this reason, the impact is considered **less than significant**.

d. For cannabis waste, a Cannabis Waste Management Plan will be prepared for the proposed projects 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 parcels at a designated composting area pursuant to 3 CCR § 8308. The generation of solid waste that is not able to be composted will continue to be disposed of at existing solid waste facilities, as other residential and commercial waste is currently being handled. Disposing of solid waste in existing facilities, either through self-hauling or by contracting with an existing hauler, will ensure the project does not violate solid waste standards at the State or local level. For these reasons, the impact is considered **less than significant**.

e. The construction and operational activities from the proposed projects would be required to comply with all federal, State, and local statutes related to solid waste, including AB 939. This would include compliance with recycling, hazardous waste, and composting programs in the County to comply with AB 939. For cannabis waste, a Cannabis Waste Management Plan will be prepared for the proposed projects 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. The proposed project would fully comply with these existing regulations and programs in ensuring continued compliance with the California Integrated Waste Management Act. The proposed project employs the reduce, reuse, recycle mantra throughout its operations and continuously improves on waste diversion practices. For these reasons, the impact is considered **less than significant**.

Wildfire

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

Setting:

The steep topography and extent of forests and woodlands, coupled with typically hot, dry summers, create an extreme fire danger throughout most of the county (CalFire 2012). Human-caused fires commonly occur along roadways and in other developed areas, and lightning strikes frequently cause fires in more remote areas. Wildland fire, regardless of the cause, can damage property, infrastructure, and roadways and threaten life. Because of the extensive forests surrounding the project area and the steep terrain along SR 3 and Salt Creek, fire hazards are high and could damage the roadway or threaten nearby homes and recreation areas.

The subject property falls within the Hayfork Fire Department sphere of protection as seen in Figure 6 (Hayfork Fire Department 2015). The subject property is also within a State Responsibility Zone (SRA). CalFire is the responsible agency with jurisdiction over inspections and managing the fire resources in the area. The CAL FIRE Fire and Resource Assessment Program (FRAP) designates lands in three general classifications, “Moderate”, “High” and “Very High” Fire Hazard Severity Zones (FHSZ). According to CAL FIRE, the project parcels are located within a Very High Fire Hazard Severity Zone (CAL FIRE, 2021).

Impact Analysis:

a. As discussed under the Hazards and Hazardous Materials section (impact analysis f.), due to the ample compacted dirt, rock and paved parking areas and vehicle turnouts meeting County roadway and access design and fire safety requirements set forth in County Code of Ordinances Chapters 8.30 and 12.10 along SR 3, the proposed project would not impair or physically interfere with an emergency response plan of emergency evacuation plan. Therefore, a **less than significant** impact anticipated.

b. The steep topography and extent of forests and woodlands, coupled with typically hot, dry summers, create an extreme fire danger throughout most of the County. Because of the extensive forests surrounding the project area and the steep terrain along SR 3 and Salt Creek, fire hazards are high and could damage the roadway or threaten nearby homes and recreation areas.

   The subject property falls within the Hayfork Fire Department sphere of protection as seen in Figure 6 (Hayfork Fire Department 2015). The Hayfork Fire Department recommends that residents create and maintain a defensible space of at least 100 feet or greater from each building. They also recommend improving fire safety by properly designing and maintaining the landscape by choosing fire resistant plants, ensuring plants are properly irrigated, removing debris, and creating fuel breaks.

   The subject property is also within a State Responsibility Zone (SRA). CalFire is the responsible agency with jurisdiction over inspections and managing the fire resources in the area. As such, the subject property is required to maintain a 100-foot defensible space around all structures (CalFire 2005). In addition, the proposed project is required to comply with State Fire Safe Standards for protection of life and property from wildfires through clearing of vegetation, location of appropriately sized water storage facilities, and other actions required for fire protection/suppression actions as may be determined by CalFire. The subject property meets both defensible space requirements of at least 100 feet around each building, as well as, the existing fire breaks along the perimeter of the subject property. Additionally, the proposed project would be reviewed by State and local agencies to ensure they comply with building, electrical, and fire codes, which would avoid or minimize the potential for the projects to exacerbate wildfire risks.

   While the project parcels are in an area designated as a Very High Fire Hazard Severity Zone, which could expose employees to pollutant concentrations or the uncontrolled spread of a wildfire, these hazards would not be substantially different than that for other types of land uses in the project area.

   Therefore, the proposed projects as designed and in compliance with existing laws and regulations, will not exacerbate wildfire risks, due to slope, prevailing winds, and other factors and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, impacts would be **less than significant**.

c. Most of the proposed improvements have minimal potential to increase the risk of wildfires due to the proposed locations away from surrounding vegetation and the lack of ignition sources and flammable materials. The proposed improvement that has the greatest potential to exacerbate fire risks includes the extension of electrical infrastructure. The proposed project requires the installation of power lines to Parcel 1. There will be no removal of trees or sensitive habitat to install the electrical lines. This infrastructure would be designed and maintained in compliance with existing laws and regulations to reduce potential wildlife risk (e.g., vegetation and fire safety standards). Due to the proposed location and short distance of this infrastructure, and compliance with current regulations, it is not anticipated that the proposed electrical infrastructure would substantially exacerbate fire risk.

   The infrastructure improvements proposed by the project would result in physical impacts to the project site, which has been previously analyzed under the appropriate resource sections of this document. The projects have been designed and mitigated to reduce impacts to less than significant. Mitigation was required for the proposed projects as discussed in the following resource sections of this document:

   - Air Quality
   - Biological Resources
   - Cultural Resources
   - Hydrology and Water Quality

   No additional mitigation measures beyond those already identified would be required for the proposed projects. For these reasons, impacts from the proposed project would be **less than significant**.

d. According to the FEMA Flood Insurance Rate Map (Panel No. 06105C1400E; dated 1/20/2010), flood hazard zones in the vicinity of the project are classified as Zone D, which is the area where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted (Federal Emergency Management Agency 2010). The only potential flood hazards are areas around Salt Creek, which is unmapped. While the possibility of flooding can occur from Salt Creek, which flows through the subject property, the ~~cultivation, distribution, and manufacturing sites~~ proposed improvements would be set outside of the State Waterboard's 150-foot Class I stream setback. The 0 – 5 percent slope of the usable area on the subject property indicates the likelihood of a landslide is extremely low. For these reasons, the flood hazard and potential landslides downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would be **less than significant.**

Mandatory Findings of Significance

Would the Project:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigation incorporated	Less than Significant impact	No impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a 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?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Setting:

The project information provided for each of the topics above has been reviewed for all actions associated with the proposed project during both temporary construction and long-term operation. Based on the description of the proposed projects and their locations, the projects would not result in any significant impacts with the incorporated project design elements, mitigation measures, as well as compliance with the standards and requirements of other regulating resource agencies.

Impact Analysis:

a. All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animal species, and historical and prehistorical resources were evaluated as part of the analysis in this document. Where impacts were determined to be potentially significant, mitigation measures have been imposed to reduce those impacts to less than significant levels. In other instances, the project design and compliance with existing laws and regulations would reduce impacts of the projects to less than significant levels. Therefore, the proposed projects as designed, mitigated, and in compliance with existing regulatory requirements, would not substantially

degrade the quality of the environment and impacts would be **Potentially Significant Impact Unless Mitigation Incorporated**.

b. As discussed elsewhere in this document, the project parcels are located along State Route 3 in the unincorporated community of Peanut in Trinity County. The project parcels have historically and are currently used for agricultural activities. The project parcels are surrounded by agricultural land, timberland, rural residential uses, and cannabis cultivation operations.

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, biological resources, cultural resources, and hydrology and water quality. In most instances where the projects have the potential to result in individually limited significant impacts to the environment (including the resources listed above), mitigation measures have been imposed to reduce the potential effects to less than significant levels. In other instances, the project design and compliance with existing laws and regulations would reduce impacts of the project to less than significant levels.

Trinity County has approved several permits for commercial cannabis operations within 1-mile of the project parcels. Due to the rural location and size of the project parcels, the potential for the project to make a considerable contribution to potential cumulative impacts (e.g., odors, noise, lighting, fugitive dust, etc.) from cannabis activities in the project area is limited. However, there is a potential for the project to contribute to cumulative water quality impacts. These potential cumulative water quality impacts would not be cumulatively considerable due to compliance with existing regulatory requirements including, but not limited to, the SWRCB Cannabis General Order, DCC regulations (see California Code of Regulations § 8102(p); § 8102(dd); § 8216; § 8304(a and b); § 8307), and the Trinity County Cannabis Ordinance.

In response to comments from the Department of Cannabis Control (DCC) on this CEQA document, additional discussion of potential cumulative impacts is provided below for several topics including groundwater supply, noise, transportation, and air quality and odors.

Groundwater Supply Impacts: As discussed in the Hydrology and Water Quality section of this document, the project proposes to use a groundwater well and rainwater catchment system as the water sources for the proposed cannabis activities. The use of the rainwater catchment system is intended to reduce potential impacts on the groundwater supply in the project area since the project site is located in an area designated by the County as a Critical Water Resource Overlay Zone ("CWR Zone"). In average rainfall years, the rainwater catchment system is estimated to collect up to 819,000 gallons of water, which significantly exceeds the estimated water use for the proposed cannabis activities. In the lowest rain fall year (2013), it is estimated that the system would collect approximately 294,000 gallons. Even in the lowest rainfall year, the onsite rainwater capture would allow for several months of forbearance from groundwater withdrawals during the dry season. Additionally, water conservation measures proposed by the project would include drip irrigation, watering during the evening, smart watering techniques, times and volume drip emitters, and straw mulch cover on soil.

The EIR prepared for the County Cannabis Ordinance evaluated whether the Cannabis Program could result in groundwater supply impacts (pgs. 3.10-32 to 3.10-34 and pgs. 4-11 to 4-13). The water sources (well and rainwater capture) and estimated use proposed by the project (~530,000 gallons annually) are consistent with the assumptions and analysis in the EIR. To reduce potential groundwater impacts from implementation of the Cannabis Program, mitigation was included requiring the reporting of annual monitoring of groundwater conditions to the County as part of the annual inspections required under the ordinance. This monitoring is intended to identify if on-site well operations are resulting in groundwater drawdown impacts and what adaptive measures would be implemented to recover groundwater levels and protect adjacent wells. Because implementation of this mitigation measure would be required as part of annual commercial cannabis operations permit renewals (see Cannabis Ordinance Section 17.43G.030.X), it would provide ongoing protection of local groundwater resources and offset cumulative groundwater impacts. Thus, implementation of this requirement of the Cannabis Program would prevent potential cumulative impacts from cannabis operations in the project area. Compliance with Section 17.43G.030.X of the County Cannabis Ordinance has been included as mitigation measure HWQ-1 for the proposed project. Therefore, in compliance with mitigation measure HWQ-1 and the County's Cannabis Ordinance, groundwater withdrawal by the proposed project would not result in a cumulatively considerable impact.

Noise Impacts: As discussed in the Noise section of this document, the EIR prepared for the County Cannabis Ordinance analyzed potential construction impacts from development of new cannabis operations or the expansion of existing operations (pgs. 3.12-8 to 3.12-10 and 4-14 to 4-15). To mitigate potential noise impacts from construction activity, mitigation was required limiting outdoor constructing activity to the hours of 7:00 a.m. to 7:00 p.m. (see Cannabis Ordinance Section 17.43G.040.I). The EIR determined that with the implementation of this requirement, potential impacts to sensitive receptors from construction noise would not be cumulatively considerable. Therefore, with the implementation of Section 17.43G.040.I of the County Cannabis Ordinance, construction noise impacts from the proposed project would not result in a cumulatively considerable impact.

The EIR prepared for the County Cannabis Ordinance analyzed potential operational noise impacts from development of new cannabis operations or the expansion of existing operations (pgs. 3.12-10 to 3.12-13). The operational impacts analyzed included both non-transportation and transportation noise.

The EIR determined that non-transportation operational noise from implementation of the Cannabis Program would not exceed the noise standards in the County General Plan due to the temporary and periodic nature of cannabis activities and the setback requirements in the Cannabis Ordinance (e.g., minimum 350 feet from neighboring residences). The project proposes cannabis activities that are consistent with the assumptions and analysis conducted in the EIR and it is not anticipated that any new significant impacts or substantially more severe impacts would occur from implementation of the proposed project. Therefore, the non-transportation operational noise from the proposed project would not result in a cumulatively considerable impact.

The EIR prepared for the County Cannabis Ordinance determined that transportation operational noise from implementation of the Cannabis Program would exceed the exterior noise standards for maximum allowable exposure from transportation noise on SR 3 in the Hayfork Area. The EIR concluded that there are not feasible mitigation measures that could be implemented to reduce transportation noise impacts and impacts would be cumulatively considerable. As discussed in the Transportation section of this document, the proposed project would generate approximately 79 daily trips, which is below the OPR threshold for determining when a project would have a significant transportation impact. Considering the limited traffic that would be generated by the project and the intermittent nature of cannabis activities, it is not anticipated that the proposed project would result in a cumulatively considerable contribution to cumulative impacts from transportation operational noise.

Transportation Impacts: As discussed in the Transportation section of this document, 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 vehicle miles traveled (VMT) or a significant transportation impact. 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. As noted above, the proposed cannabis operations are estimated to generate approximately 79 vehicle trips per day, which is well below the screening threshold recommended by OPR.

The EIR prepared for the County Cannabis Ordinance analyzed potential transportation impacts from the development of new cannabis operations or the expansion of existing operations (pgs. 3.14-13 to 3.14-16, 3.14-19, and 4-15 to 4-16). The EIR determined that implementation of the Cannabis Program would not result in cumulatively considerable impacts from construction traffic or VMT. The proposed project is consistent with the assumptions and analysis in the EIR as no new significant impacts or substantially more severe impacts would occur from the project. Therefore, the proposed project would not result in cumulatively considerable impacts related to construction traffic or VMT.

The EIR indicated that there is the potential for cumulative transportation and circulation impacts related to inadequately designed roadways that are not properly designed to accommodate traffic volumes, stormwater drainage conditions, or emergency access. Since the proposed project site is directly accessed from SR 3 and would be required to install onsite access roads that meet County roadway and access design and fire safety requirements set forth in County Code of Ordinances (Chapters 8.30 and 12.10), this would offset the potential contribution to cumulative impacts related to traffic safety and emergency access. Therefore, based on the project location and compliance with County Code requirements, the proposed project would not result in cumulatively considerable impacts related to traffic safety and emergency access.

Air Quality and Odor Impacts: As discussed in the Air Quality section of this document, Trinity County is in attainment or unclassified for all federal and state ambient air quality standards (AAQS), including the standards for particulate matter. However, other areas in the North Coast Air Basin (NCAB) are designated nonattainment for PM10 (e.g., Humboldt County). Emissions

modeling was completed for the proposed project (see Attachment A), which estimated that the construction and operational emissions from the project would be below the daily significance thresholds in North Coast Unified Air Quality Management District (NCUAQMD) Rule 110 (NCUAQMD, 2015; see Table 1.0 – Significance Thresholds, pg. 7-8). Although not directly applicable to land use projects, the Rule 110 significance thresholds provide a reference point for levels of emissions that would trigger requirements for best available control technology and/or mitigation off-sets. As such, these thresholds reflect the best available expert judgment regarding what constitutes significant levels of air pollution within the NCAB and Trinity County. Therefore, it is concluded that the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region (i.e., NCAB) is non-attainment (i.e., PM10) under a federal or state AAQS.

During long-term operation of the proposed cannabis operations, there is the potential for the generation of objectionable odors in the form of cannabis cultivation, drying, and processing activities. The potential for odors to be perceived and considered objectionable depends on the size of a cannabis operation, the receptors, the strain of cannabis being cultivated/processed, the presence of nearby vegetation, and topographic and atmospheric conditions. Although exposure to offensive odors generally does not result in physical harm, the odors can be perceived as objectionable leading to considerable distress among the public and can result in citizen complaints to local governments and regulatory agencies.

As discussed in the EIR prepared for the County's Cannabis Ordinance (pg. 3.3-24), all cultivation operations are required to be setback a minimum of 350 feet from adjacent residences such that attendant odors would be less likely to be detectable by people off-site. As discussed in the Air Quality section in this document, the applicant is requesting a Variance to reduce the property line setback for cultivation activity from 500-feet to 100-feet. With the reduced setback from the property lines, the proposed project would still meet the minimum 350-foot setback from the nearest residences that is required by the County Cannabis Ordinance. As discussed in other sections of this document, the nearest residences would be 380 feet away from the outdoor cultivation activity and 355 feet from the indoor operation of the commercial nursery (see Figure 4).

As discussed in the Air Quality section of this document, the nearest sensitive receptors to the project site are residential uses and there are less than 10 residences within one-quarter of a mile of the site. Considering the average number of persons per household in Trinity County (2.09 persons; US Census, 2019), the estimated number of persons residing in the project area (~21 persons) would not be considered a substantial number of people. Additionally, many of the nearest sensitive receptors are themselves either cultivating cannabis and/or have immediate neighbors that are cultivating cannabis. As such, considering the subjective nature of odor impacts, their tolerance for cannabis odors may be significantly greater than that of the general public.

As discussed in the Air Quality section of this document, the applicant is proposing various measures to minimize cannabis odors including the use of hoop houses for the outdoor cultivation activity, carbon filtration systems in the proposed mixed-use and nursery buildings, and the planting and maintenance of companion plants such as mint and rosemary that would

blend with the cannabis odor. Additionally, the varying topography and vegetation present in the project area would minimize the spread of cannabis odors.

If the existing and proposed cannabis operations in the project area were to burn excess plant material from cultivation and processing activities, there is a greater potential for the odors to be detected by nearby receptors and for the odors to be considered objectionable. However, this activity is prohibited by State cannabis regulations (CCR Section 8108).

Based on these factors, it is not anticipated that the proposed project would result in the exposure of a substantial number of people to objectionable odors from cannabis activities. Therefore, the proposed project would not result in a cumulatively considerable contribution to cumulative impacts related to odors.

~~Further, the project has been designed to be consistent with the EIR prepared for the County's Cannabis Ordinance. As required by CEQA, the EIR specifically analyzed the potential cumulative environmental impacts of commercial cannabis activities as allowed under the County's Cannabis Ordinance. The EIR determined that in compliance with the standards in the Cannabis Ordinance and other applicable laws and regulations, that cumulative impacts from commercial cannabis activities would be less than significant. This is especially true relative to the environmental baseline of unregulated cannabis activity.~~

Therefore, the proposed project as designed, mitigated, and in compliance with existing regulatory requirements, would not result in impacts that are individually limited, but cumulatively considerable. Therefore, impacts would be **Potentially Significant Impact Unless Mitigation Incorporated**.

c. The potential for the proposed project to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this document. In instances where the proposed project has the potential to result in direct or indirect adverse effects to human beings, including impacts to air quality and cultural resources, mitigation measures have been applied to reduce the impact to below a level of significance. In other instances, the project design and compliance with existing laws and regulations would reduce impacts of the project to less than significant levels. Therefore, the proposed project as designed, mitigated, and in compliance with existing regulatory requirements, would not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. Therefore, impacts would be **Potentially Significant Impact Unless Mitigation Incorporated**.

Mitigation Measures

The list includes who will be responsible for implementation of each mitigation measure, as well as, those responsible for final clearance.

Mitigation Measure AQ-1: The spray application of pesticides (e.g., neem oil, sulfur or other materials) shall occur no closer than 350 feet to adjacent residences. Spraying shall not occur at wind speeds greater than 10 miles per hour. 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. The applicant or a responsible third-party professional are responsible for ensuring this mitigation measure is implemented in accordance with the Integrated Pest Management Plan. The Applicant is the main point of contact for a responsible 3rd party professional regarding pest management and ensures staff are familiar with the IPM Plan. The applicant is solely responsible for final clearance.

Mitigation Measures BIO-1. If vegetation removal or other ground disturbing activities associated with project construction cannot occur outside the bird nesting season (generally February 1 – August 31), a qualified biologist will conduct nesting bird surveys within the area of impact and establish a protective buffer for any active nests found.

- Conduct surveys no more than 7 days prior to activities, covering the entire area of potential impact.
- If an active nest is located during the survey, a no-disturbance buffer shall be established around the nest by the qualified biologist, in consultation with California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.
- Establish protective buffers for active nests based on type of project activity to be conducted, habitat, and species of concern.
- Physical protective buffers should be in the form of high visibility fencing, inspected weekly by a biological monitor to ensure stability.
- If project activities are to be conducted while active nest buffers are in place, a biological monitor will be on site during project activities to ensure that no take of migratory birds occurs.

Mitigation Measures BIO-2. To avoid impacts to sensitive native amphibian and fishery resources from bullfrog establishment in the proposed rainwater catchment pond, pond draining should occur in September through October, a minimum of every two years. Careful planning and coordination with CDFW, is necessary to ensure potential impacts to stream resources can be addressed, prior to commencing with pond draining. Discharge of polluted water to waters of the state may require permitting from other agencies with permitting authority, such as the Regional Water Quality Control Board.

Take of bullfrogs is specifically allowed in the California Code of Regulations (CCR), Title 14 (T- 14) section 5.05(a)(28), under the authority of a sport fishing license. There is no daily bag limit, possession limit, or hour restriction, but bullfrogs can only be taken by hand, hand-held dip net, hook and line, lights, spears, gigs, grabs, paddles, bow and arrow, or fish tackle. While draining occurs, direct removal efforts should be employed as described above if possible.

Mitigation Measures BIO-3. To prevent impacts to special-status plant species that have a potential to occur within the project site, at least one additional seasonally appropriate botanical survey should be conducted prior to any ground disturbance activities.

- The survey should occur during the appropriate blooming time for the target species.
- Survey methods should comply with the CDFW rare plant survey protocols and be performed by a qualified field botanist.
- Any populations of special-status plant species that are detected should be mapped. Populations should be flagged if avoidance is feasible and if populations are located adjacent to construction areas.
- The locations of any special-status plant populations to be avoided should be clearly identified in the contract documents (plans and specifications).
- If special-status plant populations are detected where construction would have unavoidable impacts, a compensatory conservation plan should be prepared and implemented in coordination with CDFW. Such plans may include salvage, propagation, on-site reintroduction in restored habitats, and monitoring.

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

Mitigation Measure CR-2: If any buried archeological materials or indicators are uncovered or discovered during any cannabis cultivation activities, all ground-disturbing activities shall immediately cease within 100 feet of the find. The applicant will notify the Appropriate Person within 48 hours of any discovery. The Appropriate Person is the County Planning Director.

Prehistoric archeological indicators include, but are not limited to: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars, and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone, fire affected stones, shellfish, or other dietary refuse. Historic period site indicators generally include, but are not limited to: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails.

In the event that prehistoric archeological materials or indicators are discovered, the applicant will also notify the Native American Heritage Commission within 48 hours of any discovery and request a list of any California Native American tribes that are potentially culturally affiliated with the discovery. The applicant will notify any potentially culturally affiliated California Native American tribes of the discovery within 48 hours of receiving a list from the Native American Heritage Commission.

The applicant will promptly retain a professional archeologist to evaluate the discovery. This will likely be the same archeologist who completed the Cultural Resources Assessment. The applicant will submit

proposed mitigation and conservation measures to the appropriate person(s) SWRCB and regulatory agencies, as applicable, for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.

In the event of a discovery of prehistoric archeological materials or indicators are discovered, the applicant will also provide a copy of the final proposed mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving prehistoric archeological resources and tribal cultural resources with appropriate dignity. Ground-disturbing activities shall not resume within 100 feet of the discovery until all approved measures have been completed to the satisfaction of the SWRCB and regulatory agencies, as applicable.

Mitigation Measures CR-3. Upon discovery of any human remains, the applicant will immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98. The following actions shall be taken immediately upon the discovery of human remains:

All ground-disturbing activities in the vicinity of the discovery shall stop immediately. The applicant will immediately notify the county coroner. Ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98 have been met. The applicant will ensure that the area 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.

Per Health and Safety Code section 7050.5, the coroner has two working days to examine human remains after being notified by the person responsible for the excavation, or by their authorized representative. If the remains are Native American, the coroner has 24 hours to notify the Native American Heritage Commission.

Per Public Resources Code section 5097.98, the Native American Heritage Commission will immediately notify the persons it believes to be the most likely descended from the deceased Native American. The most likely descendent has 48 hours to make recommendations to the landowner or representative for the treatment or disposition, with proper appropriate dignity, of the human remains and any associated grave goods.

If the Native American Heritage Commission is unable to identify a descendant; the mediation provided for pursuant to subdivision (k) of Public Resources Code section 5097.94, if invoked, fails to provide measures acceptable to the landowner; or the most likely descendent does not make recommendations within 48 hours; and the most likely descendants and the landowner have not mutually agreed to extend discussions regarding treatment and disposition pursuant to subdivision (b)(2) of Public Resources Code section 5097.98, the landowner or their authorized representative shall reinter the human remains and items associated with the Native American human remains with appropriate dignity on the property in a location not subject to further and future disturbance consistent with subdivision (e) of Public Resources Code section 5097.98.. If the landowner does not accept the descendant's

recommendations, the landowner or the descendants may request mediation by the Native American Heritage Commission pursuant to Public Resources Code section 5097.94, subdivision (k).

The applicant is solely responsible for ensuring this mitigation measure is implemented and for final clearance.

Mitigation Measures HWQ-1. ~~As part of the application and license renewal process, applicants shall provide the County with groundwater monitoring data for existing on-site well facilities that documents well production and changes in groundwater levels during each month of the year. Should this monitoring data identify potential drawdown impacts on adjacent well(s) and indicate a connection to operation of the on-site wells, the cannabis operators, in conjunction with the County, shall develop adaptive management measures to allow for recovery of groundwater levels. Adaptive management measures may include forbearance (e.g., prohibition of groundwater extraction from the months of May to October), water conservation measures, reductions in on-site cannabis cultivation, alteration of the groundwater pumping schedule, or other measures determined appropriate. Adaptive management measures will remain in place until groundwater levels have recovered based on annual monitoring data provided to the County as part of subsequent annual inspections.~~

~~The applicant is solely responsible for ensuring this mitigation measure is implemented and for final clearance.~~

Prior to the commencement of on-site operations that require groundwater resources, the project application shall provide the County Department of Environmental Health and State Waterboard with groundwater monitoring data for the existing on-site production well that documents the existing production and water recovery rate. Each month thereafter, the project applicant shall provide the Trinity County Department of Environmental Health and State Waterboard with water well recovery rate data. Should the County Department of Environmental Health or the State Water board identify potential drawdown impacts data based on this data, the project applicant shall develop adaptive management measures to allow for recovery of groundwater levels

Adaptive management measures may include forbearance (e.g., prohibition of groundwater extraction from the months of May to October), water conservation measures, reductions in on-site cannabis cultivation, alteration of the groundwater pumping schedule, or other measures determined appropriate. Adaptive management measures will remain in place until groundwater levels have recovered based on annual monitoring data provided to the County as part of subsequent annual inspections.

Determination

On the basis of this evaluation:

☐ I find 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 “potential 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, mothering further is required.

Signature Date

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Appendices

Appendix A – CalEEMod Emissions Modeling

Appendix B – Biological Resources Assessment

Appendices

Appendix A – CalEEMod Emissions Modeling

Appendix B – Biological Resources Assessment

APPENDIX A:

CalEEMod Emissions Modeling

Patton CEQA IS/MND - 2021

Trinity County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	59.76	User Defined Unit	1.37	59,760.00	0
General Light Industry	8.46	1000sqft	0.19	8,460.00	0
General Office Building	1.50	1000sqft	0.03	1,500.00	0
Refrigerated Warehouse-No Rail	0.70	1000sqft	0.02	700.00	0
Unrefrigerated Warehouse-No Rail	2.58	1000sqft	0.06	2,580.00	0
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Other Non-Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	88
Climate Zone	1			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Patton CEQA IS/MND - 2021 - Trinity County, Summer

Project Characteristics - Pacific Gas & Eletric Company data is used since the Trinity Public Utilities District does not have known intensity factors

Land Use - See Project Description

Off-road Equipment -

Trips and VMT - Demolition reduced due to the subject property being vacant land

Vehicle Trips - See Transportation Section for trip values. No operations on Sundays.

Landscape Equipment - 10 Snow Days in Hayfork, CA per year on average

Road Dust - 10 MPH Maximum

Energy Use -

Water And Wastewater - See Water demand in project description

Solid Waste - Waste calculations based on industry practices

Operational Off-Road Equipment - Ongoing use of a tractor for continued operations

Stationary Sources - Emergency Generators and Fire Pumps - Emergency generator for the Mixed Use Building and fire pump for sprinklers, if required.

Land Use Change - Proposed vegetative screening for project

Waste Mitigation -

Construction Phase - Construction should be complete by summer 2022

Grading - Total Graded acres was changed to 3 acres

Architectural Coating - Non Residential interior was changed from 109,500 to 11,164 to account for the; 500 Commercial Nursery retail; 1,500 Shared use offices; 8,464 post harvest; 700 Distribution Types 11 & 13
Non residential Exterior was changed from 36,500 to 11,164 to account fo rthe same square footage breakdown as interior.

Area Coating - Non-residential interiors and Non-residential exteriors were changed from 109,500 to 11,164 and 36,500 to 11,164 square ft., respectively.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	36,500.00	11,164.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	109,500.00	11,164.00
tblLandUse	LandUseSquareFeet	0.00	59,760.00
tblLandUse	LotAcreage	0.00	1.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	25.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	25.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	6.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	28.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	0.00	0.46
tblVehicleTrips	ST_TR	1.32	3.07
tblVehicleTrips	ST_TR	2.46	3.67
tblVehicleTrips	ST_TR	1.68	17.50
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	0.00	0.46
tblVehicleTrips	WD_TR	6.97	3.07

tblVehicleTrips	WD_TR	11.03	3.67
tblVehicleTrips	WD_TR	1.68	17.50
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1197	40.7009	24.2180	0.0432	18.2962	2.0478	20.3440	9.9917	1.8840	11.8756	0.0000	4,202.3979	4,202.3979	1.2166	0.0000	4,222.0904
2022	18.0877	19.0009	23.1350	0.0429	0.9386	0.8307	1.7693	0.2526	0.7815	1.0341	0.0000	4,168.6464	4,168.6464	0.7748	0.0000	4,188.0166
Maximum	**18.0877**	**40.7009**	**24.2180**	**0.0432**	**18.2962**	**2.0478**	**20.3440**	**9.9917**	**1.8840**	**11.8756**	**0.0000**	**4,202.3979**	**4,202.3979**	**1.2166**	**0.0000**	**4,222.0904**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1197	40.7009	24.2180	0.0432	18.2962	2.0478	20.3440	9.9917	1.8840	11.8756	0.0000	4,202.3979	4,202.3979	1.2166	0.0000	4,222.0904
2022	18.0877	19.0009	23.1350	0.0429	0.9386	0.8307	1.7693	0.2526	0.7815	1.0341	0.0000	4,168.6464	4,168.6464	0.7748	0.0000	4,188.0166
Maximum	**18.0877**	**40.7009**	**24.2180**	**0.0432**	**18.2962**	**2.0478**	**20.3440**	**9.9917**	**1.8840**	**11.8756**	**0.0000**	**4,202.3979**	**4,202.3979**	**1.2166**	**0.0000**	**4,222.0904**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0739	7.0000e-005	7.6700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Energy	1.7400e-003	0.0159	0.0133	1.0000e-004		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003		19.0184	19.0184	3.6000e-004	3.5000e-004	19.1314
Mobile	0.1896	1.1994	2.2139	6.0200e-003	0.3493	7.8000e-003	0.3571	0.0936	7.3500e-003	0.1009		611.0546	611.0546	0.0565		612.4672
Offroad	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Stationary	0.2872	1.4976	1.1558	1.3800e-003		0.1169	0.1169		0.1169	0.1169		146.9150	146.9150	0.0206		147.4299
Total	**2.7171**	**4.3886**	**5.6286**	**0.0106**	**0.3493**	**0.2161**	**0.5654**	**0.0936**	**0.2084**	**0.3020**		**1,078.2433**	**1,078.2433**	**0.1749**	**3.5000e-004**	**1,082.7207**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0739	7.0000e-005	7.6700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Energy	1.7400e-003	0.0159	0.0133	1.0000e-004		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003		19.0184	19.0184	3.6000e-004	3.5000e-004	19.1314
Mobile	0.1896	1.1994	2.2139	6.0200e-003	0.3493	7.8000e-003	0.3571	0.0936	7.3500e-003	0.1009		611.0546	611.0546	0.0565		612.4672
Offroad	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Stationary	0.2872	1.4976	1.1558	1.3800e-003		0.1169	0.1169		0.1169	0.1169		146.9150	146.9150	0.0206		147.4299
Total	**2.7171**	**4.3886**	**5.6286**	**0.0106**	**0.3493**	**0.2161**	**0.5654**	**0.0936**	**0.2084**	**0.3020**		**1,078.2433**	**1,078.2433**	**0.1749**	**3.5000e-004**	**1,082.7207**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Patton CEQA IS/MND - 2021 - Trinity County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/8/2021	7/5/2021	5	20	
2	Site Preparation	Site Preparation	7/6/2021	7/12/2021	5	5	
3	Grading	Grading	7/13/2021	7/22/2021	5	8	
4	Building Construction	Building Construction	7/23/2021	6/9/2022	5	230	
5	Paving	Paving	6/10/2022	7/5/2022	5	18	
6	Architectural Coating	Architectural Coating	7/6/2022	7/29/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,164; Non-Residential Outdoor: 11,164; Striped Parking Area: 5,227 (Architectural Coating – sqft)

OffRoad Equipment

Patton CEQA IS/MND - 2021 - Trinity County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	61.00	26.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1930	0.1698	1.6787	2.2700e-003	0.1916	2.7800e-003	0.1944	0.0508	2.5700e-003	0.0534		224.9214	224.9214	0.0205		225.4333
Total	**0.1930**	**0.1698**	**1.6787**	**2.2700e-003**	**0.1916**	**2.7800e-003**	**0.1944**	**0.0508**	**2.5700e-003**	**0.0534**		**224.9214**	**224.9214**	**0.0205**		**225.4333**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1930	0.1698	1.6787	2.2700e-003	0.1916	2.7800e-003	0.1944	0.0508	2.5700e-003	0.0534		224.9214	224.9214	0.0205		225.4333
Total	**0.1930**	**0.1698**	**1.6787**	**2.2700e-003**	**0.1916**	**2.7800e-003**	**0.1944**	**0.0508**	**2.5700e-003**	**0.0534**		**224.9214**	**224.9214**	**0.0205**		**225.4333**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2315	0.2038	2.0145	2.7300e-003	0.2299	3.3400e-003	0.2333	0.0610	3.0800e-003	0.0641		269.9057	269.9057	0.0246		270.5199
Total	**0.2315**	**0.2038**	**2.0145**	**2.7300e-003**	**0.2299**	**3.3400e-003**	**0.2333**	**0.0610**	**3.0800e-003**	**0.0641**		**269.9057**	**269.9057**	**0.0246**		**270.5199**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2315	0.2038	2.0145	2.7300e-003	0.2299	3.3400e-003	0.2333	0.0610	3.0800e-003	0.0641		269.9057	269.9057	0.0246		270.5199
Total	**0.2315**	**0.2038**	**2.0145**	**2.7300e-003**	**0.2299**	**3.3400e-003**	**0.2333**	**0.0610**	**3.0800e-003**	**0.0641**		**269.9057**	**269.9057**	**0.0246**		**270.5199**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1930	0.1698	1.6787	2.2700e-003	0.1916	2.7800e-003	0.1944	0.0508	2.5700e-003	0.0534		224.9214	224.9214	0.0205		225.4333
Total	**0.1930**	**0.1698**	**1.6787**	**2.2700e-003**	**0.1916**	**2.7800e-003**	**0.1944**	**0.0508**	**2.5700e-003**	**0.0534**		**224.9214**	**224.9214**	**0.0205**		**225.4333**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1930	0.1698	1.6787	2.2700e-003	0.1916	2.7800e-003	0.1944	0.0508	2.5700e-003	0.0534		224.9214	224.9214	0.0205		225.4333
Total	**0.1930**	**0.1698**	**1.6787**	**2.2700e-003**	**0.1916**	**2.7800e-003**	**0.1944**	**0.0508**	**2.5700e-003**	**0.0534**		**224.9214**	**224.9214**	**0.0205**		**225.4333**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1267	2.9235	0.8160	7.0300e-003	0.1595	0.0126	0.1720	0.0459	0.0120	0.0580		734.3536	734.3536	0.0884		736.5642
Worker	0.7847	0.6906	6.8268	9.2400e-003	0.7792	0.0113	0.7905	0.2066	0.0104	0.2171		914.6804	914.6804	0.0833		916.7619
Total	**0.9113**	**3.6141**	**7.6428**	**0.0163**	**0.9386**	**0.0239**	**0.9625**	**0.2526**	**0.0225**	**0.2750**		**1,649.0340**	**1,649.0340**	**0.1717**		**1,653.3261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1267	2.9235	0.8160	7.0300e-003	0.1595	0.0126	0.1720	0.0459	0.0120	0.0580		734.3536	734.3536	0.0884		736.5642
Worker	0.7847	0.6906	6.8268	9.2400e-003	0.7792	0.0113	0.7905	0.2066	0.0104	0.2171		914.6804	914.6804	0.0833		916.7619
Total	**0.9113**	**3.6141**	**7.6428**	**0.0163**	**0.9386**	**0.0239**	**0.9625**	**0.2526**	**0.0225**	**0.2750**		**1,649.0340**	**1,649.0340**	**0.1717**		**1,653.3261**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1151	2.7621	0.7208	6.9800e-003	0.1595	0.0111	0.1706	0.0459	0.0106	0.0565		728.2678	728.2678	0.0888		730.4872
Worker	0.7353	0.6232	6.0508	8.9500e-003	0.7792	0.0106	0.7897	0.2066	9.7600e-003	0.2164		886.0451	886.0451	0.0741		887.8972
Total	**0.8504**	**3.3853**	**6.7716**	**0.0159**	**0.9386**	**0.0216**	**0.9603**	**0.2526**	**0.0203**	**0.2729**		**1,614.3128**	**1,614.3128**	**0.1629**		**1,618.3843**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1151	2.7621	0.7208	6.9800e-003	0.1595	0.0111	0.1706	0.0459	0.0106	0.0565		728.2678	728.2678	0.0888		730.4872
Worker	0.7353	0.6232	6.0508	8.9500e-003	0.7792	0.0106	0.7897	0.2066	9.7600e-003	0.2164		886.0451	886.0451	0.0741		887.8972
Total	**0.8504**	**3.3853**	**6.7716**	**0.0159**	**0.9386**	**0.0216**	**0.9603**	**0.2526**	**0.0203**	**0.2729**		**1,614.3128**	**1,614.3128**	**0.1629**		**1,618.3843**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504		1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1221**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**		**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2411	0.2043	1.9839	2.9300e-003	0.2555	3.4700e-003	0.2589	0.0678	3.2000e-003	0.0709		290.5066	290.5066	0.0243		291.1138
Total	**0.2411**	**0.2043**	**1.9839**	**2.9300e-003**	**0.2555**	**3.4700e-003**	**0.2589**	**0.0678**	**3.2000e-003**	**0.0709**		**290.5066**	**290.5066**	**0.0243**		**291.1138**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9765	9.5221	12.1940	0.0189		0.4877	0.4877		0.4504	0.4504	0.0000	1,805.1297	1,805.1297	0.5672		1,819.3091
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1221**	**9.5221**	**12.1940**	**0.0189**		**0.4877**	**0.4877**		**0.4504**	**0.4504**	**0.0000**	**1,805.1297**	**1,805.1297**	**0.5672**		**1,819.3091**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2411	0.2043	1.9839	2.9300e-003	0.2555	3.4700e-003	0.2589	0.0678	3.2000e-003	0.0709		290.5066	290.5066	0.0243		291.1138
Total	**0.2411**	**0.2043**	**1.9839**	**2.9300e-003**	**0.2555**	**3.4700e-003**	**0.2589**	**0.0678**	**3.2000e-003**	**0.0709**		**290.5066**	**290.5066**	**0.0243**		**291.1138**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.7385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**17.9431**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1447	0.1226	1.1903	1.7600e-003	0.1533	2.0800e-003	0.1554	0.0407	1.9200e-003	0.0426		174.3040	174.3040	0.0146		174.6683
Total	**0.1447**	**0.1226**	**1.1903**	**1.7600e-003**	**0.1533**	**2.0800e-003**	**0.1554**	**0.0407**	**1.9200e-003**	**0.0426**		**174.3040**	**174.3040**	**0.0146**		**174.6683**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	17.7385					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**17.9431**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1447	0.1226	1.1903	1.7600e-003	0.1533	2.0800e-003	0.1554	0.0407	1.9200e-003	0.0426		174.3040	174.3040	0.0146		174.6683
Total	**0.1447**	**0.1226**	**1.1903**	**1.7600e-003**	**0.1533**	**2.0800e-003**	**0.1554**	**0.0407**	**1.9200e-003**	**0.0426**		**174.3040**	**174.3040**	**0.0146**		**174.6683**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1896	1.1994	2.2139	6.0200e-003	0.3493	7.8000e-003	0.3571	0.0936	7.3500e-003	0.1009		611.0546	611.0546	0.0565		612.4672
Unmitigated	0.1896	1.1994	2.2139	6.0200e-003	0.3493	7.8000e-003	0.3571	0.0936	7.3500e-003	0.1009		611.0546	611.0546	0.0565		612.4672

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	0.00	0.00		
General Light Industry	25.97	25.97	0.00	86,008	86,008
General Office Building	5.51	5.51	0.00	13,027	13,027
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	12.25	12.25	0.00	40,566	40,566
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	43.73	43.73	0.00	139,602	139,602

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
General Light Industry	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
General Office Building	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Other Asphalt Surfaces	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Other Non-Asphalt Surfaces	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Refrigerated Warehouse-No Rail	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Unrefrigerated Warehouse-No Rail	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Patton CEQA IS/MND - 2021 - Trinity County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.7400e-003	0.0159	0.0133	1.0000e-004		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003		19.0184	19.0184	3.6000e-004	3.5000e-004	19.1314
NaturalGas Unmitigated	1.7400e-003	0.0159	0.0133	1.0000e-004		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003		19.0184	19.0184	3.6000e-004	3.5000e-004	19.1314

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	81.3551	8.8000e-004	7.9800e-003	6.7000e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004		9.5712	9.5712	1.8000e-004	1.8000e-004	9.6281
General Office Building	80.3014	8.7000e-004	7.8700e-003	6.6100e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.4472	9.4472	1.8000e-004	1.7000e-004	9.5034
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.7500e-003**	**0.0159**	**0.0133**	**1.0000e-004**		**1.2100e-003**	**1.2100e-003**		**1.2100e-003**	**1.2100e-003**		**19.0184**	**19.0184**	**3.6000e-004**	**3.5000e-004**	**19.1314**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0.0813551	8.8000e-004	7.9800e-003	6.7000e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004		9.5712	9.5712	1.8000e-004	1.8000e-004	9.6281
General Office Building	0.0803014	8.7000e-004	7.8700e-003	6.6100e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		9.4472	9.4472	1.8000e-004	1.7000e-004	9.5034
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.7500e-003**	**0.0159**	**0.0133**	**1.0000e-004**		**1.2100e-003**	**1.2100e-003**		**1.2100e-003**	**1.2100e-003**		**19.0184**	**19.0184**	**3.6000e-004**	**3.5000e-004**	**19.1314**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0739	7.0000e-005	7.6700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Unmitigated	2.0739	7.0000e-005	7.6700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4801					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5931					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.6700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Total	**2.0739**	**7.0000e-005**	**7.6700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0164**	**0.0164**	**4.0000e-005**		**0.0175**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4801					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5931					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.1000e-004	7.0000e-005	7.6700e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0164	0.0164	4.0000e-005		0.0175
Total	**2.0739**	**7.0000e-005**	**7.6700e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**		**0.0164**	**0.0164**	**4.0000e-005**		**0.0175**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	8.00	260	97	0.37	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Total	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**		**0.0901**	**0.0901**		**0.0829**	**0.0829**		**301.2390**	**301.2390**	**0.0974**		**303.6746**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	6	28	25	0.73	Diesel
Fire Pump	1	1	6	25	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (25 - 50 HP)	0.2461	1.2836	0.9909	1.1800e-003		0.1081	0.1081		0.1081	0.1081		125.9271	125.9271	0.0177		126.3685
Fire Pump - Diesel (25 - 50 HP)	0.0410	0.2141	0.1650	2.0000e-004		8.8500e-003	8.8500e-003		8.8500e-003	8.8500e-003		20.9879	20.9879	2.9400e-003		21.0614
Total	**0.2872**	**1.4977**	**1.1558**	**1.3800e-003**		**0.1169**	**0.1169**		**0.1169**	**0.1169**		**146.9150**	**146.9150**	**0.0206**		**147.4299**

11.0 Vegetation

Patton CEQA IS/MND - 2021

Trinity County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	59.76	User Defined Unit	1.37	59,760.00	0
General Light Industry	8.46	1000sqft	0.19	8,460.00	0
General Office Building	1.50	1000sqft	0.03	1,500.00	0
Refrigerated Warehouse-No Rail	0.70	1000sqft	0.02	700.00	0
Unrefrigerated Warehouse-No Rail	2.58	1000sqft	0.06	2,580.00	0
Other Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0
Other Non-Asphalt Surfaces	1.00	Acre	1.00	43,560.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	88
Climate Zone	1			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Pacific Gas & Eletric Company data is used since the Trinity Public Utilities District does not have known intensity factors

Land Use - See Project Description

Off-road Equipment -

Trips and VMT - Demolition reduced due to the subject property being vacant land

Vehicle Trips - See Transportation Section for trip values. No operations on Sundays.

Landscape Equipment - 10 Snow Days in Hayfork, CA per year on average

Road Dust - 10 MPH Maximum

Energy Use -

Water And Wastewater - See Water demand in project description

Solid Waste - Waste calculations based on industry practices

Operational Off-Road Equipment - Ongoing use of a tractor for continued operations

Stationary Sources - Emergency Generators and Fire Pumps - Emergency generator for the Mixed Use Building and fire pump for sprinklers, if required.

Land Use Change - Proposed vegetative screening for project

Waste Mitigation -

Construction Phase - Construction should be complete by summer 2022

Grading - Total Graded acres was changed to 3 acres

Architectural Coating - Non Residential interior was changed from 109,500 to 11,164 to account for the; 500 Commercial Nursery retail; 1,500 Shared use offices; 8,464 post harvest; 700 Distribution Types 11 & 13
Non residential Exterior was changed from 36,500 to 11,164 to account fo rthe same square footage breakdown as interior.

Area Coating - Non-residential interiors and Non-residential exteriors were changed from 109,500 to 11,164 and 36,500 to 11,164 square ft., respectively.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	36,500.00	11,164.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	109,500.00	11,164.00
tblLandUse	LandUseSquareFeet	0.00	59,760.00
tblLandUse	LotAcreage	0.00	1.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	25.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	25.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	6.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	28.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	0.00	0.46
tblVehicleTrips	ST_TR	1.32	3.07
tblVehicleTrips	ST_TR	2.46	3.67
tblVehicleTrips	ST_TR	1.68	17.50
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	0.00	0.46
tblVehicleTrips	WD_TR	6.97	3.07

tblVehicleTrips	WD_TR	11.03	3.67
tblVehicleTrips	WD_TR	1.68	17.50
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2210	1.7432	1.7801	3.1300e-003	0.1261	0.0823	0.2085	0.0531	0.0770	0.1301	0.0000	275.6630	275.6630	0.0577	0.0000	277.1051
2022	0.3246	1.1887	1.4846	2.6600e-003	0.0543	0.0525	0.1068	0.0147	0.0494	0.0641	0.0000	234.7377	234.7377	0.0454	0.0000	235.8731
Maximum	**0.3246**	**1.7432**	**1.7801**	**3.1300e-003**	**0.1261**	**0.0823**	**0.2085**	**0.0531**	**0.0770**	**0.1301**	**0.0000**	**275.6630**	**275.6630**	**0.0577**	**0.0000**	**277.1051**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2210	1.7432	1.7801	3.1300e-003	0.1261	0.0823	0.2085	0.0531	0.0770	0.1301	0.0000	275.6628	275.6628	0.0577	0.0000	277.1048
2022	0.3246	1.1887	1.4846	2.6600e-003	0.0543	0.0525	0.1068	0.0147	0.0494	0.0641	0.0000	234.7376	234.7376	0.0454	0.0000	235.8729
Maximum	**0.3246**	**1.7432**	**1.7801**	**3.1300e-003**	**0.1261**	**0.0823**	**0.2085**	**0.0531**	**0.0770**	**0.1301**	**0.0000**	**275.6628**	**275.6628**	**0.0577**	**0.0000**	**277.1048**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-8-2021	9-7-2021	0.9600	0.9600
2	9-8-2021	12-7-2021	0.7840	0.7840
3	12-8-2021	3-7-2022	0.7232	0.7232
4	3-8-2022	6-7-2022	0.7111	0.7111
5	6-8-2022	9-7-2022	0.2865	0.2865
		Highest	0.9600	0.9600

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3784	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3400e-003	1.3400e-003	0.0000	0.0000	1.4300e-003
Energy	3.2000e-004	2.8900e-003	2.4300e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	21.3126	21.3126	8.8000e-004	2.3000e-004	21.4025
Mobile	0.0295	0.1907	0.3583	9.2000e-004	0.0517	1.2300e-003	0.0529	0.0139	1.1600e-003	0.0151	0.0000	84.7944	84.7944	8.2300e-003	0.0000	85.0002
Offroad	0.0214	0.2178	0.2909	4.0000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	35.5263	35.5263	0.0115	0.0000	35.8136
Stationary	7.0000e-004	3.6400e-003	2.8100e-003	0.0000		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.3237	0.3237	5.0000e-005	0.0000	0.3248
Waste						0.0000	0.0000		0.0000	0.0000	3.0408	0.0000	3.0408	0.1797	0.0000	7.5335
Water						0.0000	0.0000		0.0000	0.0000	0.9459	4.8596	5.8055	0.0974	2.3400e-003	8.9369
Total	**0.4303**	**0.4151**	**0.6551**	**1.3400e-003**	**0.0517**	**0.0135**	**0.0652**	**0.0139**	**0.0124**	**0.0264**	**3.9867**	**146.8179**	**150.8045**	**0.2977**	**2.5700e-003**	**159.0128**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3784	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3400e-003	1.3400e-003	0.0000	0.0000	1.4300e-003
Energy	3.2000e-004	2.8900e-003	2.4300e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	21.3126	21.3126	8.8000e-004	2.3000e-004	21.4025
Mobile	0.0295	0.1907	0.3583	9.2000e-004	0.0517	1.2300e-003	0.0529	0.0139	1.1600e-003	0.0151	0.0000	84.7944	84.7944	8.2300e-003	0.0000	85.0002
Offroad	0.0214	0.2178	0.2909	4.0000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	35.5263	35.5263	0.0115	0.0000	35.8136
Stationary	7.0000e-004	3.6400e-003	2.8100e-003	0.0000		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.3237	0.3237	5.0000e-005	0.0000	0.3248
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.9459	4.8596	5.8055	0.0974	2.3400e-003	8.9369
Total	**0.4303**	**0.4151**	**0.6551**	**1.3400e-003**	**0.0517**	**0.0135**	**0.0652**	**0.0139**	**0.0124**	**0.0264**	**0.9459**	**146.8179**	**147.7637**	**0.1180**	**2.5700e-003**	**151.4794**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**76.27**	**0.00**	**2.02**	**60.36**	**0.00**	**4.74**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	0.0000
Total	**0.0000**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/8/2021	7/5/2021	5	20	
2	Site Preparation	Site Preparation	7/6/2021	7/12/2021	5	5	
3	Grading	Grading	7/13/2021	7/22/2021	5	8	
4	Building Construction	Building Construction	7/23/2021	6/9/2022	5	230	
5	Paving	Paving	6/10/2022	7/5/2022	5	18	
6	Architectural Coating	Architectural Coating	7/6/2022	7/29/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,164; Non-Residential Outdoor: 11,164; Striped Parking Area: 5,227 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	158	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	61.00	26.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**		**0.0155**	**0.0155**		**0.0144**	**0.0144**	**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0800e-003	1.9100e-003	0.0172	2.0000e-005	1.8200e-003	3.0000e-005	1.8400e-003	4.8000e-004	3.0000e-005	5.1000e-004	0.0000	1.9959	1.9959	1.9000e-004	0.0000	2.0005
Total	**2.0800e-003**	**1.9100e-003**	**0.0172**	**2.0000e-005**	**1.8200e-003**	**3.0000e-005**	**1.8400e-003**	**4.8000e-004**	**3.0000e-005**	**5.1000e-004**	**0.0000**	**1.9959**	**1.9959**	**1.9000e-004**	**0.0000**	**2.0005**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**		**0.0155**	**0.0155**		**0.0144**	**0.0144**	**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0800e-003	1.9100e-003	0.0172	2.0000e-005	1.8200e-003	3.0000e-005	1.8400e-003	4.8000e-004	3.0000e-005	5.1000e-004	0.0000	1.9959	1.9959	1.9000e-004	0.0000	2.0005
Total	**2.0800e-003**	**1.9100e-003**	**0.0172**	**2.0000e-005**	**1.8200e-003**	**3.0000e-005**	**1.8400e-003**	**4.8000e-004**	**3.0000e-005**	**5.1000e-004**	**0.0000**	**1.9959**	**1.9959**	**1.9000e-004**	**0.0000**	**2.0005**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
Total	**9.7200e-003**	**0.1012**	**0.0529**	**1.0000e-004**	**0.0452**	**5.1100e-003**	**0.0503**	**0.0248**	**4.7000e-003**	**0.0295**	**0.0000**	**8.3589**	**8.3589**	**2.7000e-003**	**0.0000**	**8.4265**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	5.7000e-004	5.1600e-003	1.0000e-005	5.4000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5988	0.5988	6.0000e-005	0.0000	0.6002
Total	**6.2000e-004**	**5.7000e-004**	**5.1600e-003**	**1.0000e-005**	**5.4000e-004**	**1.0000e-005**	**5.5000e-004**	**1.5000e-004**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**0.5988**	**0.5988**	**6.0000e-005**	**0.0000**	**0.6002**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
Total	**9.7200e-003**	**0.1012**	**0.0529**	**1.0000e-004**	**0.0452**	**5.1100e-003**	**0.0503**	**0.0248**	**4.7000e-003**	**0.0295**	**0.0000**	**8.3589**	**8.3589**	**2.7000e-003**	**0.0000**	**8.4265**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	5.7000e-004	5.1600e-003	1.0000e-005	5.4000e-004	1.0000e-005	5.5000e-004	1.5000e-004	1.0000e-005	1.5000e-004	0.0000	0.5988	0.5988	6.0000e-005	0.0000	0.6002
Total	**6.2000e-004**	**5.7000e-004**	**5.1600e-003**	**1.0000e-005**	**5.4000e-004**	**1.0000e-005**	**5.5000e-004**	**1.5000e-004**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**0.5988**	**0.5988**	**6.0000e-005**	**0.0000**	**0.6002**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
Total	**9.1600e-003**	**0.0990**	**0.0634**	**1.2000e-004**	**0.0262**	**4.6400e-003**	**0.0309**	**0.0135**	**4.2700e-003**	**0.0177**	**0.0000**	**10.4215**	**10.4215**	**3.3700e-003**	**0.0000**	**10.5057**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	7.6000e-004	6.8700e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7983	0.7983	7.0000e-005	0.0000	0.8002
Total	**8.3000e-004**	**7.6000e-004**	**6.8700e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7983**	**0.7983**	**7.0000e-005**	**0.0000**	**0.8002**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
Total	**9.1600e-003**	**0.0990**	**0.0634**	**1.2000e-004**	**0.0262**	**4.6400e-003**	**0.0309**	**0.0135**	**4.2700e-003**	**0.0177**	**0.0000**	**10.4215**	**10.4215**	**3.3700e-003**	**0.0000**	**10.5057**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	7.6000e-004	6.8700e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.4000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.7983	0.7983	7.0000e-005	0.0000	0.8002
Total	**8.3000e-004**	**7.6000e-004**	**6.8700e-003**	**1.0000e-005**	**7.3000e-004**	**1.0000e-005**	**7.4000e-004**	**1.9000e-004**	**1.0000e-005**	**2.0000e-004**	**0.0000**	**0.7983**	**0.7983**	**7.0000e-005**	**0.0000**	**0.8002**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1103	1.0111	0.9614	1.5600e-003		0.0556	0.0556		0.0523	0.0523	0.0000	134.3496	134.3496	0.0324	0.0000	135.1599
Total	**0.1103**	**1.0111**	**0.9614**	**1.5600e-003**		**0.0556**	**0.0556**		**0.0523**	**0.0523**	**0.0000**	**134.3496**	**134.3496**	**0.0324**	**0.0000**	**135.1599**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6400e-003	0.1693	0.0522	4.0000e-004	8.8500e-003	7.5000e-004	9.6000e-003	2.5700e-003	7.1000e-004	3.2800e-003	0.0000	38.0636	38.0636	4.9200e-003	0.0000	38.1866
Worker	0.0490	0.0450	0.4053	5.2000e-004	0.0428	6.6000e-004	0.0435	0.0114	6.1000e-004	0.0120	0.0000	47.0757	47.0757	4.3900e-003	0.0000	47.1854
Total	**0.0566**	**0.2143**	**0.4576**	**9.2000e-004**	**0.0517**	**1.4100e-003**	**0.0531**	**0.0140**	**1.3200e-003**	**0.0153**	**0.0000**	**85.1392**	**85.1392**	**9.3100e-003**	**0.0000**	**85.3720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1103	1.0111	0.9614	1.5600e-003		0.0556	0.0556		0.0523	0.0523	0.0000	134.3495	134.3495	0.0324	0.0000	135.1598
Total	**0.1103**	**1.0111**	**0.9614**	**1.5600e-003**		**0.0556**	**0.0556**		**0.0523**	**0.0523**	**0.0000**	**134.3495**	**134.3495**	**0.0324**	**0.0000**	**135.1598**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6400e-003	0.1693	0.0522	4.0000e-004	8.8500e-003	7.5000e-004	9.6000e-003	2.5700e-003	7.1000e-004	3.2800e-003	0.0000	38.0636	38.0636	4.9200e-003	0.0000	38.1866
Worker	0.0490	0.0450	0.4053	5.2000e-004	0.0428	6.6000e-004	0.0435	0.0114	6.1000e-004	0.0120	0.0000	47.0757	47.0757	4.3900e-003	0.0000	47.1854
Total	**0.0566**	**0.2143**	**0.4576**	**9.2000e-004**	**0.0517**	**1.4100e-003**	**0.0531**	**0.0140**	**1.3200e-003**	**0.0153**	**0.0000**	**85.1392**	**85.1392**	**9.3100e-003**	**0.0000**	**85.3720**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0973	0.8901	0.9327	1.5400e-003		0.0461	0.0461		0.0434	0.0434	0.0000	132.0834	132.0834	0.0316	0.0000	132.8745
Total	**0.0973**	**0.8901**	**0.9327**	**1.5400e-003**		**0.0461**	**0.0461**		**0.0434**	**0.0434**	**0.0000**	**132.0834**	**132.0834**	**0.0316**	**0.0000**	**132.8745**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8300e-003	0.1571	0.0454	3.9000e-004	8.7000e-003	6.5000e-004	9.3500e-003	2.5200e-003	6.2000e-004	3.1400e-003	0.0000	37.0927	37.0927	4.8600e-003	0.0000	37.2142
Worker	0.0452	0.0399	0.3514	5.0000e-004	0.0421	6.0000e-004	0.0427	0.0112	5.6000e-004	0.0118	0.0000	44.8135	44.8135	3.8200e-003	0.0000	44.9089
Total	**0.0520**	**0.1970**	**0.3967**	**8.9000e-004**	**0.0508**	**1.2500e-003**	**0.0520**	**0.0137**	**1.1800e-003**	**0.0149**	**0.0000**	**81.9062**	**81.9062**	**8.6800e-003**	**0.0000**	**82.1231**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0973	0.8901	0.9327	1.5400e-003		0.0461	0.0461		0.0434	0.0434	0.0000	132.0832	132.0832	0.0316	0.0000	132.8743
Total	**0.0973**	**0.8901**	**0.9327**	**1.5400e-003**		**0.0461**	**0.0461**		**0.0434**	**0.0434**	**0.0000**	**132.0832**	**132.0832**	**0.0316**	**0.0000**	**132.8743**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8300e-003	0.1571	0.0454	3.9000e-004	8.7000e-003	6.5000e-004	9.3500e-003	2.5200e-003	6.2000e-004	3.1400e-003	0.0000	37.0927	37.0927	4.8600e-003	0.0000	37.2142
Worker	0.0452	0.0399	0.3514	5.0000e-004	0.0421	6.0000e-004	0.0427	0.0112	5.6000e-004	0.0118	0.0000	44.8135	44.8135	3.8200e-003	0.0000	44.9089
Total	**0.0520**	**0.1970**	**0.3967**	**8.9000e-004**	**0.0508**	**1.2500e-003**	**0.0520**	**0.0137**	**1.1800e-003**	**0.0149**	**0.0000**	**81.9062**	**81.9062**	**8.6800e-003**	**0.0000**	**82.1231**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0101**	**0.0857**	**0.1098**	**1.7000e-004**		**4.3900e-003**	**4.3900e-003**		**4.0500e-003**	**4.0500e-003**	**0.0000**	**14.7383**	**14.7383**	**4.6300e-003**	**0.0000**	**14.8540**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	2.0600e-003	0.0182	3.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	5.8000e-004	3.0000e-005	6.1000e-004	0.0000	2.3199	2.3199	2.0000e-004	0.0000	2.3249
Total	**2.3400e-003**	**2.0600e-003**	**0.0182**	**3.0000e-005**	**2.1800e-003**	**3.0000e-005**	**2.2100e-003**	**5.8000e-004**	**3.0000e-005**	**6.1000e-004**	**0.0000**	**2.3199**	**2.3199**	**2.0000e-004**	**0.0000**	**2.3249**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0101**	**0.0857**	**0.1098**	**1.7000e-004**		**4.3900e-003**	**4.3900e-003**		**4.0500e-003**	**4.0500e-003**	**0.0000**	**14.7383**	**14.7383**	**4.6300e-003**	**0.0000**	**14.8540**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e-003	2.0600e-003	0.0182	3.0000e-005	2.1800e-003	3.0000e-005	2.2100e-003	5.8000e-004	3.0000e-005	6.1000e-004	0.0000	2.3199	2.3199	2.0000e-004	0.0000	2.3249
Total	**2.3400e-003**	**2.0600e-003**	**0.0182**	**3.0000e-005**	**2.1800e-003**	**3.0000e-005**	**2.2100e-003**	**5.8000e-004**	**3.0000e-005**	**6.1000e-004**	**0.0000**	**2.3199**	**2.3199**	**2.0000e-004**	**0.0000**	**2.3249**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1597					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
Total	**0.1615**	**0.0127**	**0.0163**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.5000e-004**	**0.0000**	**2.3017**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-003	1.2400e-003	0.0109	2.0000e-005	1.3100e-003	2.0000e-005	1.3300e-003	3.5000e-004	2.0000e-005	3.7000e-004	0.0000	1.3920	1.3920	1.2000e-004	0.0000	1.3949
Total	**1.4000e-003**	**1.2400e-003**	**0.0109**	**2.0000e-005**	**1.3100e-003**	**2.0000e-005**	**1.3300e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.3920**	**1.3920**	**1.2000e-004**	**0.0000**	**1.3949**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1597					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
Total	**0.1615**	**0.0127**	**0.0163**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.5000e-004**	**0.0000**	**2.3017**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-003	1.2400e-003	0.0109	2.0000e-005	1.3100e-003	2.0000e-005	1.3300e-003	3.5000e-004	2.0000e-005	3.7000e-004	0.0000	1.3920	1.3920	1.2000e-004	0.0000	1.3949
Total	**1.4000e-003**	**1.2400e-003**	**0.0109**	**2.0000e-005**	**1.3100e-003**	**2.0000e-005**	**1.3300e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.3920**	**1.3920**	**1.2000e-004**	**0.0000**	**1.3949**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0295	0.1907	0.3583	9.2000e-004	0.0517	1.2300e-003	0.0529	0.0139	1.1600e-003	0.0151	0.0000	84.7944	84.7944	8.2300e-003	0.0000	85.0002
Unmitigated	0.0295	0.1907	0.3583	9.2000e-004	0.0517	1.2300e-003	0.0529	0.0139	1.1600e-003	0.0151	0.0000	84.7944	84.7944	8.2300e-003	0.0000	85.0002

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	0.00	0.00		
General Light Industry	25.97	25.97	0.00	86,008	86,008
General Office Building	5.51	5.51	0.00	13,027	13,027
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	12.25	12.25	0.00	40,566	40,566
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	43.73	43.73	0.00	139,602	139,602

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Other Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
General Light Industry	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
General Office Building	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Other Asphalt Surfaces	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Other Non-Asphalt Surfaces	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Refrigerated Warehouse-No Rail	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315
Unrefrigerated Warehouse-No Rail	0.474428	0.044254	0.188558	0.126583	0.039843	0.006143	0.007900	0.101168	0.001698	0.001516	0.005560	0.001034	0.001315

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Patton CEQA IS/MND - 2021 - Trinity County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.1639	18.1639	8.2000e-004	1.7000e-004	18.2350
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	18.1639	18.1639	8.2000e-004	1.7000e-004	18.2350
NaturalGas Mitigated	3.2000e-004	2.8900e-003	2.4300e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1487	3.1487	6.0000e-005	6.0000e-005	3.1674
NaturalGas Unmitigated	3.2000e-004	2.8900e-003	2.4300e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1487	3.1487	6.0000e-005	6.0000e-005	3.1674

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	29694.6	1.6000e-004	1.4600e-003	1.2200e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5846	1.5846	3.0000e-005	3.0000e-005	1.5940
General Office Building	29310	1.6000e-004	1.4400e-003	1.2100e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5641	1.5641	3.0000e-005	3.0000e-005	1.5734
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.2000e-004**	**2.9000e-003**	**2.4300e-003**	**2.0000e-005**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**3.1487**	**3.1487**	**6.0000e-005**	**6.0000e-005**	**3.1674**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	29694.6	1.6000e-004	1.4600e-003	1.2200e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5846	1.5846	3.0000e-005	3.0000e-005	1.5940
General Office Building	29310	1.6000e-004	1.4400e-003	1.2100e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.5641	1.5641	3.0000e-005	3.0000e-005	1.5734
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.2000e-004**	**2.9000e-003**	**2.4300e-003**	**2.0000e-005**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**3.1487**	**3.1487**	**6.0000e-005**	**6.0000e-005**	**3.1674**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	36208.8	10.5336	4.8000e-004	1.0000e-004	10.5748
General Office Building	16590	4.8262	2.2000e-004	5.0000e-005	4.8451
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	9639	2.8041	1.3000e-004	3.0000e-005	2.8151
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**18.1639**	**8.3000e-004**	**1.8000e-004**	**18.2350**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	36208.8	10.5336	4.8000e-004	1.0000e-004	10.5748
General Office Building	16590	4.8262	2.2000e-004	5.0000e-005	4.8451
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	9639	2.8041	1.3000e-004	3.0000e-005	2.8151
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**18.1639**	**8.3000e-004**	**1.8000e-004**	**18.2350**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3784	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3400e-003	1.3400e-003	0.0000	0.0000	1.4300e-003
Unmitigated	0.3784	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3400e-003	1.3400e-003	0.0000	0.0000	1.4300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3400e-003	1.3400e-003	0.0000	0.0000	1.4300e-003
Total	**0.3784**	**1.0000e-005**	**6.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3400e-003**	**1.3400e-003**	**0.0000**	**0.0000**	**1.4300e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0876					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3400e-003	1.3400e-003	0.0000	0.0000	1.4300e-003
Total	**0.3784**	**1.0000e-005**	**6.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.3400e-003**	**1.3400e-003**	**0.0000**	**0.0000**	**1.4300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.8055	0.0974	2.3400e-003	8.9369
Unmitigated	5.8055	0.0974	2.3400e-003	8.9369

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.95638 / 0	3.7002	0.0639	1.5300e-003	5.7546
General Office Building	0.266601 / 0.1634	0.6706	8.7100e-003	2.1000e-004	0.9512
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0.161875 / 0	0.3062	5.2900e-003	1.3000e-004	0.4762
Unrefrigerated Warehouse-No Rail	0.596625 / 0	1.1284	0.0195	4.7000e-004	1.7549
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.8055**	**0.0974**	**2.3400e-003**	**8.9369**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	1.95638 / 0	3.7002	0.0639	1.5300e-003	5.7546
General Office Building	0.266601 / 0.1634	0.6706	8.7100e-003	2.1000e-004	0.9512
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0.161875 / 0	0.3062	5.2900e-003	1.3000e-004	0.4762
Unrefrigerated Warehouse-No Rail	0.596625 / 0	1.1284	0.0195	4.7000e-004	1.7549
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.8055**	**0.0974**	**2.3400e-003**	**8.9369**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	3.0408	0.1797	0.0000	7.5335

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	10.49	2.1294	0.1258	0.0000	5.2754
General Office Building	1.4	0.2842	0.0168	0.0000	0.7041
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0.66	0.1340	7.9200e-003	0.0000	0.3319
Unrefrigerated Warehouse-No Rail	2.43	0.4933	0.0292	0.0000	1.2221
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**3.0408**	**0.1797**	**0.0000**	**7.5335**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry		0.0000	0.0000	0.0000	0.0000
General Office Building		0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces		0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail		0.0000	0.0000	0.0000	0.0000
User Defined Commercial		0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	1	8.00	260	97	0.37	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/ Backhoes	0.0214	0.2178	0.2909	4.0000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	35.5263	35.5263	0.0115	0.0000	35.8136
Total	**0.0214**	**0.2178**	**0.2909**	**4.0000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**35.5263**	**35.5263**	**0.0115**	**0.0000**	**35.8136**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	6	28	25	0.73	Diesel
Fire Pump	1	1	6	25	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (25 - 50 HP)	5.7000e-004	3.0000e-003	2.3100e-003	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.2666	0.2666	4.0000e-005	0.0000	0.2675
Fire Pump - Diesel (25 - 50 HP)	1.2000e-004	6.4000e-004	4.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0571	0.0571	1.0000e-005	0.0000	0.0573
Total	**6.9000e-004**	**3.6400e-003**	**2.8000e-003**	**0.0000**		**2.8000e-004**	**2.8000e-004**		**2.8000e-004**	**2.8000e-004**	**0.0000**	**0.3237**	**0.3237**	**5.0000e-005**	**0.0000**	**0.3248**

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	0.0000	0.0000	0.0000	0.0000

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Others	3 / 3	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

APPENDIX B:

Biological Resources Assessment

UPDATED BIOLOGICAL RESOURCES (UPDATED) ASSESSMENT

Prepared For:
Patton Property
Highway 3
Peanut, CA 96041
APN #'s 019-750-13-00 & 019-750-17-00

December 4, 2019

Completed by:
Klamath Wildlife Resources
Biologist: Brian Shaw
1760 Kenyon Drive
Redding, CA 96001
Brian Shaw

TABLE OF CONTENTS

1. INTRODUCTION

The purpose of this biological resources assessment is to provide technical information and to review the proposed project in sufficient detail to determine to what extent the proposed project may affect federally listed, proposed, or candidate species as well as designated critical habitats for listed species and essential fish habitat (EFH) for appropriate fish species. The biological resources assessment is prepared in accordance with legal requirements in accordance with California Environmental Quality Act (CEQA) statutes, as well as the newest "Appendix D" for Regional Water Quality Control and California Department of Fish and Wildlife 2018 statutes for proposed new cannibas cultivation sites, as per *Section 722, Title 14 of the California Code of Regulations to read:* ***§ 722. General Lake or Streambed Alteration Agreement for Activities Related to Cannabis Cultivation*****.** . The document presents technical information upon which later decisions regarding project impacts are developed. This document also covers the requirements of the California State Water Resources Control Board's 2011 requirements for a Biological Resources Assessment.

UPDATE: There has been a minor change in the building site plan for the project. This can be found in Attachment 1. This is the placement of the "processing building" just east of where it was originally going to be placed. The overall effect of this is going to be very minimal and will not affect the natural resouces, wildlife and botany of the area in any way. More is discussed on this below. Due to this minor change however, an updated Bio-Report was completed, and is found herein.

PROJECT LOCATION

The project site consists of 80.17 combined parcel acres located on the corner of Rattlesnake Road and Highway 3 in the town of Peanut, CA 96041 in Trinity County, California. Cultivation occurs on APN #019-750-13-00 & 019-750-17-00, the western parcel and irrigation comes from an artesian well located at 39.0841, -122.9485, which is southeast of the single-family residence (Figure 1: Site Map). According to California USGS 7.5-Minute Quadrangles Index map, the project site is the Dukabella quadrangle.

Figure 1: Vicinity Map

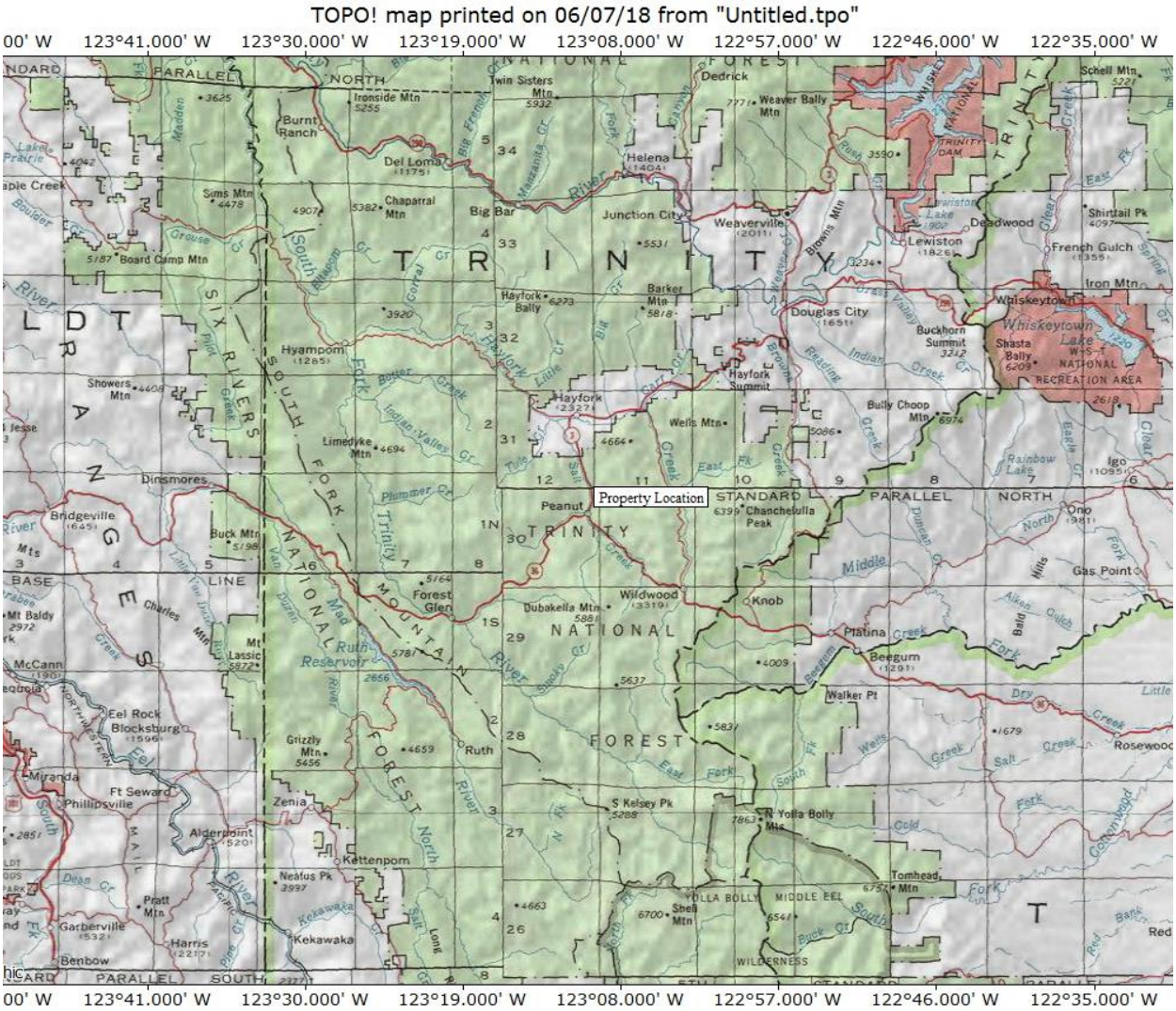

Figure 2: Project Site Location Map

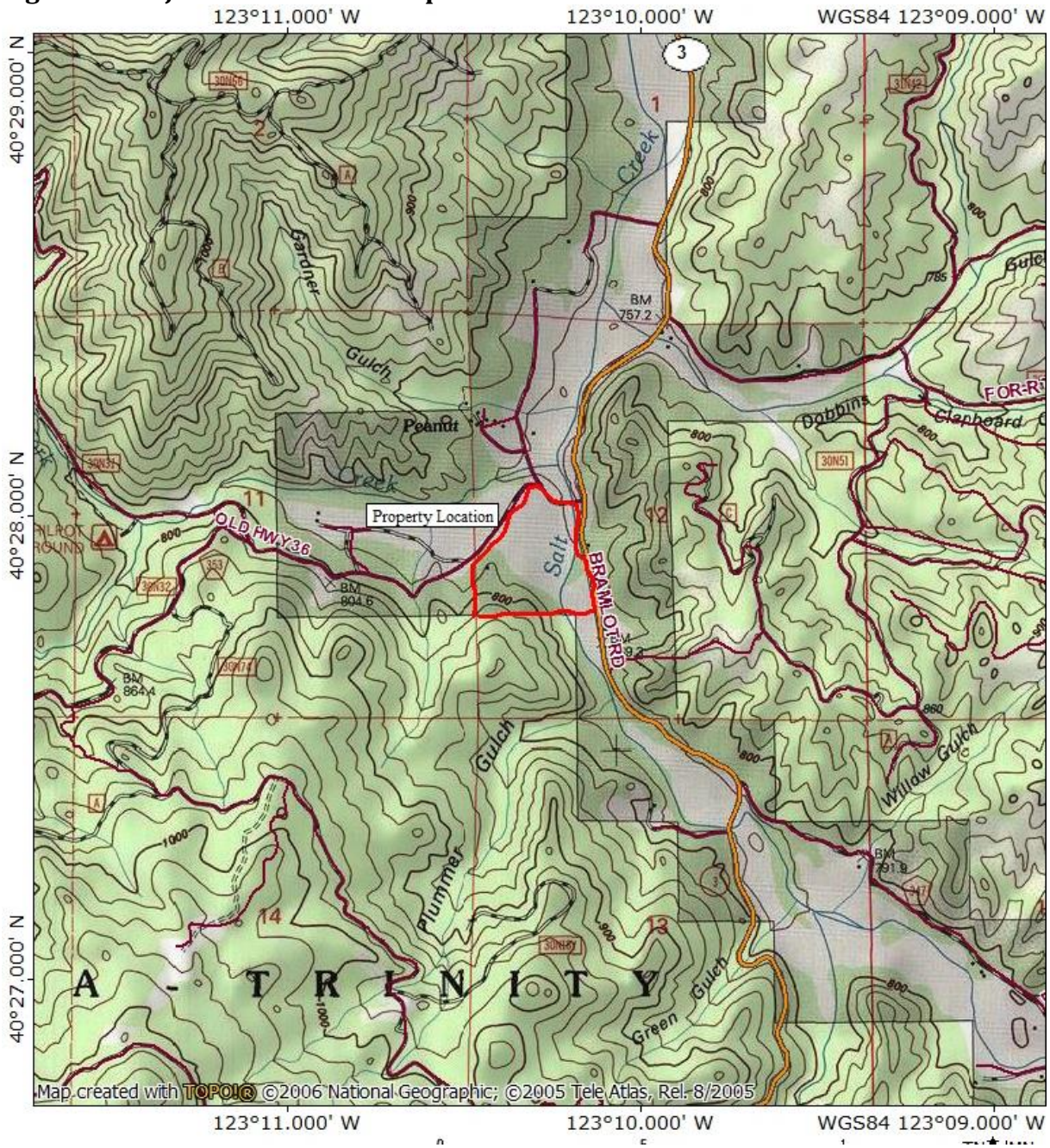

Figure 3: Project Site Map Air Photo (Red Line)

EXISTING SITE and HABITAT CONDITIONS

The property is located on a completely flat piece of land (See flat open area in air photo above, outlined in red, west of Highway 3) that has historically and extensively been used for agriculture for mostly grass and hay farming for over since the early 1900's. The lot is bounded by Rattlesnake Road on the north and west, Highway 3 and Rush Creek to the east, and an upsloping open, serpentinitic, rocky and ponderosa pine forest to the south.

The overall condition of the land is in an agricultural state, rather than a natural state. Thus, natural conditions are not the case here, as there has been tens of years of agriculture, which involves planting non-native grasses, harvesting them and tilling them under and starting again cyclically. Very little natural habitat exists on the low flat area where structures will be placed (middle of flat grassy lot in air photo above and site map found in appendices).

PROJECT DESCRIPTION

The project is located in Trinity County, with one undeveloped assessor's parcel number (APN) 019-750-13-00 (Parcel 1) with a physical address of 341 Rattlesnake Road, Peanut, CA 96041. Latitude and Longitude at the proposed cultivation site is 40.465600°, -123.171400°. Also the second developed parcel is APN 019-750-17-00 (Parcel 2) and has a physical address of 140 State Highway 3, Peanut, CA 96041. Latitude and Longitude at the

existing permitted Small Outdoor cultivation site is 40.465079°, -123.165522° (Appendix A).

Pursuant to Trinity County's Ordinance No. 315-843, this conditional use permit (CUP) would allow for a Medium Outdoor licensed to grow up to one acre of outdoor cannabis (43,560 square feet of canopy), and a Type 4 License for a wholesale Cannabis Nursery and resale of auxiliary nursery products. The nursery would be located next to the outdoor grow site and include one 30' x 120' greenhouse with artificial lighting. Nursery operations would include: preparing cutting materials and growth medium, taking cuttings from the mother plant, treating and planting the cuttings, growing the cuttings until roots are established, preparing the rooted cuttings for transport and distribution. The following would also be proposed: a groundwater well, power pole, a 400 square foot securely fenced composting area, solid waste container with cover and parking, and 10,000 square foot multi-use building. The proposed buildings and other features of the project are listed in the table below.

Table 1: Project Features and Area Summary

Project Features	**Area**
Cultivation Area	2-Acres
Multi-Use Building	10,000 square feet
Nursery Greenhouse	3600 square feet
Pond	1/2-Acre
Water Storage Area	5,000 square feet
Composting Site	400 square feet

QUALIFICATIONS

Klamath Wildlife Resources Senior Biologist, Brian Shaw has been approved by CDFW and CWQCB biologists as "qualified" to compete biological studies and reports for projects such as this, where there is ground manipulating activities on natural or non-natural lands. Brian Shaw has a Bachelor's of Science in Biological Science and a Bachelors of Arts in Geography. His understanding of northern California ecosystems is well understood and on par with any biologist in the field in California. He has owned and operated Klamath Wildlife Resources since the year 2000 and has been completing all types of biological surveys and reports and many other types of environmental surveys and reports since that time. His resume is attached as Appendix E for further reference.

2. METHODS

LISTED, PROPOSED, AND CANDIDATE SPECIES POTENTIALLY PRESENT

A list of threatened, endangered and sensitive species list for the surrounding area including Hayfork, Dukabella and adjacent quadrangles; which were reviewed to evaluate the potential was created using the California Natural Diversity Database (CNDDB) out to 1,

5, and 10 miles from the property center. The following list was created as a result, showing the species' state and federal listings:

Figure 4: CNDDB TES Species Map to 10 Miles of Subject Property

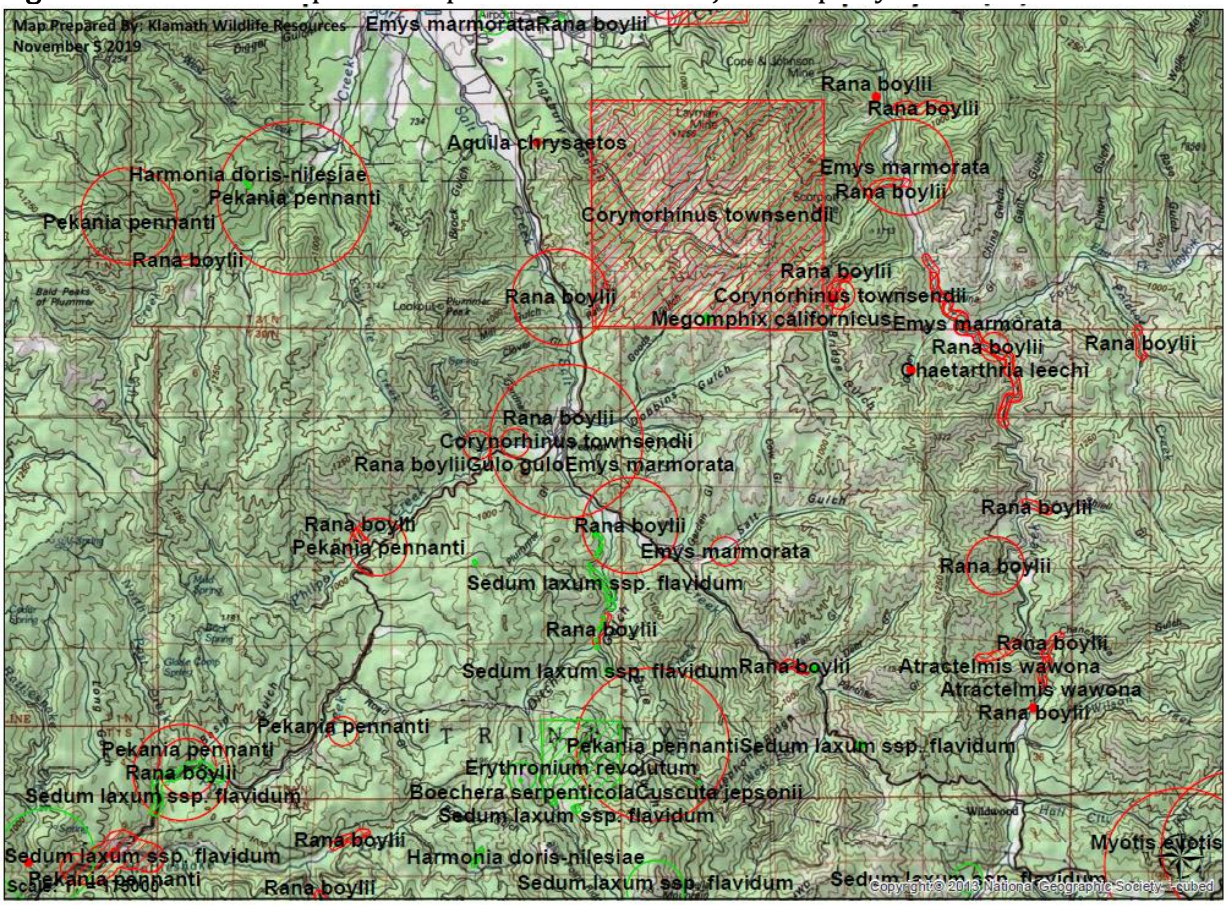

Table 1 – CNDDB and USFWS TES Combined Species List

Species	CDFW	State Listing	Federal	CNPS Plant Ranking
1-mile buffer				
California Wolverine (*Gulo gulo*)		Threatened		
Western Pond Turtle (*Clemmys marmorata*)		SSC		
Pacific Fisher - West Coast DPS (*Pekania pennanti*)	SSC	SSC	Candidate	
Foothill Yellow-Legged Frog *(Rana boylii)*	SSC			
Golden Eagle (*Aquila crysaetos*)	SSC			
Tailed Frog (*Ascaphus truei*)	SSC			

Summer-run steelhead trout (*Oncorhynchus mykiss irideus*)	SSC			
Summer run chinook salmon (*Oncorhynchus tshawytscha spring-run*)	SSC			
Osprey (*Pandion haeliaetus*)	SSC			
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	-	Endangered	Threatened	
Pallid bat (*Antrozous pallidus*)	SSC	-	-	
Townsend's big-eared bat (*Corynorhinus townsendii*)	SSC			
Grasshopper sparrow (*Ammodramus savannarum*)	SSC	-	-	
Double-crested cormorant (*Phalacrocorax auritus*)	WL	-	-	
American badger (*Taxidea taxus*)	SSC			
Northern Goshawk (*Accipiter gentilis*)	SSC		SSC	
Northern Spotted Owl (*Strix occidentalis caurina*)	SSC	Threatened	Threatened	
Gray Wolf (*Canis lupis*)			Endangered	
Natural Bridge Megomphix (*Megomphix californicus*) – A Snail	SSC			
Nile's Harmonia *(Harmonia doris-nilesiae)*				CNPS 1B
Tracy's Eriastrum (*Eriastrum tracium*)				CNPS 1B
Hoover's Spurge (*Chamaesyce hooveri)*		Threatened		CNPS 1B
Slender Orcutt Grass (*Orcuttia tenuis)*		Threatened		CNPS 1B
Pale Yellow Stonecrop (*Sedum flaxum*)				CNPS 4
Mahogany Fawn Lily (*Erythronium revolutum*)				CNPS 2B.2
Wawona Riffle Beetle (*Atractelmis wawona*)	Globally Sensitive			
Serpentine rockcress (*Boechera serpenticola*)				CNPS 1B

Jepson's Dodder (*Cuscuta jepsonii*)				CNPS 1B

The USFWS list of federally listed plants, animals and habitats is listed in the Appendices.

STUDIES REQUIRED

Studies required include a general wildlife and aquatic survey and botanical survey. Descriptions of the methodologies used to conduct the wildlife and botanical evaluations are provided below. These surveys were completed on May 30, 2018.

WILDLIFE and BIOLOGICAL EVALUATION

A wildlife evaluation was conducted to determine if habitat potentially capable of supporting endangered, threatened, proposed, or candidate species is present, or may be present, in the study area. The wildlife evaluation was conducted in two stages. First, historical occurrence databases were queried to identify federally listed, proposed, and candidate animal species previously reported in the vicinity of the study area, and/or potentially affected by construction within this project. These records include CNDDB records (CDFW, 2018), and critical habitat GIS data maintained by the National Marine Fisheries Service (NMFS, 2018) and US Fish and Wildlife (USFWS, 2018), all listed above. The second stage of the project consisted of a habitat and species study within and just beyond the bounds of the imprint of the study area. Based on the results of the records review and this field evaluation, the potential for federally listed, proposed, and candidate animal species to utilize habitats in the study area was determined to be minimal. A field study was completed by Brian Shaw on May 30, 2018. The results of the survey are discussed below.

BOTANICAL EVALUATION

A botanical evaluation was conducted to determine if habitat potentially capable of supporting federally listed, proposed, or candidate plant species exists in the study areas. The botanical evaluation was completed in two stages. First, historical occurrence databases were queried to identify federally listed, proposed, and candidate species previously reported in the vicinity of the study area, and/or species that could potentially be affected by the construction within this project. These records included the USFWS species list for the Fort Bidwell quadrangle and adjacent quadrangles, California Natural Diversity Data Base (CNDDB) records (CDFW, 2018), and critical habitat geographic information system (GIS) data maintained by the USFWS (USFWS, 2018). The second stage of the study consisted of a field visit and project walkthrough and survey of the natural environment in and near the project footprint. The survey generally followed the CDFW *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, 2009*. Botanical TES species were the most likely life forms to be discovered on or near to the open field where the construction of processing buildings will be placed.

A survey was completed on May 30, 2018 during peak flowing period for all plants in the area. The results of the study are found in the "Results" section further along in the document.

Time Spent At Site: A full eight hours was spent evaluating the approximate 40 acre parcel, with focus on areas where buildings will be built. This was plenty of time to evaluate the non-native fallow cropfield that currently exists at the property for botanicals, birds, mammals, habitats and make in depth biological evaluations for the site.

AGENCY COORDINATION

There are no consultations necessary with regulatory agencies for fish, wildlife or botanical species are a result of the proposed project, or as a result of the biological and botanical survey.

3. RESULTS: ENVIRONMENTAL SETTING

DESCRIPTION OF EXISTING BIOLOGICAL AND PHYSICAL CONDITIONS

The study area is located at 2605 feet above sea level just west of Salt Creek and just south of where Philpot Creek joins Salt Creek, in an open flat grassy area, which is in the bottomlands of the Trinity mountains which are dominated by coniferous forest. Much of the property south and east of the lone flat area on the property indeed does consist of coniferous mixed conifer and ponderosa pine forests.

As discussed earlier, the flat area where the production buildings will be placed have been used for agriculture for nearly 100 years. Thus, the area does not have much of its original natural setting remaining. Which is why the landowner is choosing to build here, to limit any possible impacts to the natural environment here. The rest of the parcel however, immediately turns much more natural, with the riparian Salt Creek just to the west and the serpentinitic upland ponderosa pine forest immediately adjacent to the south, and the mixed conifer forest just across Salt Creek and Highway 3 on the upland hills to the east. None of these latter areas will be touched during construction the buildings, which again will be out in the grassy flats away from all of the natural environments that surround the grassy flat.

The area is defined by the California Habitat Wildlife Relationship (CWHR) system (*Laudenslayer et al 1988)* as the three following habitat types: Ponderosa Pine (PIPO), Sierra Mixed Conifer (SMC) and Riparian (MRI), and Cropland. The non-native cropland hasn't been used for many years, thus lies fallow, and is just an open dry field with only naturally occurring low lying plants and grasses growing on it. There are no trees on or near the proposed building site.

The climate of this part of Trinity County is on the edge of the Pacific Northwest climate and Mediterranean climate in nature, but exhibits the dry summers characteristic of California. Thus, dry summers are the case here with somewhat to very wet, and somewhat temperate winters. Annual precipitation in Hayfork the town, which is only 6 miles north of the subject property is: 33.31" per year (WRCC, 2018).

A soils search was completed for the property, using the NRCS Soils Search online query; with two soils units found to be present in the study area, which are the Hohmann-Brader and Xerofluvents-riverwash associations (Table 2). The most dominant rock type (xerofluvents) is a riverwash, derived from a bedrock and is alluvial by nature. Thus, the soil in the correct situation can be considered "hydric" in nature. However, the soil type post deposition, is not listed as a hydric soil. The other scantly represented soil (Hohmann) is found on the upslopes from the flat area where the construction will be located, and is an upland rock formation derived from eroded igneous material not considered hydric in nature.

Table 2 – NRCS Soils Survey Query

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
94	Hohmann-Brader families association, 40 to 60 percent slopes.	0.5	1.9%
351	Xerofluvents-Riverwash association, 0 to 20 percent slopes.	26.0	98.1%
Totals for Area of Interest		**26.5**	**100.0**

4. RESULTS: BIOLOGICAL RESOURCES, IMPACTS, AND MITIGATION

OCCURRENCES OF FEDERAL and STATE LISTED, PROPOSED AND CANDIDATE WILDLIFE SPECIES

The USFWS and California State species list for the Hayfork and Dukabella and adjacent quadrangles list the following federal and state listed, proposed, or candidate animal species as potentially being affected by work proposed in the quadrangle.

Animals

- Northern Spotted Owl *(Strix occidentalis)*
- Yellow Billed Cuckoo *(Coccyzus americanus)*
- Gray Wolf *(Canis lupis)*
- Pacific Fisher (*Martes pennant*)
- California Wolverine (*Gulo gulo*)

Discussion

For all of the above USFWS listed (first three above) species, the US Fish and Wildlife service has nearby "critical habitat" and occurrences for these species. However, as Appendix B shows, it further states that "there is no critical habitat for these species" on the property. As again, the property long ago was converted to cropland, and remains as such

today. However, due to these species' sensitive nature, it is important to discuss the species and their level of likelihood to be found in the area, as well as their closest known locations near the project area.

Northern Spotted Owl (*Strix occidentalis caurina*)
A medium sized chocolate brown owl with dark eyes, the northern spotted owl is a nocturnal owl that captures its prey by perch and pounce stealth, eating mostly small forest rodents. Northern spotted owl live in forests characterized by dense canopy closure of mature and old-growth trees, abundant logs, standing snags, and love trees with broken tops. These forests have been largely reduced as a result of western forest logging in their range. As a result of this habitat loss, their numbers have significantly diminished by approximately half since the early 1980's to around 2000 pairs, with 560 pairs in northern California.

There are three known territories within ten miles of the project location. The CNDDB listed "Brock Gulch", "Clover Gulch" and "East Tule Creek" NSO territories are found here, with the Brock Gulch territory within 2 miles from the project location. However, the last time a detection was received from this territory was in 1982, mostly due to lack of NSO protocol surveys being completed on National Forest lands here. The most recent detection of any of the three nearby territories is from the East Tule Creek territory, which was detected last in 1992.

Habitat at the building site is non-forested, thus NSO and their habitat will not be affected by the minor construction of buildings on the property. No NSO or its habitat will be affected in any way by this project.

Yellow Billed Cuckoo *(Coccyzus americanus)*
Plumage is grayish-brown above and white below, with red primary flight feathers. The tail feathers are boldly patterned with black and white below. The legs are short and bluish-gray. Adults have a narrow, yellow eye ring. Western yellow-billed cuckoos breed in large blocks of riparian habitats (particularly woodlands with cottonwoods and willows). Dense understory foliage appears to be an important factor in nest site selection.

There are no known occurrences of YBC within ten miles of the project area. However, large areas of suitable riparian habitat do exist within this rang along Salt Creek and Rattlesnake Creek and some of the other tributaries to Salt Creek.

However, there is no USFWS deemed critical habitat found anywhere close to the property, nor is there suitable habitat along Salt Creek which runs through the subject property or Philpot Creek which flows into Salt Creek just north of the property. Also, the construction site is a fallow flat cropfield with no riparian vegetation. Thus no YBS or its habitat will be affected by this project.

Gray Wolf (*Canis lupus*)
Recently re-introduced into the northern California counties, both the State of California and the USFWS has listed the California population of wolves and its critical habitat areas as Endangered. The Gray Wolf, being a keystone predator, is an integral component of the ecosystems to which it typically belongs. The wide range of habitats in which wolves can thrive reflects their adaptability as a species, and includes temperate forests, mountains, tundra, taiga, and grasslands.
Trinity County and its wide open and remote spaces and wide variety of habitats provide very good potential habitat for the gray wolf. The species was found in Trinity County prior to modern settlement (past 150 years). However, at current time, there is only the two packs of wolves in California, which are found in the northeastern counties of Siskiyou, Shasta and Lassen Counties.

There are no areas of critical habitat listed near the project area for gray wolf. Also, there are no recent or historical species accounts in any of the USFWS or CNDDB databases for the species within ten miles of the project area. Thus no gray wolf or its habitat will be affected by this project.

California Wolverine (*Gulo gulo*)
Wolverines appear to have few specific habitat requirements aside from extensive areas of wilderness dominated by coniferous forest of sufficient size to support wide-ranging, solitary individuals. In the continental United States, wolverines are primarily found in stands dominated by true-fir, spruce, hemlock, Douglas-fir, or lodgepole pine.
In northern California, where the recent location of the wolverine was found, which now IS its known "habitat type", as it is the only currently known wolverine in California, includes high elevation Jeffrey pine, California red fir, Sierra mixed conifer, and lodgepole pine.

The California Wolverine is listed as a California State threatened species. The recent sightings show that wolverine still exist in California. There are undoubtedly many more of the species, as the species was discovered at a "bait station" while conducting "carnivore protocol surveys" by biologists. The vast majority of the vast mountainous, forested and above treeline alpine areas in California are not being surveyed in this way. Thus, it can be somewhat confidently surmised that more of the species exist, but just are not seen, as they are a reclusive species.

One other somewhat recent sighting was recorded very near to the subject property, just one mile up Philpot Creek near the Philpot Creek USFS campground in 1991. And again, bait station Carnivore surveys (Zielinski et al protocol, 1995) have not been conducted on any type of wide ranging scale in any of the forests of northern California except the Plumas NF and their 10-year, well-funded "Quincy Library Group" set of forest fire protection pilot project. Thus, with the one detection nearby to the subject property, it is easy to surmise that the species is still present in the Trinity Mountains and Trinity County.

However, the very minor building that will be placed out in a fallow, non-forested, non-native flat grass field will not impact existing locations or future locations of the wolverine in any way.

Pacific Fisher (*Pekania pennanti*)

A Federal Candidate and CA State Candidate species for listing, the Pacific Fisher is currently listed as a California species of special concern. Fishers prefer large areas of dense mature coniferous or mixed forest and are solitary animals. They are mainly nocturnal, but may be active during the day. They travel many miles along ridges in search of prey, seeking shelter in hollow trees, logs, rock crevices, and dens of other animals. Fishers in California prefer a strong component of oak, with California Black Oak for denning in their natural broken off tops and side branch holes that are left. Trinity County possesses very good habitat characteristics for the species, as is evident as four separate reported locations of the species exist within five miles of the project area, the most recent in 1995. The mixed-conifer and oak sub-component and wide open spaces of Trinity county provide very good habitat conditions for the species.

However, the very minor building that will be placed out in a non-forested, fallow, non-native flat grass field will not impact existing locations or future locations of the Pacific fisher in any way.

Other Species

The following TES species are listed on the USFWS and CNDDB wildlife queries for the area as occurring close to the project site, but have no suitable habitat located on the subject property building location:

- Foothill Yellow-Legged Frog (*Rana boylii*) - No creek in construction area, but species found in Salt Creek nearby but will not be affected by construction.
- Northwestern Pond Turtle (*Emys marmorata*) - No creek in construction area.
- Western Tailed-Frog (*Ascaphus trueii*) – No creek in construction area.
- Conservancy Fairy Shrimp (*Branchinecta conservation*) - No vernal pools on property.
- Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) - No vernal pools on property.
- Vernal Pool Tadpole Shrimp (*Lepidurus packardi*) – No vernal pools on property.

Wildlife/Avian Survey and Results

KWR biologist Brian Shaw completed a wildlife and avian survey on May 30, 2018. A pair of red-tailed hawks were seen flying over during the survey. A nest search was conducted in the adjacent pine forest to the north and small sized riparian area to the east (Salt Creek). No Nests were found. Trees also were searched for raptor and other bird nests, with none discovered. A point count bird survey was conducted on this day, as per protocol. Mammals, frogs, reptiles, insects (butterflies, and others) were also searched for. No other protocol surveys for TES species were required due to lack of their specific habitat(s). Thus a generalized observation survey was completed. There were no Endangered, Threatened, Candidate or Sensitive species found, nor were there any nests

found that would be protected by the Migratory Bird Treaty Act during the May 2018 field survey. All avian and wildlife species that were detected are listed below:

Reptiles/Amphibians Observed

- Western Fence Lizard: (*Sceloporus occidentalis)*
- Alligator Lizard (*Elgaria multicarinata multicarinata)*
- Foothill Yellow-Legged Frog (*Rana boylii*)

Birds

- Yellow Rumped Warbler
- Golden-Crowned Sparrow
- Cassins Vireo (formerly Solitary Vireo)
- Hairy Woodpecker
- Red-Tailed Hawk Pair (no nest found after search conducted)
- Red-Breasted Sapsucker
- American Robin
- Pacific-Sloped Flycatcher
- Mourning Dove
- Mountain Quail
- Common Raven
- Northern Flicker
- Pacific Wren
- Stellars Jay
- Dark-Eyed Junco

Other Wildlife Seen

- Five Different Species of Butterfly

USFWS Listed Plants – Hayfork, Dukabella and adjacent quadrangle query out to 10 miles from project site:

- Hoover's Spurge (*Chamaesyce hooveri*)
- Slender Ocrutt Grass (*Orcutta tenuis*)

Further Review of CNDDB/CDFW records found the following additional California Native Plant Society (CNPS) plant species and information: California Department of Fish and Wildlife considers rare plant species as defined by CNPS to be special status species "List 1B, List 2 species are considered special status, as are List 3 and 4 species if they can be shown to meet the definition of Rare or Endangered under CEQA Guidelines sections 15125 (c) and/or section 15380. Impacts to these species must be analyzed during the CEQA process. These species thus, are as follows:

Eriastrum tracyi – Tracy's eriastrum: CNPS 1B
Harmonia doris-nilesiae: Nile's harmonia CNPS 1B

The CNPS listed species shown above are the California protected species when considering a new project in an area. *C. hooveri and O. tenuis are* found only in vernal pool areas, and there are no vernal pools on any part of the subject property. Thus this species will not be affected by the proposed project. *E.tracii* is found in shaly, clay soils and open rocky lands, often amongst chapparal species like *A. fasciculatum* on very exposed hillsides. While *H. doris-nilesiae* if a serpentine soil specific plant. The flat fallow bottomland field where the proposed buildings will be placed do not contain this type of habitat. Thus it is very unlikely that these plants would grow in these types of soils. To be certain however, a plant survey was conducted using CDFW *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, 2009*. The resultant plant species discovered during the survey are listed below.

Serpentinitic Botanical Species Near Project

There are four species of serpentine specific plants that are found close to the area as per the most recent CNDDB search completed on December 4, 2019. Much of Trinity County has this soil type which creates conditions and microhabitats for many tree and plant species that only grow in these soil settings. The uplands just north of the proposed building area (**Attachment 1**) were found to be of this soil type, with obvious protrusions of ultramafic rock and a very open forest of pine-cedar, vegetation types indicative of this soils/rock presence. All but one of these are CNPS 1B, the rarest of plants. A thorough search was completed for these four species below, during their specific blooming season, with no new individuals found. Also, the buildings for this project will not be placed on this potential habitat for these species, and will be placed on the flat alluvial soils where the two creeks come together just below.

Nile's Harmonia *(Harmonia doris-nilesiae)*				CNPS 1B
Tracy's Eriastrum (*Eriastrum tracium*)				CNPS 3.2B
Serpentine rockcress (Boechera serpenticola)				CNPS 1B
Jepson's Dodder (Cuscuta jepsonii)				CNPS 1B

Botanical Survey and Results

Botanical Species Found during the May 30, 2018 field survey are listed below:

Acspimon glaber
Castelleja spp (Yellow fiddleneck)
Pinus ponderosa
Pseudopstuga menzseisei
Pinus lambertiana
Calocedrus decurrens

Eschscholzia californica
Bromus spp
Salix spp
Acer circunatum
Acer macrophylum
Quercus garryana var. semota
Ribes spp
Ceanothus cordulatus
Alnus rombifolia
Castelleja spp (Popcorn flower)
Quercus kellogii
Erigonium cicutarium
Amsinckia spp.
Lasthenia californica
Lupinus bicolor
Trifolium hirtum
Arctostaphylos patula
Toxicodendron diversilobum
Ceanothus intergerrimus

There were no threatened, endangered, or sensitive plant species found during the botanical survey.

WATERS OF THE UNITED STATES:

A "Surface Waters" assessment study and evaluation was completed on May 30, 2018. This includes a study and full walk through of the property to evaluate if Class I-IV watercourses, lakes, ponds, artesian wells, springs, seeps and man-made canals are present or not. The findings are below.

40 CFR 230.3(s) of the Federal Registry states this to be: The term waters of the United States means: 1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; 2. All interstate waters including interstate wetlands; 3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters.

The Army Corps of Engineers (ACOE) is the lead agency and oversees all matters in this latter category (Category 3). A reconnaissance query of the National Wetlands Inventory (NWI) through USFWS wetland mapping database was completed. There is one Class I (year-round) creek on the property, which is Salt Creek. See Appendix B at the back of the document for this query map. This confirmed the USFWS NWI map assessment as that there are no wetlands or waters found on or near the subject property. The property is a non-wetland fallow cropfield, and is on a flat upland from Salt Creek to just to the east. Philpot Creek also flows into Salt Creek, but is just off of the property across Rattlesnake Road about .10 miles to the north (downstream). There are no wetlands, waters, seeps,

meadows or any other types of waters or wetlands on or near to the flat area where the buildings will be constructed. Thus, waters or wetlands will not be an issue for this project.

CRITICAL HABITAT

Critical habitat is a specific geographic area that is essential for the conservation of a threatened or endangered species, and may require special management or protection (USFWS, July 15, 2013). Critical habitat can be designated by the USFWS or the National Marine Fisheries Service (NMFS). No critical habitat for fish is designated in the study area (or project watershed). The USFWS species lists for the Dukabella and Hayfork quadrangles out to ten miles do not identify designated critical habitat for any federally listed animal or plant species as per **Appendix B**, USFWS TES Query at the back of the document.

ESSENTIAL FISH HABITAT

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, established the EFH mandate, that only applies to fish species managed under a federal Fishery Management Plan. As such, EFH analysis is required for the Pacific salmon. Essential fish habitat for the Pacific salmon fishery consists of "those waters and substrate necessary for salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem" (NMFS, 2001). There are no creeks or tributary creeks that flow into any critical habitat streams or rivers for anadramous ocean dwelling fish, as the closest creek - Salt Creek flows into Hayfork Creek but has impoundments on its downstream descent that disallow anadramous fish from entering its waters. This finding was confirmed through review of Figure A-1 in the Pacific Fisheries Management Council's *Appendix A: Identification and Description of Essential Fish Habitat, Adverse Impacts, and Recommended Conservation Measures for Salmon* (August 1999). As well as the NOAA EFH Mapping website, which shows all creeks that are accessible to anadramous fish. Salt Creek is not one of these creeks. Also, the USFWS query shows if and where anadramous fish occur near to a project area. Anadromous fish do not show up in this query for this property and associated Salt Creek.

DISCUSSION OF SPECIES POTENTIALLY AFFECTED

As determined through the records search and field evaluation, no currently known locations of federally listed, proposed, or candidate wildlife or plant species would be affected by project implementation. No habitat exists for the species on the property, as the property is now considered cropland and is no longer a native habitat type. Further, a wildlife and botanical survey was completed, with no listed, proposed or candidate species or Migratory Bird Treaty Act nests found on the subject property.

There were a pair of Red-Tailed Hawks found circling over the subject flat fallow field where the project will occur. However, an extensive nest search during the biological survey showed no large nests found for the species in the adjacent forests where RTHA typically nest within.

PROJECT EFFECTS

See Appendix A for the map of the proposed buildings that are to be placed on the subject property. They are as follows:

The construction of a 43,400 square foot building and two 30' x 100' greenhouses and another existing shop with upgraded building components to create a 30 x 100' greenhouse will not have any impacts on any federally or state listed endangered, threatened, species of special concern, candidate wildlife species or plant species. The new buildings (former, above) will be built on an open, flat piece of land that has been used for hay farming and other crop production since the early 1900's. There thus will be no disruption in native ecosystems as a result of this project.

AVOIDANCE/MINIMIZATION MEASURES

There are no avoidance/minimization required for the project.

ESTIMATE OF TAKE ON TES SPECIES OR HABITATS

There are no TES species or their habitats found on or near the subject property. Thus, there will be no "harm or harassment" or "take" of any TES or candidate species.

CUMULATIVE EFFECTS

Cumulative effects are effects that when treated separately do not create an adverse effect for a habitat or TES species singularly, but when combined, would create a negative affect for that species or its habitat.

There are no known current projects that are ongoing or are planned to occur adjacent or near to this property. Thus, there are no known cumulative effects that would or could affect add to the effects (none) of this subject properties' effects.

The cumulative habitat types could occur would be logging of private lands that are nearby to the property, which can be seen on somewhat nearby adjacent ridges. Clearcutting by private timber companies over time, does lower the level of biodiversity in a contiguous ecosystem, which in most of Trinity County and in the Peanut area consists of Mixed Conifer (PIPO, PSME, ABCO, CADE, PILA spp. w/ some QUKE) and Douglas Fir coniferous forest ecosystems. However, there will be no addition to timber removal at all in any way by this project. There are not any known immediate cumulative impacts by adjacent landowners to this project.

5. CONCLUSIONS

No federally listed, proposed, or candidate plant or animal species were observed during the field inspections and are not listed to be near or on the subject property. No other habitat or designated critical habitat for federally listed species or EFH for Pacific salmon are present in the study area. This is mostly due to the lack of natural habitats in the area, as the area has been long ago used as a crop production field.

6. REFERENCES

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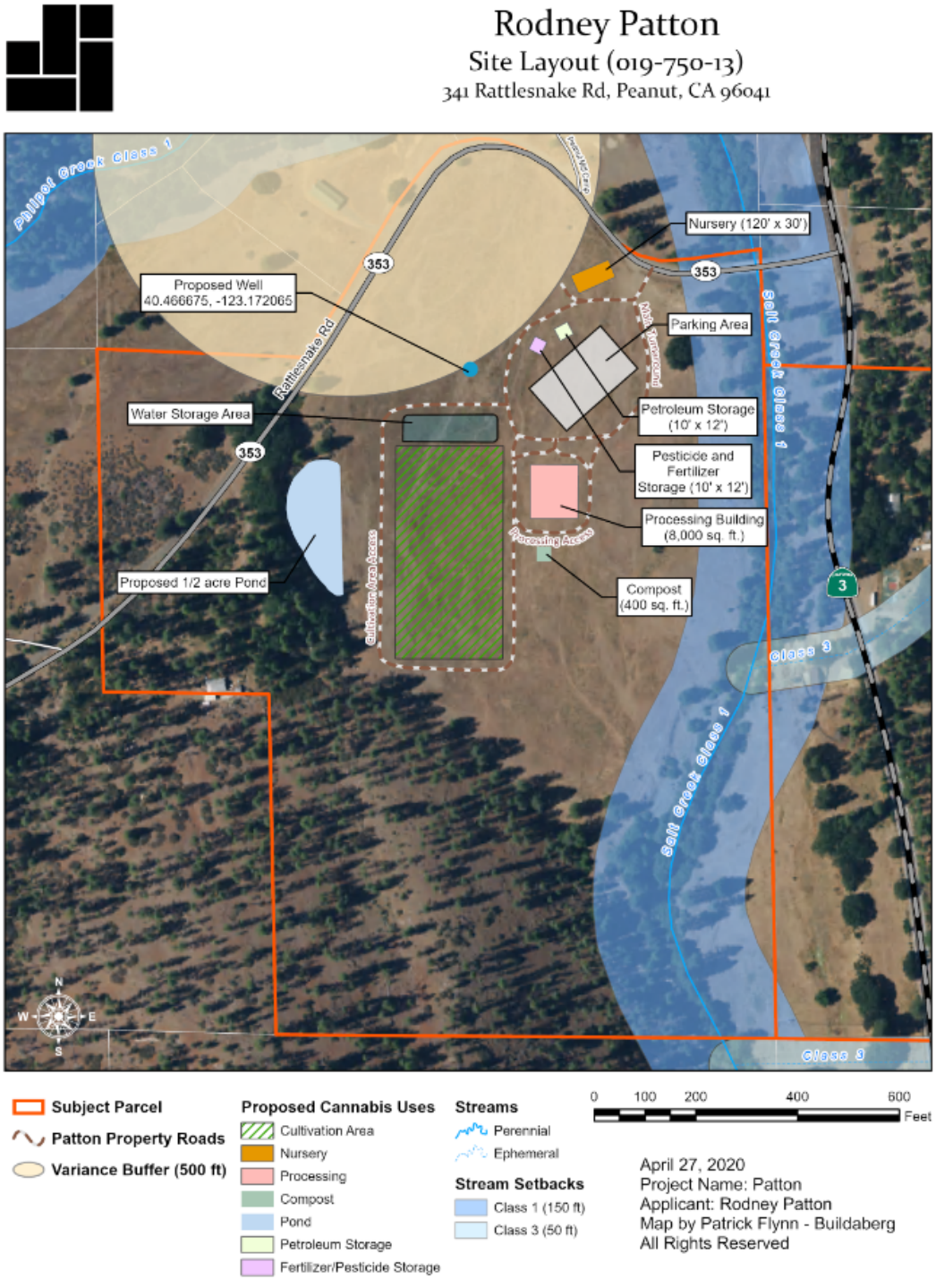
APPENDIX A: Proposed Updated Site and Construction Location Map



APPENDIX B: US Fish and Wildlife Species Query: May 29, 2018

Mammals, Birds, Crustaceans

Gray Wolf Canis lupus
There is Final critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/4488
Endangered

Northern Spotted Owl Strix occidentalis caurina
There is Final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1123
Threatened

Yellow-billed Cuckoo Coccyzus americanus
There is proposed critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/3911
Threatened

Conservancy Fairy Shrimp Branchinecta conservatio
There is Final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8246
ENDANGERED

Vernal Pool Fairy Shrimp Branchinecta lynchi
There is Final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/498
Threatened

Vernal Pool Tadpole Shrimp Lepidurus packardi
There is Final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2246
Endangered

PLANTS
Hoover's Spurge Chamaesyce hooveri
There is Final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/3019
Threatened

Slender Orcutt Grass Orcuttia tenuis
There is _nal critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1063
Threatened

Other Applicable Laws Apply to this USFWS query that can apply to protection of resources as a result of a proposed project or land manipulation, where appropriate and where Migratory Birds and Nests occur.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:
Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/
birds-of-conservation-concern.php
Measures for avoiding and minimizing impacts to birds
http://www.fws.gov/birds/management/project-assessment-toolsand-guidance/
conservation-measures.php
Nationwide conservation measures for birds
http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures

APPENDIX C: Wetland and Waters of the US Map: National Wetlands Inventory Map

APPENDIX D: Photographs of the Project Building Locations "Habitats" (Cropland)

1: Largest Building Locations (Large Greenhouse) – See Building Map Above

2: Smaller Building (Processing Building) Location (Existing Garage will be upgraded)

Appendix E: Resume

Brian Shaw
Company Owner and Supervisory Biologist
1760 Kenyon Drive
Redding, CA 96001
Phone Number: 530-244-5652/530-524-8474(cell)

Education
Graduated: Double Major - California State University, Chico
Bachelors of Science Biological Science: Spring 1997
Bachelors of Arts: Geography (GIS Emphasis) - Spring 1993

Affiliations/Certifications/Permits
USFWS Permit Number **TE-20914-B-0** - California Gnatcatcher
CDFW Scientific Collecting Permit Number: **#SC-3910**
CALFIRE Certified Spotted Owl Expert #29 (Formerly PCB #0050)
Member of The Wildlife Society Western Chapter and Shasta-SAC Chapter
Wetland Certification - Tiburon Wetland Training Certified ESRI Arc GIS Certification and Classes: CSU Chico, Shasta College, DOT, ESRI

Employment Experience

Klamath Wildlife Resources - Company Owner/Senior-Supervisory Biologist
Owner and Senior Biologist, Technical Writer and GIS/GPS Senior of **Klamath Wildlife Resources (KWR)** from 2000-2015 (current). I manage and oversee all aspects of company ownership/management, including: budget items, staff scheduling, staff performance evaluations, proposal writing, contract acquisition and project management. The company specializes in biological, watershed evaluation, GIS, botanical and environmental analysis and assessment. Our focus area has been in natural resource related science and planning, GIS/GPS mapping/data management, environmental permitting/reporting, **Construction monitoring** (Wind Farm/Telecommunication/Power Lines) NEPA, CEQA Documents, EA, BA, BE, FONSI, ND) and sensitive species assessments. Our company and myself also complete protocol surveys and studies for: California Gnatcatcher, Least Bells Vireo, Northern Goshawk, Spotted Owl, Siskiyou Mountains Salamander, Willow Flycatcher, Fellers and Freel Amphibian surveys, Great Gray Owl, Carnivores, point count avian surveys, bat surveys (mines, mist netting, acoustical) as well as vegetation & botanical surveys and timber cruising for the USFS, BLM and private land and timber owners of northern California. Complete environmental assessments, wetland delineation (certified delineator), biological evaluations/assessments, agency permitting (404, 401, 1601) and agency consultation (CDFG, USFWS, ACOE, RWQCB). We/I also assist land developers their future planning and land use documentation, including environmental, traffic, noise studies. Certified CALFIRE Spotted Owl Expert #29 (Formerly PCB #0050, Habitat Evaluation Expert). CDFW permit holder for small mammal, amphibian, bird/owl handling in support of wildlife studies. Involved with wind farm biological clearance surveys, which involves systematic searching through the year below all existing wind turbines on platforms and in surrounding vegetation for avian/chiropteran impacts. These surveys are multi-tiered, involving Searcher Efficiency Trials, Live Avian Bird Counts, Scavenger Trials as well as the Post Construction Fatality Surveys. Our company also completes the recently very often offered Environmental Site Assessment and Evaluations for environmental remediation typically on government properties. I have personally prepared over 400 technical proposals for a wide range of environmental, biological, botanical, and

wildlife projects. This has resulted in being awarded over 250 separate projects based on these proposals/offers. My company and myself as the representative have many solid and long-standing solid business relationships with the US Forest Service, BLM, National Parks Service, Private Timber Companies throughout the west, large and small engineering/land planning firms, California State Parks, CALFIRE, many Native American Tribes through the west, PG&E, WAPA, SoCAL Edison, and have working contracts currently in five separate western states.

Previous Employment

Department of Transportation – Environmental and Transportation Planner Districts 2 & 3: 2001-2004: Redding and Marysville, CA

Environmental: Under the direction of a Senior Environmental Planner, I assessed the impacts of the more difficult transportation projects for biological resources, and made recommendations for the appropriate environmental approvals, mitigation measures and permits. Deep and well-rounded knowledge of the California Environmental Quality Act, National Environmental Policy Act, Federal and State Endangered Species Act and other state and federal laws. Wrote many environmental impact reports (called Natural Environment Study at Caltrans), covering many species and habitats, involving consultation with ACOE, NMFS, USFWS and CDFG.

Transportation: Under the supervision of the Chief, Regional Planning & Local Assistance Regional/Systems Planning Senior served as the point of contact between District 2 and 3 Division of Planning and the Regional Transportation Planning Agency (RTPA) for Siskiyou and Lassen Counties. Provided technical assistance and arranged annual meetings with tribal governments and RTPs. Monitored fund administration documents prepared by RTPA staff-including Federal and State public transportation grant programs. Was point of contact for assignments relating to Regional Planning activities outside of Siskiyou and Lassen Counties (other local counties). Conducted Transportation Concept Reports and traffic flow modeling, ATR data acquisition and analysis to assess traffic in Redding, Marysville, Burney and many other north-state cities and highways. Wrote corridor management plan for Highway 299 from Modoc County (Nevada State Border) to the Humboldt County line.

Senior Wildlife Biologist - Natural Resources Manager, Alpine Land Information Services (01/98 to 1/00): Company wildlife biologist for Roseburg Resources Company through contract to Alpine LIS. Represented RRC on all wildlife management issues, most importantly Northern Spotted Owl, but also Northern Goshawk, Willow Flycatcher, Osprey, Bald Eagle, amphibians, and botanicals. Also wrote cumulative impact reports for Sierra Pacific Industries (SPI). I planned and completed ecological investigations (studies/reports, etc.) and GIS habitat evaluation and management of timberland development proposals to determine their effect on these species. I also studied watercourses on their lands, delineating impacts caused by storms and/or roads. I also planned and carried out herpetological (Tailed Frog, Yosemite Toad, Foothill and Mountain Yellow-legged Frog, Cascades Frog) and macroinvertebrate surveys on their lands. I coordinated, worked within and supervised contracts for Northern Spotted Owl, Goshawk and conducted Willow Flycatcher surveys and monitored nests/known locations for Roseburg Resources Co. I also carried out these surveys following their respective protocols. I professionally represented Sierra Pacific Industries (SPI) on Northern Goshawk, Bald Eagle, Osprey, Great Blue Heron and Northern Spotted Owl Consultations and botanical surveys with biologists and botanists from the USFS, CDFG and USFWS. I proposed mitigation and protection measures for these species. I wrote several Section IV's of the Option "a" and "c" for many Timber Harvest Plans for SPI. I completed botanical and biological investigations and surveys in the Klamath, Sierra Nevada and southern Cascades mountains. Full botanical and wildlife surveys were conducted by Shaw and crew technicians for especially CNPS 1B and sensitive plants, as well as all sensitive and T&E plants and animals. Familiar with all sensitive and T&E plants and animals of California. Using Atlas

G.I.S. and ArcView 3.2, created many varieties of biological, botanical and geographical maps. I was in charge of five cumulative impacts assessment THP portions as well as crews of natural resources personnel, making sure timelines and plans were completed on time and efficiently, and surveys and data were submitted accurately.

GIS Specialist/ Biologist, Enplan (10/97-5/98)
I spent half of my time between working with computer mapping programs (AutoCad versions 13, 14 and 14 Map, Map Info, and Arc View 3.1) and serving as the wildlife biologist. The mapping portion worked with programs that are used to digitize city streets, property boundaries, enter or locate coordinates, enter acreage, tabulate area, and create functional city, rural and biological maps for various northern California agencies. The wildlife biology portion required writing proposals and bids for endangered species projects for various government agencies. I also spent time in the field working on existing projects, identifying all animal and bird species within proposed development areas. I have worked on projects involving the cities of Grass Valley, Fort Jones, Montague, Redding, and Shasta County. Finally, I wrote a technical proposal for a Great Gray Owl/Northern Spotted Owl project that we eventually were awarded by the U.S. Forest Service. I headed up the field portion of this project as the supervising wildlife biologist over eight other field biologists. This included air photo station and call route placement based on habitat conditions (which differ per owl), suggested habitat management and field report writing to the BLM and USFS.

Scientific Aid, California Department of Fish and Game (8/15/97-10/1/98)
I worked as a biological scientific aid administering studies of salmonid populations on the northern portion of the Sacramento River between Cottonwood and Redding, CA. My duties included monitoring and maintenance of screwtraps, weighing, measuring and identifying all sizes and species of fish, snorkeling and seining, driving boats with both outboard and jet engines up to 18' long up and down an unpredictable river., data compilation, driving of government vehicles and much social interaction with a crew of eight other workers as well as the public. We also tagged the carcasses of the dying chinook salmon runs during their respective migrations.

Environmental Specialist 1, Jones and Stokes and Associates (6/1/97-8/15/97)
Determined population status of the Northern Spotted Owl and the Great Gray Owl near Detroit and Sisters, Oregon. Using voice imitated techniques as well as playing a tape through a tape recorder and loud speaker we drove in our personal vehicles along Williamette National Forest roads at night to illicit responses from the owls. All protocol techniques were used to draw the birds near including mousing, hooting, running to catch up to the bird and triangulation. Much exact map reading of topographic maps was necessary as well as extreme situational hiking through rugged terrain on the forest.

Supervising Wildlife Biologist, Jones and Stokes and Associates (6/1/96-9/1/96)
Supervised crew of four on forest carnivore goshawk, and spotted owl study of the Plumas National Forest, Quincy District. Used track plate and trailmaster cameras to monitor fisher, pine marten, fox, and any other small mammals of the forest. Used juvenile, alarm, and fledgling calls through a call box to illicit responses from the goshawks being studied. Also, we identified all tree and shrub species at our forested survey areas (northern Sierra Nevada species). Responsible for all data entry, expenses, monitoring work of others, air photo interpretation and placement of call stations and routes and helped with the final project report.

9-Quad CNDDB Search: Patton CUP (P-18-23)

Dubakella Mountain Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped and Unprocessed
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Atractelmis wawona	Wawona riffle beetle	None	None	-	-	Mapped
Arborimus pomo	Sonoma tree vole	None	None	SSC	-	Unprocessed
Gulo gulo	wolverine	None	Threatened	FP	-	Mapped
Pekania pennanti	Fisher	None	None	SSC	-	Mapped
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC	-	Mapped
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Allium hoffmanii	Beegum onion	None	None	-	4.3	Unprocessed
Allium siskiyouense	Siskiyou onion	None	None	-	4.3	Unprocessed
Asclepias solanoana	serpentine milkweed	None	None	-	4.2	Unprocessed
Ericameria ophitidis	serpentine goldenbush	None	None	-	4.3	Unprocessed
Harmonia doris-nilesiae	Niles' harmonia	None	None	-	1B.1	Mapped and Unprocessed
Helianthus exilis	serpentine sunflower	None	None	-	4.2	Unprocessed
Boechera serpenticola	serpentine rockcress	None	None	-	1B.2	Mapped
Streptanthus drepanoides	sickle-fruit jewelflower	None	None	-	4.3	Unprocessed
Cuscuta jepsonii	Jepson's dodder	None	None	-	1B.2	Mapped
Sedum flavidum	pale yellow stonecrop	None	None	-	4.3	Mapped
Arctostaphylos malloryi	Mallory's manzanita	None	None	-	4.3	Unprocessed
Erythronium citrinum var. citrinum	lemon-colored fawn lily	None	None	-	4.3	Unprocessed
Erythronium revolutum	coast fawn lily	None	None	-	2B.2	Mapped
Fritillaria glauca	Siskiyou fritillaria	None	None	-	4.2	Unprocessed
Fritillaria purdyi	Purdy's fritillary	None	None	-	4.3	Unprocessed
Cypripedium fasciculatum	clustered lady's-slipper	None	None	-	4.2	Unprocessed
Cypripedium montanum	mountain lady's-slipper	None	None	-	4.2	Unprocessed
Collomia tracyi	Tracy's collomia	None	None	-	4.3	Unprocessed
Eriastrum tracyi	Tracy's eriastrum	None	Rare	-	3.2	Mapped
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed
Eriogonum strictum var. greenei	Greene's buckwheat	None	None	-	4.3	Unprocessed
Eriogonum ternatum	ternate buckwheat	None	None	-	4.3	Unprocessed

Forest Glen Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP	-	Mapped and Unprocessed
Pandion haliaetus	osprey	None	None	WL	-	Mapped and Unprocessed
Psiloscops flammeolus	flammulated owl	None	None	-	-	Unprocessed
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	None	Candidate Endangered	SSC	-	Mapped and Unprocessed
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	Candidate	Candidate Endangered	SSC	-	Mapped and Unprocessed
Bombus caliginosus	obscure bumble bee	None	None	-	-	Mapped
Bombus occidentalis	western bumble bee	None	None	-	-	Mapped and Unprocessed
Erethizon dorsatum	North American porcupine	None	None	-	-	Unprocessed
Pekania pennanti	Fisher	None	None	SSC	-	Mapped
Lasionycteris noctivagans	silver-haired bat	None	None	-	-	Mapped
Lasiurus cinereus	hoary bat	None	None	-	-	Mapped
Ancotrema voyanum	hooded lancetooth	None	None	-	-	Mapped
Margaritifera falcata	western pearlshell	None	None	-	-	Unprocessed
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Upland Douglas Fir Forest	Upland Douglas Fir Forest	None	None	-	-	Mapped
Ptilidium californicum	Pacific fuzzwort	None	None	-	4.3	Mapped and Unprocessed
Peltigera gowardii	western waterfan lichen	None	None	-	4.2	Unprocessed
Allium hoffmanii	Beegum onion	None	None	-	4.3	Unprocessed
Allium siskiyouense	Siskiyou onion	None	None	-	4.3	Unprocessed
Lomatium tracyi	Tracy's lomatium	None	None	-	4.3	Unprocessed
Sanicula tracyi	Tracy's sanicle	None	None	-	4.2	Mapped
Ericameria ophitidis	serpentine goldenbush	None	None	-	4.3	Unprocessed
Cuscuta jepsonii	Jepson's dodder	None	None	-	1B.2	Mapped
Sedum flavidum	pale yellow stonecrop	None	None	-	4.3	Mapped and Unprocessed
Hosackia yollabolliensis	Yolla Bolly Mtns. bird's-foot trefoil	None	None	-	1B.2	Mapped and Unprocessed
Lupinus elmeri	South Fork Mountain lupine	None	None	-	1B.2	Mapped
Frasera umpquaensis	Umpqua green-gentian	None	None	-	2B.2	Mapped
Iliamna latibracteata	California globe mallow	None	None	-	1B.2	Mapped
Veratrum insolitum	Siskiyou false-hellebore	None	None	-	4.3	Unprocessed
Epilobium oreganum	Oregon fireweed	None	None	-	1B.2	Mapped
Epilobium septentrionale	Humboldt County fuchsia	None	None	-	4.3	Unprocessed
Cypripedium montanum	mountain lady's-slipper	None	None	-	4.2	Unprocessed
Piperia candida	white-flowered rein orchid	None	None	-	1B.2	Mapped
Leptosiphon rattanii	Rattan's leptosiphon	None	None	-	4.3	Unprocessed
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed

Halfway Ridge Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Ascaphus truei	Pacific tailed frog	None	None	SSC	-	Mapped
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped and Unprocessed
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	None	Candidate Endangered	SSC	-	Mapped
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	Candidate	Candidate Endangered	SSC	-	Mapped
Pekania pennanti	Fisher	None	None	SSC	-	Mapped and Unprocessed
Monadenia infumata setosa	Trinity bristle snail	None	Threatened	-	-	Mapped and Unprocessed
Ancotrema voyanum	hooded lancetooth	None	None	-	-	Mapped
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Harmonia doris-nilesiae	Niles' harmonia	None	None	-	1B.1	Mapped
Sedum paradisum ssp. paradisum	Canyon Creek stonecrop	None	None	-	1B.3	Mapped
Astragalus iodanthus var. diaphanoides	snake milk-vetch	None	None	-	4.3	Unprocessed
Lilium rubescens	redwood lily	None	None	-	4.2	Unprocessed
Cypripedium fasciculatum	clustered lady's-slipper	None	None	-	4.2	Unprocessed
Cypripedium montanum	mountain lady's-slipper	None	None	-	4.2	Unprocessed
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed

Hayfork Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Ascaphus truei	Pacific tailed frog	None	None	SSC	-	Mapped
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped
Aquila chrysaetos	golden eagle	None	None	FP ; WL	-	Mapped and Unprocessed
Pandion haliaetus	osprey	None	None	WL	-	Mapped
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Empidonax traillii	willow flycatcher	None	Endangered	-	-	Unprocessed
Pacifastacus leniusculus klamathensis	Klamath crayfish	None	None	-	-	Unprocessed
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	None	Candidate Endangered	SSC	-	Mapped
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	Candidate	Candidate Endangered	SSC	-	Mapped
Pekania pennanti	Fisher	None	None	SSC	-	Mapped
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC	-	Mapped
Monadenia infumata setosa	Trinity bristle snail	None	Threatened	-	-	Unprocessed
Ancotrema voyanum	hooded lancetooth	None	None	-	-	Mapped
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Harmonia doris-nilesiae	Niles' harmonia	None	None	-	1B.1	Mapped
Sedum paradisum ssp. paradisum	Canyon Creek stonecrop	None	None	-	1B.3	Mapped
Erythronium citrinum var. citrinum	lemon-colored fawn lily	None	None	-	4.3	Unprocessed
Limnanthes floccosa ssp. floccosa	woolly meadowfoam	None	None	-	4.2	Mapped
Eriastrum tracyi	Tracy's eriastrum	None	Rare	-	3.2	Mapped

Hayfork Summit Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Ascaphus truei	Pacific tailed frog	None	None	SSC	-	Mapped
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped and Unprocessed
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Pekania pennanti	Fisher	None	None	SSC	-	Mapped
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC	-	Mapped
Monadenia churchi	Klamath sideband	None	None	-	-	Unprocessed
Helminthoglypta talmadgei	Trinity shoulderband	None	None	-	-	Mapped
Vespericola pressleyi	Big Bar hesperian	None	None	-	-	Unprocessed
Vespericola shasta	Shasta hesperian	None	None	-	-	Unprocessed
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Chaenactis suffrutescens	Shasta chaenactis	None	None	-	1B.3	Mapped and Unprocessed
Ericameria ophitidis	serpentine goldenbush	None	None	-	4.3	Unprocessed
Cypripedium fasciculatum	clustered lady's-slipper	None	None	-	4.2	Unprocessed

Naufus Creek Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Ascaphus truei	Pacific tailed frog	None	None	SSC	-	Mapped
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped and Unprocessed
Rhyacotriton variegatus	southern torrent salamander	None	None	SSC	-	Mapped
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	None	Candidate Endangered	SSC	-	Mapped and Unprocessed
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	Candidate	Candidate Endangered	SSC	-	Mapped
Bombus caliginosus	obscure bumble bee	None	None	-	-	Mapped
Bombus occidentalis	western bumble bee	None	None	-	-	Mapped
Erethizon dorsatum	North American porcupine	None	None	-	-	Unprocessed
Pekania pennanti	Fisher	None	None	SSC	-	Mapped
Monadenia infumata setosa	Trinity bristle snail	None	Threatened	-	-	Unprocessed
Ancotrema voyanum	hooded lancetooth	None	None	-	-	Mapped
Punctum hannai	Trinity Spot	None	None	-	-	Unprocessed
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Allium hoffmanii	Beegum onion	None	None	-	4.3	Unprocessed
Allium siskiyouense	Siskiyou onion	None	None	-	4.3	Unprocessed
Asclepias solanoana	serpentine milkweed	None	None	-	4.2	Unprocessed
Harmonia doris-nilesiae	Niles' harmonia	None	None	-	1B.1	Mapped
Sedum flavidum	pale yellow stonecrop	None	None	-	4.3	Mapped and Unprocessed
Sedum laxum ssp. heckneri	Heckner's stonecrop	None	None	-	4.3	Unprocessed
Lilium rubescens	redwood lily	None	None	-	4.2	Unprocessed
Epilobium oreganum	Oregon fireweed	None	None	-	1B.2	Mapped
Epilobium septentrionale	Humboldt County fuchsia	None	None	-	4.3	Unprocessed
Cypripedium montanum	mountain lady's-slipper	None	None	-	4.2	Unprocessed
Piperia candida	white-flowered rein orchid	None	None	-	1B.2	Mapped
Collomia tracyi	Tracy's collomia	None	None	-	4.3	Unprocessed
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed
Eriogonum strictum var. greenei	Greene's buckwheat	None	None	-	4.3	Unprocessed

Pony Buck Peak Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Ascaphus truei	Pacific tailed frog	None	None	SSC	-	Mapped
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Threatened	None	-	-	Mapped and Unprocessed
Atractelmis wawona	Wawona riffle beetle	None	None	-	-	Mapped
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC	-	Mapped
Lasionycteris noctivagans	silver-haired bat	None	None	-	-	Mapped
Myotis evotis	long-eared myotis	None	None	-	-	Mapped
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Allium hoffmanii	Beegum onion	None	None	-	4.3	Unprocessed
Lomatium tracyi	Tracy's lomatium	None	None	-	4.3	Unprocessed
Asclepias solanoana	serpentine milkweed	None	None	-	4.2	Unprocessed
Ericameria ophitidis	serpentine goldenbush	None	None	-	4.3	Unprocessed
Harmonia doris-nilesiae	Niles' harmonia	None	None	-	1B.1	Mapped and Unprocessed
Harmonia stebbinsii	Stebbins' harmonia	None	None	-	1B.2	Mapped
Helianthus exilis	serpentine sunflower	None	None	-	4.2	Unprocessed
Streptanthus drepanoides	sickle-fruit jewelflower	None	None	-	4.3	Unprocessed
Sabulina rosei	peanut sandwort	None	None	-	4.2	Unprocessed
Cuscuta jepsonii	Jepson's dodder	None	None	-	1B.2	Mapped
Sedum flavidum	pale yellow stonecrop	None	None	-	4.3	Mapped and Unprocessed
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	None	None	-	1B.3	Mapped and Unprocessed
Erythronium citrinum var. citrinum	lemon-colored fawn lily	None	None	-	4.3	Unprocessed
Epilobium oreganum	Oregon fireweed	None	None	-	1B.2	Mapped and Unprocessed
Cypripedium fasciculatum	clustered lady's-slipper	None	None	-	4.2	Unprocessed
Piperia candida	white-flowered rein orchid	None	None	-	1B.2	Mapped
Erythranthe trinitiensis	pink-margined monkeyflower	None	None	-	1B.3	Mapped
Collomia diversifolia	serpentine collomia	None	None	-	4.3	Unprocessed
Collomia tracyi	Tracy's collomia	None	None	-	4.3	Unprocessed
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed
Eriogonum strictum var. greenei	Greene's buckwheat	None	None	-	4.3	Unprocessed
Eriogonum ternatum	ternate buckwheat	None	None	-	4.3	Unprocessed

Smokey Creek Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	None	Candidate Endangered	SSC	-	Mapped and Unprocessed
Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	Candidate	Candidate Endangered	SSC	-	Mapped
Pekania pennanti	Fisher	None	None	SSC	-	Mapped
Upland Douglas Fir Forest	Upland Douglas Fir Forest	None	None	-	-	Mapped
Ptilidium californicum	Pacific fuzzwort	None	None	-	4.3	Mapped and Unprocessed
Allium hoffmanii	Beegum onion	None	None	-	4.3	Unprocessed
Allium siskiyouense	Siskiyou onion	None	None	-	4.3	Unprocessed
Lomatium tracyi	Tracy's lomatium	None	None	-	4.3	Unprocessed
Sanicula tracyi	Tracy's sanicle	None	None	-	4.2	Mapped
Asclepias solanoana	serpentine milkweed	None	None	-	4.2	Unprocessed
Chaenactis suffrutescens	Shasta chaenactis	None	None	-	1B.3	Mapped and Unprocessed
Ericameria ophitidis	serpentine goldenbush	None	None	-	4.3	Unprocessed
Harmonia doris-nilesiae	Niles' harmonia	None	None	-	1B.1	Mapped
Harmonia stebbinsii	Stebbins' harmonia	None	None	-	1B.2	Mapped
Helianthus exilis	serpentine sunflower	None	None	-	4.2	Unprocessed
Boechera serpenticola	serpentine rockcress	None	None	-	1B.2	Mapped
Streptanthus drepanoides	sickle-fruit jewelflower	None	None	-	4.3	Unprocessed
Sedum flavidum	pale yellow stonecrop	None	None	-	4.3	Mapped
Rhynchospora alba	white beaked-rush	None	None	-	2B.2	Mapped
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	None	None	-	1B.3	Mapped
Frasera umpquaensis	Umpqua green-gentian	None	None	-	2B.2	Mapped
Phacelia leonis	Siskiyou phacelia	None	None	-	1B.3	Mapped
Erythronium citrinum var. citrinum	lemon-colored fawn lily	None	None	-	4.3	Unprocessed
Epilobium oreganum	Oregon fireweed	None	None	-	1B.2	Mapped
Cypripedium montanum	mountain lady's-slipper	None	None	-	4.2	Unprocessed
Piperia candida	white-flowered rein orchid	None	None	-	1B.2	Mapped
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed
Eriogonum strictum var. greenei	Greene's buckwheat	None	None	-	4.3	Unprocessed
Eriogonum ternatum	ternate buckwheat	None	None	-	4.3	Unprocessed
Eriogonum umbellatum var. humistratum	Mt. Eddy buckwheat	None	None	-	4.3	Unprocessed

Wildwood Quad Search						
Scientific Name	Common Name	Federal Status	State Status	CDFW Status	CRPR	Data Status
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	-	Mapped and Unprocessed
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	-	-	Mapped
Stygobromus trinus	Trinity County amphipod	None	None	-	-	Mapped
Entosphenus tridentatus	Pacific lamprey	None	None	SSC	-	Unprocessed
Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	None	None	SSC	-	Unprocessed
Atractelmis wawona	Wawona riffle beetle	None	None	-	-	Mapped
Chaetarthria leechi	Leech's chaetarthrian water scavenger beetle	None	None	-	-	Mapped
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC	-	Mapped and Unprocessed
Myotis evotis	long-eared myotis	None	None	-	-	Mapped
Monadenia churchi	Klamath sideband	None	None	-	-	Unprocessed
Helminthoglypta talmadgei	Trinity shoulderband	None	None	-	-	Mapped and Unprocessed
Megomphix californicus	Natural Bridge megomphix	None	None	-	-	Mapped and Unprocessed
Punctum hannai	Trinity Spot	None	None	-	-	Unprocessed
Emys marmorata	western pond turtle	None	None	SSC	-	Mapped and Unprocessed
Allium hoffmanii	Beegum onion	None	None	-	4.3	Unprocessed
Lomatium tracyi	Tracy's lomatium	None	None	-	4.3	Unprocessed
Asclepias solanoana	serpentine milkweed	None	None	-	4.2	Unprocessed
Ericameria ophitidis	serpentine goldenbush	None	None	-	4.3	Unprocessed
Harmonia stebbinsii	Stebbins' harmonia	None	None	-	1B.2	Mapped
Helianthus exilis	serpentine sunflower	None	None	-	4.2	Unprocessed
Boechera serpenticola	serpentine rockcress	None	None	-	1B.2	Unprocessed
Streptanthus drepanoides	sickle-fruit jewelflower	None	None	-	4.3	Unprocessed
Sabulina rosei	peanut sandwort	None	None	-	4.2	Unprocessed
Silene nelsonii	Nelson's stringflower	None	None	-	4.3	Unprocessed
Sedum flavidum	pale yellow stonecrop	None	None	-	4.3	Mapped
Lilium rubescens	redwood lily	None	None	-	4.2	Unprocessed
Veratrum insolitum	Siskiyou false-hellebore	None	None	-	4.3	Unprocessed
Epilobium oreganum	Oregon fireweed	None	None	-	1B.2	Mapped
Cypripedium californicum	California lady's-slipper	None	None	-	4.2	Unprocessed
Cypripedium fasciculatum	clustered lady's-slipper	None	None	-	4.2	Unprocessed
Cypripedium montanum	mountain lady's-slipper	None	None	-	4.2	Unprocessed
Collomia tracyi	Tracy's collomia	None	None	-	4.3	Unprocessed
Eriogonum libertini	Dubakella Mountain buckwheat	None	None	-	4.2	Unprocessed
Eriogonum ternatum	ternate buckwheat	None	None	-	4.3	Unprocessed