CEQA Initial Study and Mitigated Negative Declaration
For
CISCO FARMS, INC.
PLN-2021-17384

Proposed Cannabis Cultivation Facilities

Lead Agency:

Humboldt County Planning Department
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July 2022

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APPENDIX 1

Site Map (OurEvolution Engineering, November 2021)

Cultivation and Operations Plan (Cenci Consulting, December 2021)

Project Description (Cenci Consulting, December 2021)

APPENDIX 2

Botanical Report of Special Status Native Plant Populations and Natural Communities (Naiad Biological Consulting, September 2021)

Biological Reconnaissance and Project Feasibility Assessment Report (Naiad Biological Consulting, September 2021)

Invasive Species Control Plan (Naiad Biological Consulting, October 2020)

Golden Eagle Survey Report (Erin Phillips, Naiad Biological Consulting, February 2022)

Road Evaluation (OurEvolution Engineering, March 2021)

Cultural Resources Investigation Report for Commercial Cannabis Cultivation at APN 104-232-005 and APN 105-101-011 in Petrolia, Humboldt County, California (William Rich and Associates, May 2021) *– on file with Humboldt County Planning and Building Department*

Septic Feasibility Study (Our Evolution Engineering, August 2021)

Onsite Wastewater Treatment System Design (OurEvolution Engineering, October 2021)

Web Soil Survey Soil Type Map (Natural Resources Conservation Service, Web Soil Survey, February 2022)

Letter to Humboldt County: "Agricultural activities and relation to Williamson Act" (Cenci Consulting, December 2021)

CalEEMod Analysis for Cisco Farms, Inc. Cannabis Project (NorthPoint Consulting, April 2022)

Notice of Applicability for Waste Discharge Requirements, Water Quality Order WQ 2019-0001-DWQ for WDID 1_12CC428193 (State Water Resources Control Board, May 2022)

Executed Streambed Alteration Agreement No. EPIMS-HUM-18009-R1C (California Department of Fish and Wildlife, June 2022)

ACCRONYMS AND ABREVIATIONS

ADA	American Disabilities Act
BACT	Best Available Control Technology
BMPs	Best Management Practices
BPTC	Best Practicable Treatment or Control
CalEEMod	California Emission Model (CalEEMod® Version 2020.40)
CAP	Climate Action Plan
CARB	California Air Resource Board
CBC	California Building Code
CCAC	California Clean Air Act
CCLUO	Commercial Cannabis Land Use Ordinance – Inland
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Pesticide Regulation
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGP	Construction General Permit
CNEL	Community Noise Equivalent Level
CNNDB	California Natural Diversity Database
CNPS	California Native Plant Society
CUP	Conditional Use Permit
DCC	Department of Cannabis Control
DWR	Department of Water Resources
GHG	Greenhouse Gas
ISMND	Initial Study / Mitigated Negative Declaration
MSDS	Material Safety Data Sheets
NCAB	North Coast Air Basin
NCRWQCB	North Coast Regional Water Quality Control Board
NCUAQMD	North Coast Unified Air Quality Management District
PM_{10}	Particulate matter with a diameter of 10 micrometers or less
PG&E	Pacific Gas and Electric Company
RCEA	Redwood Coast Energy Authority
SIUR	Small Irrigation Use Registration
SMA	Streamside Management Area
SMP	Site Management Plan
Sq. ft.	Square feet
SAA	Streambed Alteration Agreement
SRA	State Responsibility Area
STX	Stream Crossing
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USFWS	US Fish & Wildlife Service
USGS	United States Geological Survey
WDID	Waste Discharge Identification

1.Background

1. **Project Title**: Cisco Farms, Inc. Cannabis Project - Conditional Use Permit for five (5) acres of new commercial cannabis cultivation, 67,760 square feet (sq. ft.) of commercial nursery space and 3,000 sq. ft. of commercial processing on a single legal parcel comprised of three (3) Assessor Parcel Numbers (APNs) 105-101-011, 104-232-005, and 104-191-001 in unincorporated Humboldt County, California.

2. **Lead Agency Name and Address**: Humboldt County Planning & Building Department, 3015 H Street, Eureka, CA 95501-4484; Phone: (707) 445-7541; Fax (707) 445-7446

3. **Contact Person and Phone Number**: Michael Holtermann, Planner; (707) 445-7245; fax: 707-445-7446; email: mholtermann@co.humboldt.ca.us

4. **Project Location**: The project site is located at 1414 Chambers Road, Petrolia, CA 95558, approximately 1-mile east of the town of Petrolia, on one legal parcel comprised of APNs 105-101-011, 104-232-005, and 104-191-001 (Section 2, Township 2 South, Range 2 West, Humboldt Base Meridian). The project site is located in an unincorporated area of Humboldt County. To reach the site from the Petrolia General Store, head North on Sherman Avenue and turn right on Grant Street. Continue on to Old Coast Wagon Road and continue to Mattole Road. Travel on Mattole Road for 0.2 miles and turn left onto Chambers Road. The gated private driveway to access the site will be on the left after 1.5 miles down Chambers Road.

5. **Project Sponsor's Name and Address:**

Applicant	**Property Owner**	**Agent**
Cisco Farms, Inc.	Benemann Family Trust	Kate Cenci
P.O. Box 1083	P.O. Box 1083	P.O. Box 148
Trinidad, CA 95570	Trinidad, CA 95570	Petrolia, CA 95558

6. **General Plan Designation**: Agricultural Grazing (AG).

7. **Zoning**: Agriculture Exclusive (AE).

8. **Project Site**: The project site is located at 1414 Chambers Road (APNs 105-101-011, 104-232-005, 104-191-001) approximately 1-mile east of the community of Petrolia. The parcel is approximately 517 acres in size per an approved parcel merger (Record No. PLN-2020-16522) and contains elevations ranging from 225 to 860 feet above sea level. The project site is located in Section 2, Township 2 South, Range 2 West (S2, T2S, R2W), of the Humboldt Base and Meridian. The parcel contains grassland, woodland, and riparian habitats, and is currently used for cattle grazing. The proposed project would occur on a grassland area currently used for cattle grazing, that is not designated as Prime Agricultural Soils, with slopes of less than 15%. The parcel is under a Williamson Act Contract.

   The property contains several watercourses, including Mill Creek, a perennial (Class I) watercourse, two seasonal (Class II) watercourses, and several ephemeral (Class III) drainages. Appropriate buffers (150 ft., 100 ft., and 50 ft., respectively) have been designated for these watercourses in accordance with County and State requirements. All watercourses generally flow westerly through the parcel and are tributaries to the Mattole River. No mapped wetlands were identified within the Proposed Project site.

Existing onsite development includes a ±1,900-sq. ft. residence and associated septic system, four (4) agricultural barns, fuel storage structures associated with agricultural activities, gravel and natural-surfaced roads, three (3) 500-gallon fuel tanks, a domestic spring diversion with associated water storage (2 x 3,600-gallon HDPE water tank and 3 x 1,000-gallon concrete water tanks), and two (2) livestock groundwater wells with associated well houses and water storage (1 x 5,000-gallon HDPE storage tank).

9. **Description of Project**: Cisco Farms, Inc. is seeking a Conditional Use Permit for 5 acres of new commercial cannabis cultivation (3 acres of full-sun outdoor, 1 acre of light-deprivation outdoor, and 1 acre of mixed-light), commercial processing, and commercial nursery activities (Table 1) in accordance with the Commercial Cannabis Land Use Ordinance (CCLUO).

   Specifically, the "Proposed Project" includes the following activities (Appendix 1 – Site Maps):
   - Five Acres of Commercial Cannabis Cultivation:
     - Three (3) acres (130,680 square feet [sq. ft.]) of full-sun outdoor cultivation in soil beds or planted in-ground within an approximately 10-acre garden area (See Appendix A - "OD-1" on Site Maps)
     - One (1) acre (43,560 sq. ft.) of light-deprivation outdoor cultivation with no artificial light in seventeen (17) 105' x 24' greenhouses and one (1) 30' x 24' greenhouse ("GH-1")
     - One (1) acre (43,560 sq. ft.) of mixed-light cultivation with supplemental lighting up to 25 watts/sq. ft. in gutter-connected greenhouses totaling 218' x 200' (ML-1);
   - 67,760 sq. ft. of Commercial Nursery:
     - 21,440 sq. ft. inside 107' x 200' gutter-connected greenhouse (CN-1)
     - 40,320 sq. ft. in sixteen (16) 105' x 24' greenhouses (CN-2)
     - 6,000 sq. ft. in two (2) 30' x 100' buildings (CN-3);
   - 3,000 sq. ft. of commercial processing activities in a 30' x 100' commercial processing building;
   - 19,200 sq. ft. of ancillary drying and storage space inside four (4) 40' x 120' agriculture-exempt structures;
   - A new groundwater well for non-irrigation water uses
   - Rainwater catchment infrastructure and storage for irrigation water, including construction of a 2.65-million-gallon capacity rainwater catchment pond and installation of 40 x 5,000-gallon plastic water storage tanks (38 irrigation tanks and two (2) tanks designated for "Fire Use Only");
     - An additional 14 x 5,000-gallon plastic water storage tanks would be added to the site if the proposed well was unable to be used for non-irrigation water
   - PG&E upgrade and associated infrastructure;
   - Installation of a 323kW-capacity roof-mounted solar photovoltaic power system;
   - Four (4) compost areas;
   - 34 parking spaces, including two (2) ADA space for employees;
   - 1,280 sq. ft. of farmworker housing in four (4) 40' x 8' modular housing units;
   - Septic system associated with the commercial processing building and farmworker housing;
   - Upgrade two existing culverts; and
   - Site grading, drainage, and erosion control.

With all improvements included, the Proposed Project would disturb approximately seven (7) acres of existing grassland on the 517-acre parcel.

Table 1: Proposed Discretionary Cannabis Activities and Associated Locations

I.D.	Description	Full-Sun Outdoor Cultivation (sq. ft.)	Mixed-Light Cultivation (sq. ft.)	Light-Deprivation Outdoor Cultivation (sq. ft.)	Commercial Nursery (sq. ft.)	Commercial Processing (sq. ft.)
OD-1	<P> Soil Beds or in Native Soil	130,680	-	-	-	-
GH-1	<P> (17) 105' x 24' Greenhouses	-	-	42,840	-	-
	<P> 30' x 24' Greenhouse	-	-	720	-	-
ML-1	<P> 218' x 200' Gutter-Connect Greenhouse	-	43,560	-	-	-
CN-1	<P> 107' x 200' Gutter-Connect Greenhouse	-	-	-	21,440	-
CN-2	<P> (16) 105' x 24' Greenhouses	-	-	-	40,320	-
CN-3	<P> (2) 30' x 100' Nursery Buildings	-	-	-	6,000	
-	<P> 30' x 100' Commercial Building	-	-	-	-	3,000
Subtotals		**130,680 (3 acres)**	**43,560 (1 acre)**	**43,560 (1 acre)**	**67,760 (1.56 acres)**	**3,000 (0.07 acres)**
Total Cultivation Canopy Area		**217,800 sq. ft. (5 acres)**			**-**	**-**
Total Proposed Commercial Cannabis Activity: 288,560 sq. ft. (6.6 acres)						

Access/Parking: The Proposed Project site is located approximately 1 mile east of the community of Petrolia off of Chambers Road. Chambers Road is a county-maintained, Category 4 road to the property gate. The onsite road network is in good condition and is comprised of existing gravel and natural-surfaced roads. A fire turn-around area is proposed near the area proposed for cultivation activities. Thirty-four (34) parking spaces, including two (2) ADA-compliant parking spaces, would be located near the proposed processing facility and cultivation area (Appendix 1 – Site Maps).

Water Source, Storage, and Use: Water for irrigation would be sourced solely from rainwater catchment captured in a proposed 2.65-million-gallon capacity rainwater catchment pond and 190,000 gallons (38 x 5,000-gallon tanks) of hard storage tanks plumbed to catchment surfaces for a total of 2,840,000 gallons of proposed water storage. Accounting for evaporation, the proposed pond is sized sufficiently in combination with the tanks to supply all the water storage required for cultivation activities. Projected water demand for other project components would be 111,709 gallons, (including 10,429 gallons for processing and 101,280 gallons of water for farmworker housing). Water for fire suppression would be stored in two (2) 5,000-gallon tanks, designated as "Fire Use Only". Water for processing and farmworker housing would be sourced from a proposed groundwater well. (Note: An engineered grading permit for the proposed pond was submitted to the Humboldt

County Planning and Building Department on March 15th, 2021 (BLD-2021-53539). Permit BLD-2021-53539 is ready to issue upon approval of the Conditional Use Permit for the Proposed Project.)

Projected total water demand for proposed commercial cannabis cultivation is 2,154,095 gallons, including 1,807,276 gallons for mature plant cultivation and 346,819 gallons for nursery activities (Table 2). The total rainwater collection potential, including surface area of the pond, greenhouses, dry buildings, and the proposed processing and nursery buildings, during an average rainfall year of 73.93 inches is approximately 8,301,376 gallons (Table 3). The total irrigation demand plus pond evaporation is approximately 2,832,024 gallons (Table 4). During drought years, the total collection potential varies from 3,058,697 gallons to 3,974,959 gallons, depending on the dataset used to estimate the lowest rainfall on record (Table 3), which is sufficient to meet the proposed demand, even during the minimum precipitation year on record of 27.24 inches and accounting for pond evaporation.

Table 2: Monthly and Annual Water Use for Irrigation Activities (Source: Cultivation and Operations Plan, Cenci 2021)

Month	Mixed-Light	Light-Dep	Full-Sun Outdoor	Nursery	Total Cultivation
January	-	-	-	11,530	11,530
February	-	-	-	28,862	28,862
March	11,575	-	-	55,492	67,067
April	112,011	70,438	-	62,700	245,149
May	117,239	116,771	20,211	67,016	321,237
June	113,878	112,568	67,998	43,894	338,338
July	117,239	116,646	128,600	50,733	413,218
August	117,674	116,460	128,600	10,216	372,951
September	47,231	99,068	124,452	5,174	275,926
October	-	-	61,767	3,354	65,121
November	-	-	6,849	2,867	9,716
December	-	-	-	4,982	4,982
TOTAL	**636,847**	**631,951**	**538,478**	**346,819**	**2,154,095**

Note: Components may not sum to totals because of rounding.

Table 3: Rain-catchment Surfaces and Water Collection Potential (in Gallons) for Average and Dry Years (Source: Cultivation and Operations Plan, Cenci 2021)

Rain-catchment Facility	Catchment Surface Material	Footprint (sf)	PRISM 30-Yr Average (73.93 in)	PRISM Record Low (2013: 29.33 in)	CoCoRaHS Record Low (2020: 35.4 in)	NCWAP Record Low (1977: 27.24 in)
Pond	EPDM, poly-ethylene	46,367	2,136,878	847,756	1,023,204	787,347
Gutter-connect Greenhouses	acrylite, acrylic, polycarbonate	65,000	2,995,607	1,188,437	1,434,390	1,103,751
Stand-alone Greenhouses	polyethylene	43,560	2,007,518	796,436	961,262	739,683
Drying Buildings	galvanized steel, Galvalume	19,200	884,856	351,046	423,697	326,031
Nursery & Processing Buildings	galvanized steel, Galvalume	6,000	276,518	109,702	132,405	101,885
TOTAL COLLECTION POTENTIAL (GAL)			**8,301,376**	**3,293,377**	**3,974,959**	**3,058,697**

Table 4: Total Proposed Project Monthly and Annual Water Demand (in Gallons) (Source: Cultivation and Operations Plan, Cenci 2021)

Month	All Cultivation	Pond Evaporation	Processing	Employee Residence	Total Water Required
January	11,530	-	886	4,960	17,376
February	28,862	-	800	4,480	34,142
March	67,067	-	886	9,920	77,872
April	245,149	-	857	9,600	255,606
May	321,237	173,424	886	9,920	505,467
June	338,338	155,302	857	9,600	504,097
July	413,218	136,775	886	9,920	560,798
August	372,951	116,066	886	9,920	499,823
September	275,926	96,362	857	9,600	382,745
October	65,121	-	886	9,920	75,927
November	9,716	-	857	8,480	19,053
December	4,982	-	886	4,960	10,827
TOTAL	**2,154,095**	**677,929**	**10,429**	**101,280**	**2,943,733**

Non-irrigation water for domestic uses, including drinking, plumbing, and processing (e.g., handwashing, surface and tool cleaning, and toilet flushing) would be sourced from a proposed on-site well. Demand for non-irrigation water would total approximately 111,709 gallons annually, including 10,429 gallons for processing activities and 101,280 gallons for water use associated with the farmworker housing (Table 4).

Even though non-irrigation water would be sourced from a proposed well, there is sufficient rainwater catchment to supply the overall Proposed Project's annual demand during both average and dry years. Rainwater catchment and groundwater well sources do not require registration in the State Water Resources Control Board's (SWRCB's) Small Irrigation Use Registration (SIUR) program. The California Department of Fish and Wildlife (CDFW) would be notified of the well once it is drilled. No diversionary water sources are proposed.

Hours/Days of Operation and Number of Employees: Activities associated with the proposed cultivation greenhouses and nursery greenhouses, including watering, transplanting, and harvesting, would generally occur during daylight hours with processing confined to the hours of 7:00 a.m. to 8:00 p.m., seven days a week. Twelve (12) employees would be employed year-round to manage and conduct day-to-day activities. An additional 22 contract laborers would be hired during peak seasonal events such as planting, harvesting, and processing. Peak seasonal events occur at regular intervals, typically between May through December. Non-peak times are January through April, when only managers and year-round laborers would be employed. Up to 8 employees may live on-site as the Proposed Project is currently proposed; additional employees would live off-site and commute daily to the Proposed Project site. See Table 5 for further details regarding employee projections.

Table 5: Employees by Activity and Classification (Source: Cultivation and Operations Plan, Cenci 2021)

Activity	Managers	Year-round Laborers	Seasonal / Contract Labor
Nursery (all)	1	2	4
Cultivation	1	6	10
Processing	1	-	8
Maintenance	1	-	0
Classification Subtotal	*4*	*8*	*22*
TOTAL EMPLOYEES		**34**	

Traffic: A period of 4 weeks of construction in 2022 is proposed to complete grading, pond construction, and site preparation for the 2023 season. During this period, it is expected that the construction contractors' employees would make four trips per day, and one trip per day of dump truck or flatbed truck delivery. Larger equipment would be mobilized once at the beginning of construction of the Proposed Project, and out at the end of construction of the Proposed Project. Full build-out of the site would occur over a 5-year period (see Construction timeline, below).

At full-build out, during operations, the Proposed Project would result in an average of 8 daily trips by full-time employees and an additional 44 trips by seasonal contract laborers for a total of 52 daily trips during peak season events. The calculation of 8 daily trips was based off 8 of the 12 full-time workers living onsite, leaving 4 full-time employees to commute to the site twice daily. Cisco Farms, Inc. would encourage employee carpooling to help reduce the Proposed Project's carbon footprint. Distribution activities would result in an average of 6 deliveries (12 trips) per month, and the commercial nursery would result in an average of 12 deliveries (24 trips) per month. Onsite vehicle and truck traffic would be required to maintain a 15-mph speed limit or less. A speed limit sign would be posted onsite.

Electrical Service and Generator Use: The Proposed Project would use existing electrical service, solar power, and a proposed electrical upgrade from Pacific Gas & Electric (PG&E). An application for a 600-amp service has been submitted to PG&E by the applicant. A roof-mounted solar photovoltaic power system would be installed on the proposed four (4) 4,800-sq. ft. drying buildings, the two (2) indoor 3,000-sq. ft. commercial nursery buildings (CN-3), the 3,000-sq. ft. processing building, and the four (4) 320-sq. ft. modular farmworker housing structures. This system has a total renewable energy power capacity of 323 kilowatts (kW) and is estimated to provide approximately 565,896 kilowatt-hours (kWh) of annual energy production, based on 4.8 annual average daily peak sun hours in Petrolia, California (Appendix 1 – Renewable Energy Table on Sheet C2 of Site Map).

Electricity would be required for cultivation (fans and lights), nursery, drying, and processing activities, security, and modular farmworker housing. Energy demand is calculated at a total of 639,962 kwh (Table 6). Solar power and the RCEA Power+ Plan or 100% Solar Choice Plan through PG&E would be utilized to meet renewable energy requirements. Energy demand would increase gradually over the proposed five-year build-out plan (refer to "Construction" description below), and the photovoltaic power system would be the primary source of power until a PG&E upgrade could be obtained.

Propane would be used in the nursery greenhouses to assist with plant propagation. An onsite generator would be kept for backup purposes only; use of any on-site generators would be limited to power outage events and would follow all guidelines set by Humboldt County and the State of California. The generator would be located away

from the property line to ensure the noise level does not exceed 50 decibels at the nearest tree line or property boundary, whichever is closest.

Table 6: Energy Use per Cannabis Activity by Month (in kilowatt-hour) (Source: Cultivation and Operations Plan, Cenci 2021)

Description of Activity	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL BY ACTIVITY
Mixed-Light Cultivation	-	-	9,801	78,374	80,521	76,954	80,239	80,635	50,366	-	-	-	**456,889**
Nursery Lighting	11,383	13,258	13,628	12,792	13,218	12,792	13,218	12,437	8,508	7,633	3,528	3,646	**126,043**
Drying	-	-	-	-	471	1,420	753	1,138	1,138	2,905	2,096	-	**9,921**
Processing	2,680	2,433	2,680	2,598	2,680	2,598	2,680	2,680	2,598	2,680	2,598	2,680	**31,581**
Utility, gen. lighting, security, etc.	224	202	224	217	224	217	224	224	217	224	217	224	**2,637**
Farmworker Housing†	1,095	989	1,095	1,060	1,095	1,060	1,095	1,095	1,060	1,095	1,060	1,095	**12,892**
TOTAL BY MONTH	**15,382**	**16,882**	**27,428**	**95,040**	**98,208**	**95,040**	**98,208**	**98,208**	**63,886**	**14,537**	**9,498**	**7,644**	**639,962**

†https://www.eia.gov/tools/faqs/faq.php?id=97&t=3#:~:text=How%20much%20electricity%20does%20an,about%20877%20kWh%20per%20month

Cultivation Methods: Three (3) cultivation methods are proposed: full-sun outdoor, light-deprivation outdoor, and mixed-light cultivation. The full-sun outdoor cultivation would be grown utilizing sunlight only, producing one (1) to two (2) flowering cycles per year. The light-deprivation cultivation would be cultivated within greenhouses using light-deprivation techniques without the use of any artificial light in the canopy area, producing two (2) to three (3) flowering cycles per year. The mixed-light cultivation would be cultivated in greenhouses with the use of supplemental artificial lighting in the canopy area up to 25 watts/sq. ft., producing two (2) to three (3) flowering cycles per year. Full mixed-light cultivation would not occur until upgraded power from PG&E is in place. Nursery, drying, and processing activities would occur year-round (Appendix 1 – Cultivation and Operations Plan).

Regulated Products: The Proposed Project would utilize agricultural chemicals, including fertilizers, nutrients, soil amendments, pesticides, fungicides, during cannabis cultivation. Fertilizers, nutrients, and soil amendments anticipated to be used include Earth Juice Rainbow Mix Pro Grow/Bloom, General Hydroponics Grow, oyster shell, gypsum, lime, dolomite, azomite, compost, and worm castings. Other legal fertilizers, nutrients, and soil amendments similar to the above could also be used during operations. Pesticides anticipated to be used include sulfur products, neem oil and other plant oils (e.g., garlic, cottonseed, corn, clove, etc.), Green Cleaner, Dr. Zymes, Regalia *(Reynoutria sachalinensis)*, Grandevo *(Chromobacterium subtsugae)*, Venerate XC, & biological controls (Appendix 1 – Cultivation and Operations Plan). All agricultural chemicals would be properly stored in accordance with the County Agricultural Commissioner, the California Department of Pesticide Regulation (CDPR), and the Cannabis General Order No. WQ 2019-0001-DWQ (General Order). Material Safety Data Sheets (MSDS) for each chemical would be kept onsite and accessible to employees. Agricultural chemical application rates would be administered in accordance with manufacturer guidelines, and all applications would be tracked as required by regulating agencies.

Petroleum products, including gasoline and diesel, are currently stored onsite to maintain existing residential and agricultural operations (e.g., to power tools, equipment, etc.). Petroleum products associated with the Proposed Project would include gasoline and diesel stored in small-quantity sealed containers (e.g., 5-gallon gas cans). All petroleum products would be stored within secondary containment.

Lighting and Signage: When artificial lighting is used for mixed-light cultivation there would be automated blackout covers in place to assure that light does not disturb wildlife, neighboring parcels, and that lighting complies with International Dark Sky Association Standards. All Proposed Project lighting would be designed and located so that it is confined to the property and that there is no spillover to adjacent properties. All signage would be in conformance with Humboldt County Code Section 314-87.2, unless otherwise permitted.

Site Drainage, Runoff, and Erosion Control: Cisco Farms, Inc., enrolled with the State Water Resources Control Board (SWRCB) for Tier 1, Low Risk coverage in March of 2021 under the Cannabis General Order. A Notice of Applicability was issued in May 2022, and the enrollee was assigned Waste Discharge ID (WDID) 1_12CC428193 (Appendix 2). Once an area greater than an acre has been disturbed onsite, the Tier would be upgraded with the SWRCB to Tier 2. Prior to commencing operations onsite, a Site Management Plan (SMP) will be developed utilizing Best Practicable Treatment or Control (BPTC) measures in accordance with the SWRCB's recommendations in the Cannabis General Order and Policy. Additional filings, monitoring, and furnishing of supporting documents once the Proposed Project is fully approved and developed would be coordinated with the SWRCB. The drainage and erosion control measures described below are required components of the SMP.

The SMP would include erosion prevention and sediment control BPTC Measures designed to prevent, contain, and reduce sources of sediment. The SMP also includes corrective actions to reduce sediment delivery and prevent erosion. Two existing culverted stream crossings are proposed to be upgraded to ensure passage of the 100-year streamflow event. Ongoing BPTC Measures would be implemented throughout the life of the Proposed Project, including proper storage of all liquid materials in secondary containment, safe storage of site refuse, site winterization activities, and ongoing monitoring of the site. All hazardous materials, including pesticides, fertilizers, soils, spoils piles, and cultivation waste, would be properly stored outside of riparian setbacks to protect water quality.

Construction BPTCs include implementing dust control measures such as road watering, conducting road work during the dry season, installing sediment capture measures such as straw waddles, and properly containing stockpiled materials outside of riparian setbacks.

As the Proposed Project would disturb more than one acre of the site during construction, the Proposed Project would be subject to the requirements SWRCB Construction General Permit (CGP). The SWRCB CGP would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) which documents the stormwater dynamics at the site, the Best Management Practices (BMPs), and water quality protection measures that are used, and the frequency of inspections. BMPs are activities or measures determined to be practicable, acceptable to the public, and cost effective in preventing water pollution or reducing the amount of pollution generated by non-point sources. Obtainment of a CGP is also a BPTC Measure for compliance with the SWRCB General Order.

Riparian Habitat, Wetlands, and Water Bodies: The property contains several watercourses, including Mill Creek, a perennial (Class I) watercourse, two seasonal (Class II) watercourses, and several ephemeral (Class III) drainages. Minimum appropriate buffers from watercourses have been established per the SWRCB General Order: 150 ft. from a Class I (perennial) watercourse, 100 ft. from a Class II (intermittent) watercourse, and 50 ft. from a Class III (ephemeral) watercourse, which are in excess of County-required buffers per the Streamside Management Ordinance of 50 ft. from an intermittent watercourse and 100 ft. from a perennial watercourse. A 2.65-million-gallon capacity rainwater catchment pond is proposed to store water for the Proposed Project.

Three (3) stream crossings (STX) exist onsite, including one bridge (STX-1) and two culverts (STX-2 and STX-3). STX-1 is a bridge located on an unnamed Class II intermittent watercourse that was replaced in 2008 as part

of a state-funded fisheries restoration project and is in good condition. STX-2 is an existing 48-inch diameter plastic culvert located on a Class II intermittent watercourse that is proposed to be upgraded to a 72-inch diameter arched culvert to sufficiently pass the expected 100-year streamflow event and associated debris. STX-3 is an existing 36-inch diameter plastic culvert located on a Class III ephemeral watercourse that is proposed to be upgraded to a 60-inch diameter culvert to sufficiently pass the expected 100-year streamflow event and associated debris. The California Department of Fish and Wildlife (CDFW) has been notified of the two proposed stream crossing upgrades (STX-2 and STX-3) and an executed Streambed Alteration Agreement (SAA) has been obtained (No. EPIMs-HUM-18009-R1C – Appendix 2).

The final Biological Resource Assessment (Appendix 2 - Naiad Biological Consulting, 2021) investigated the site for potential wetland areas in the vicinity near Proposed Project activities. No potential wetland areas were discovered in the vicinity near the Proposed Project area. An initial Biological Reconnaissance and Project Feasibility Assessment Report was conducted in October 2020 by Naiad Consulting to review the property and assess potential appropriate project-related sites and identify environmental constraints. One potential wetland area was identified onsite while investigating potential appropriate sites, located approximately 400 feet east of the existing barn and residence. The potential wetland area was not further evaluated or delineated in the final Biological Resource Assessment (2021), as the area is located over 1,700 feet from the Proposed Project area. No project components in the final Proposed Project are located near this potential wetland area.

Setbacks from watercourses are intended to help protect water quality and preserve riparian habitats for sensitive species. Additionally, a grading and erosion control plan would be filed to detail any proposed earthwork activities. (Note: An engineered grading permit for the proposed pond was submitted to the Humboldt County Planning and Building Department on March 15th, 2021 (BLD-2021-53539). Permit BLD-2021-53539 is ready to issue upon approval of the Conditional Use Permit for the Proposed Project.)

Waste & Wastewater System: There is an existing unpermitted septic system that serves the existing onsite residence. A second onsite wastewater treatment system is proposed to serve the Proposed Project needs (Appendix 2 – Onsite Wastewater Treatment System Design). The proposed leach field and septic tank would be located outside riparian setbacks. The restroom within the processing facility would be designed to meet Americans with Disabilities Act (ADA) standards of accessibility and would include a flushable toilet and a sink with cold and hot running water. Prior to construction, portable toilets and handwashing facilities would be provided onsite and serviced by a licensed provider.

The Proposed Project would generate solid waste in the form of cannabis plant material (e.g., stems, leaves, rootballs) and agricultural refuse (e.g., pots, fertilizer bags, empty containers, packaging, etc.), similar to other agricultural operations. The Proposed Project would also generate household-related waste, including trash (e.g., food wrappers) and recycling (e.g. bottles, cans). The applicant estimates that approximately 8,000 lbs. of plant material solid waste, 280 lbs. of agricultural refuse waste, 150 lbs. of non-recyclable/compostable household refuse, and 350 lbs. of household recyclables would be generated annually. Plant material would be chipped and composted onsite, as feasible. Refuse and recycling would be taken to the Humboldt Waste Management Authority in Eureka once every two weeks or as needed.

Construction: Proposed grading activities would be minimal and include preparation of a greenhouses and building pads/parking areas and a septic system. A grading permit would be submitted to the Humboldt County Building Division prior to commencement of activities. An engineered grading permit for the proposed pond has already been submitted. Normal means and methods would be used to construct the accessory building and greenhouses. Construction activities are expected to begin in the summer of 2022, with the exact start date dependent on permits, dry weather, and suitable soil conditions. Preparation of the cultivation areas would make

use of the equipment that would be onsite during the 2022 construction season. Cisco Farms, Inc. is proposing to stagger construction and build-out over a period of five years, as follows:

Year 1: Grading/scraping and construction of proposed rainwater catchment pond (as soon as possible after project approval), 10,000 sq. ft. of light-deprivation cultivation greenhouses (GH-1), 5,040 sq. ft. of nursery greenhouses (CN-2); preparation of ground for 1 acre of full-sun outdoor cultivation (OD-1)

Year 2: Grading/scraping and construction of 10,000 sq. ft. of light-deprivation greenhouses (GH-1), 5,040 sq. ft. of nursery greenhouses (CN-2), (1) 4,800 sq. ft. drying building, (1) 3,000 sq. ft. nursery building (CN-3); preparation of ground for 1 additional acre of full-sun outdoor cultivation (OD-1)

Year 3: Grading/scraping and construction of 10,000 sq. ft. of light-deprivation greenhouses (GH-1), 10,080 sq. ft. of nursery greenhouse (CN-2), (1) additional 4,800 sq. ft. drying building, (1) 3,000 sq. ft. commercial processing and associated septic system; preparation of ground for 1 additional acre of full-sun outdoor cultivation (OD-1)

Year 4: Grading/scraping and construction of 13,560 sq. ft. of light-deprivation greenhouses (GH-1), 5,040 sq. ft. of nursery greenhouses (CN-2), (1) additional 4,800 sq. ft. drying building, 2 employee housing units and associated septic system

Year 5: Grading/scraping and construction of 43,560 sq. ft. of mixed-light gutter-connect greenhouses (ML-1), 21,440 sq. ft. nursery in gutter-connect greenhouses (CN-1), 15,120 sq. ft. of nursery greenhouses (CN-2), (1) 3,000 sq. ft. nursery building (CN-3), (1) additional 4,800 drying building, (2) additional employee housing units

The duration of the construction during each year is expected to take approximately 10 weeks. All construction staging areas would be located within the Proposed Project site and outside of all identified wetland and riparian setbacks. During construction, the following dust control measures would be implemented:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered as needed.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. Adjacent public roads shall be kept clean of loose dirt tracked onto the roadways from the construction-site.

10. **Surrounding Land Uses and Setting:** The Proposed Project is located approximately 1 mile east of Petrolia off of Chambers Road. Surrounding land uses consist of other commercial cannabis operations, rural residential homes, agricultural operations, and natural space. The property is zoned Agriculture Exclusive (AE) and has a General Plan Land Use Designation of Agricultural Grazing (AG). Surrounding properties are zoned AE, Unclassified (U), and Timberland Production Zone (TPZ). Surrounding land use designations adjacent to the property are Agricultural Grazing, Residential Agriculture (RA5-20), and Timberland (T).

11. **Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreements). Since the Proposed Project would disturb more than one acre of the site, the Proposed Project would be subject to the requirements State Water Resources Control Board (SWRCB) Construction General Permit (CGP). Locally, permits from the Humboldt County Building Division, Humboldt County Planning Division, and Division of Environmental Health are required. The California Department of Fish and Wildlife (CDFW) was notified of the two (2) stream crossing upgrades and the domestic point of diversion in April of 2021, and a final executed Agreement was obtained in June 2022. Cisco Farms, Inc. has enrolled with the SWRCB for coverage under Order No. 2019-0001-DWQ General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities

("Cannabis General Order"). Upon approval of the Proposed Project, Cisco Farms, Inc. would apply for State of California Commercial Cannabis Licenses from the Department of Cannabis Control (DCC).



Figure 1: Proposed Project Vicinity (Source: Cultural Resources Investigation - William Rich & Associates, 2021)

12. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

☐ Aesthetics	☐ Agriculture and 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/Traffic	☒ Tribal Cultural
☐ Utilities/Service Systems	☐Wildfire	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the 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 project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the 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 project, nothing further is required.

Desmond Johnston

Signature — Date: 7/21/2022

Desmond Johnston, Senior Planner — Printed name

Humboldt County Planning & Building Department — For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained 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 into account the whole action involved, including off-site was 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 Section 21, "Earlier Analyses," 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 Addresses. Identify which effects from the above checklist were within the scope of and adequately analyze 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 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 plan, 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 identify:

   a) The significant 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 significant.

2.Introduction

This project-level Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the Cisco Farms, Inc. Cannabis Cultivation Project (Proposed Project) to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq.) and State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). The County of Humboldt (County) is the lead agency for this Proposed Project under CEQA.

2.1.INITIAL STUDY PURPOSE

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, 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.

2.2.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, written comments may be submitted to:

Michael Holtermann

Planner
Planning and Building Department
County of Humboldt
3015 H Street
Eureka, CA 95501
mholtermann@co.humboldt.ca.us

3.Environmental Checklist

3.1.EXPLANATION OF INITIAL STUDY CHECKLIST

The California Environmental Quality Act (CEQA) Guidelines Appendix G recommends that lead agencies use an Initial Study (IS) checklist to determine the potential impacts of the Proposed Project on the physical environment. The checklist provides a list of questions concerning a comprehensive array of environmental issue areas potentially affected by the Proposed Project. This section of the IS incorporates the Appendix G environmental checklist form, contained in the State CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 17 environmental topic areas. There are four possible answers to the checklist questions on the following pages. Each possible answer is explained below:

- A *Potentially Significant Impact* is appropriate if there is enough relevant information, as well as reasonable inferences from that information, that a fair argument can be made to support a conclusion that a substantial or potentially substantial adverse change may occur to any of the physical conditions within the area affected by the Proposed Project. When one or more of these entries are made, an Environmental Impact Report (EIR) is required.
- A *Less-than-Significant Impact with Mitigation Incorporated* is appropriate when the lead agency incorporates mitigation measures to reduce an impact from a potentially significant level to a less-than-significant level. For example, floodwater impacts could be reduced from a potentially significant level to a less-than-significant level by relocating a building to an area outside the floodway. The lead agency must describe the mitigation measures and briefly explain how the measures would reduce the impact to a less-than-significant level.
- A *Less-than-Significant Impact* is appropriate if there is evidence that one or more environmental impacts may occur, but the impacts are determined to be less than significant or the application of development policies and standards to the Proposed Project would reduce the impact(s) to a less-than-significant level. For example, the application of the City's stormwater improvement standards would reduce potential erosion impacts to a less-than-significant level.
- A *No Impact* is appropriate where it can be demonstrated that the impact does not have the potential to adversely affect the environment. For example, a proposed in the center of an urbanized area with no agricultural lands on or adjacent to the project area clearly would not have an adverse effect on agricultural resources or operations.

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.

3.2. CHECKLIST, DISCUSSION OF CHECKLIST RESPONSES, AND PROPOSED MITIGATION

3.2.1. AESTHETICS

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting

The Proposed Project site (APNs 105-101-011, 104-232-005, 104-191-001)) is an approximately 517-acre parcel located off Chambers Road near the community of Petrolia. The subject parcel is currently developed for domestic and agricultural purposes. Existing onsite structures include a residence and four (4) agricultural barns. The property has historically been used for agricultural purposes. Numerous other cannabis cultivation sites are located in the vicinity of the Proposed Project.

No specific scenic vistas in the Proposed Project area have been designated. Humboldt County has no officially designated State Scenic Highways, though it has numerous segments eligible for designation due to their scenic qualities (CalTrans State Scenic Highway System Map, 2021):

- State Highway 101 in its entirety in Humboldt County
- State Highway 36 from State Highway 101 near Fortuna to the Trinity County Line
- State Route 254 in Avenue of the Giants
- State Route 299 from Arcata to Willow Creek
- State Route 96 from State Route 299 at Willow Creek north to Siskiyou County

The Commercial Cannabis Land Use Ordinance (CCLUO) includes Performance Standards for Light Pollution Control, including the requirement for all mixed-light cultivation and nurseries to be shielded so that no light escapes between sunset and sunrise (CCLUO, 2018). The Proposed Project has been designed to meet all CCLUO Performance Standards.

Analysis

a) Finding: The project will not have a substantial adverse effect on a scenic vista. *Less than significant impact.*

Discussion: There are no officially designated scenic vista points in the Proposed Project area. No routes or highways eligible for designation are near the Proposed Project site, and no Wild, Scenic, and Recreational Rivers are designated near the Proposed Project site (Humboldt County General Plan, 2017).

Existing trees and vegetation would mostly block views of the Proposed Project site from Chambers Road, a public road (Appendix 1 – Site Maps). Proposed developments on the Proposed Project site may be visible from nearby private residences. Construction of the proposed facilities would be temporary and occur during daylight hours when surrounding neighbors are accustomed to the use of construction equipment. The Proposed Project is an agricultural project, consistent with the zoning and land use designation of the parcel. Other existing commercial cannabis operations are also located in the vicinity. All artificial light in the greenhouses would be shielded with blackout covers to avoid night-time light leakage. As such the Proposed Project would not be widely visible and would not have a substantial adverse effect on a scenic vista. Therefore, the impact is less than significant.

b) Finding: The project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. *No impact.*

Discussion: The Proposed Project is located off of Chambers Road in Petrolia, located over 40 driving miles from State Highway 101, which is eligible to be designated as a California State Scenic Highway (California Department of Transportation, 2021). The Proposed Project site is not visible from a state scenic highway; therefore, no impacts would occur.

c) Finding: The project will not substantially degrade the existing visual character or quality of the site and its surroundings. *Less than significant impact.*

Discussion: Sensitive viewer groups typically include residents and recreationists. The existing visual character of the Proposed Project site consists of an existing residence, four barns, a shipping container, livestock sheds, water diversion and storage infrastructure, open agricultural fields, and stands of trees and shrubs. The Proposed Project site is surrounded by agriculture, grasslands, woodlands, cannabis commercial operations, and agricultural operations.
During the Proposed Project's temporary construction periods, construction equipment, supplies, and construction activities would be visible on the subject property from immediately surrounding areas and rural

residences. Construction activities are a common occurrence in the region and are not considered to substantially degrade the area's visual quality. All construction equipment would be removed from the project site following completion of the construction activities. As such, the temporary visibility of construction equipment and activities at the Proposed Project site would not substantially degrade the visual character of the surrounding area.

Development of the site for the Proposed Project would alter the site's visual character by adding greenhouses, a pond, buildings, sheds, and other cultivation-related infrastructure (Appendix 1 - Site Maps). The Proposed Project is set to occur in the existing field on the property; no trees or vegetation are proposed to be removed from the cannabis operation. The Proposed Project is consistent with the agriculture commercial nature of the immediately surrounding areas and is consistent with nearby commercial cannabis activities.

Because the Proposed Project site has limited visibility from public access points and agricultural/cannabis activities are typical uses in the Proposed Project area, the Proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings, therefore, the impact is less than significant.

d) Finding: The project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. *Less than significant impact*.

Discussion: The full-sun outdoor cultivation would be grown utilizing sunlight only, and the light-deprivation cultivation would be cultivated within greenhouses using light-deprivation techniques without the use of any artificial light in the canopy area. New sources of light associated with the Proposed Project include the mixed-light gutter connected greenhouses (ML-1), the commercial nursery (CN-1, CN-2, and CN-3), the commercial processing building, farmworker housing, and associated security and safety lighting.

Per the Cultivation and Operations Plan (Appendix 1), all lighting associated with the Proposed Project would be shielded so as not to allow light to escape from sunrise to sunset. Automated blackout covers would be installed on the mixed-light gutter connected greenhouses (ML-1) and the nursery greenhouses (CN-1, CN-2, and CN-3) to assure that light would not disturb wildlife or neighboring parcels. The covers would be deployed on greenhouses with supplemental lighting one half hour before sunset and after sunrise. If automated blackout covers were to malfunction, employees would manually cover the greenhouse to ensure light does not escape. The proposed processing building and farmworker housing would include blinds. These project features were designed to meet International Dark Sky Association Standards and follow the Performance Standards of the CCLUO.

All new outdoor lighting (e.g., security lighting) would be the minimum lumens required for security and safety purposes, directed downward, and shielded to prevent lighting spillover. All lighting would be designed and located so that it is confined to the property and that there is no spillover on to adjacent properties.

The new structures proposed would not be constructed of materials that would reflect light or cause any sources of glare that would impact surrounding land uses, or drivers on adjacent roadways. All new lighting on the property would conform with the CCLUO and with International Dark Sky Association Standards. Therefore, the Proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area and impacts would be less than significant.

Mitigation Measures

None.

3.2.2. AGRICULTURE AND FORESTRY RESOURCES

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Setting

The Proposed Project site is located at 1414 Chambers Road (APNs 105-101-011, 104-232-005, 104-191-001) approximately 1-mile east of the community of Petrolia. The parcel is approximately 517 acres in size and is zoned Agriculture Exclusive (AE), with a land use designation of Agricultural Grazing (AG). The property is currently used for residential and agricultural purposes, including livestock grazing.

The subject property is part of a preserve under a Williamson Act Land Conservation Contract ("Walker Preserve" Ranch Nos. 79-6 and 84-20). The "Walker Preserve" consists of 1,034 acres across APNs 104-191-001, 104-221-017, 104-222-017, 104-232-003, 104-232-004, 104-232-005, and 105-101-001. The subject property has been under contract since 1979 and has continually been used for agricultural operations. Today, between 40 and 120 cattle are grazing onsite at any given time (Appendix 2 - Williamson Act Letter to County, 2022)

The Farmland Mapping and Monitoring Program of the California Department of Conservation has not yet mapped farmland in Humboldt County (http://www.conservation.ca.gov/dlrp/fmmp, April 2022). As illustrated in Figure 2, the property contains 120.25 acres of prime agricultural soils (Humboldt Web GIS, 2022).

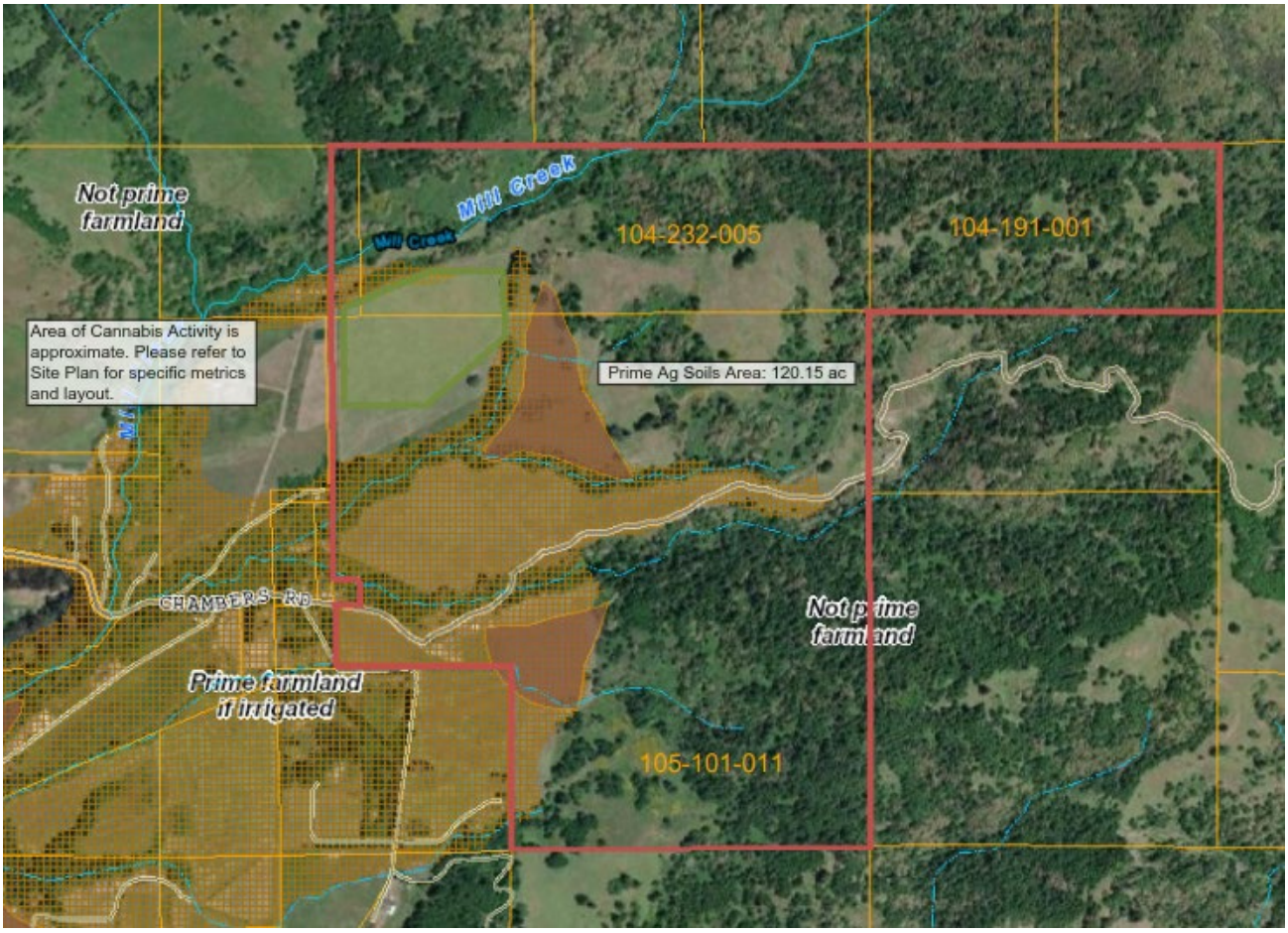


Figure 2: Prime Agricultural Soils (gold cross hatched and light brown shaded areas) located on the Project Site (Source: Humboldt Web GIS, 2022). Proposed Project area is outlined in green.

Analysis

a) Finding: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. *No Impact.*

Discussion: Humboldt County is not included in the Farmland Mapping and Monitoring Program (FMMP) (California Department of Conservation, 2018). The property does not contain Unique Farmland or Farmland of Statewide Importance. The property contains approximately 120 acres of mapped Prime Agricultural Soils, as defined under the CCLUO (Figure 2). The Prime Agricultural Soils are centrally located in the flatter portions of the property but do not overlap with the Proposed Project development area.

None of the Proposed Project would occur on Prime Agricultural Soils, Unique Farmland, or Farmland of Statewide Importance. Additionally, the Proposed Project is an agricultural project consistent with Agriculture Exclusive (AE) zoning. Therefore, the Proposed Project would not convert prime or unique farmland or farmland of statewide importance to a non-agricultural use. No impact would occur, and no mitigation would be necessary.

b) Finding: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. *Less than Significant Impact.*

Discussion: The subject property is under an existing Williamson Act Contract, and currently supports cattle grazing year-round. The applicant intends to continue cattle grazing. The Proposed Project would be located on APNs 105-101-011, 104-232-005, and 104-101-001, and would occupy a total area of approximately 22 acres, including all cannabis-related areas, ancillary buildings, roads and parking areas, employee housing, and water storage infrastructure. The Proposed Project comprises approximately 4% of lot acreage and 2% of the total Walker Preserve acreage. The remaining 98% of preserve acreage would remain available for grazing operations.

The Proposed Project site areas proposed for development are zoned Agricultural Exclusive (AE) and designated Agricultural Grazing (AG) and the proposed agricultural project is consistent with the intended zoning and general plan designation. Therefore, the Proposed Project would not conflict with existing zoning for an agricultural use or a Williamson Act contract and the impact would be less than significant.

c) Finding: The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526). *No impact.*

Discussion: The Proposed Project would not conflict with existing forestland or timberland zoning because no development is proposed to occur within the forested areas of the property. The property is zoned Agriculture Exclusive (AE); no timberland-related zoning exists onsite. All project components are proposed to occur within the areas of existing agriculture on the property zoned Agricultural Exclusive. No trees are proposed to be removed. Therefore, the Proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, and no impact would occur.

d) Finding: The project will not result in the loss of forest land or conversion of forest land to non-forest use. *No impact.*

Discussion: The Proposed Project components would take place within the agriculturally zoned areas in existing agricultural fields. No development would occur within the forested areas of the property and no trees are proposed to be removed as part of the Proposed Project. Therefore, the Proposed Project would not result in the loss of forestland or conversion of forest land to non-forest use and no impact would occur.

e) Finding: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. *No Impact.*

Discussion: The Proposed Project would not produce significant growth inducing or cumulative impacts that would result in the conversion of farmland or forest land. The Proposed Project includes cannabis cultivation, which is an agriculture product, therefore protecting farmland from conversion. Growth inducing impacts are generally caused by projects that have a direct or indirect effect on economic growth, population growth, or land development. The Proposed Project would employ twelve (12) full-time, year-round employees. An additional 22 persons or contract laborers will be hired during peak seasonal events, such as harvesting and processing (Appendix 1 – Cultivation and Operations Plan). Additionally, no trees are proposed to be removed as part of the Proposed Project.

Therefore, the Proposed Project is not anticipated to indirectly convert farmland to non-agricultural land or forest land to non-forest land. *No Impact.*

Mitigation Measures

None.

3.2.3. AIR QUALITY

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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

The Proposed Project site is located off of Chambers Road near the community of Petrolia in Humboldt County, which lies within the North Coast Air Basin (NCAB). The NCAB extends for 250 miles from Sonoma County in the south to the Oregon border. The climate of NCAB is influenced by two major topographic units: the Klamath Mountains and the Coast Range provinces. The climate is moderate with the predominant weather factor being moist air masses from the ocean. Annual average precipitation is approximately 48 inches per year (USGS StreamStats, 2021). Dominant winds in the NCAB exhibit seasonal patterns. In the coastal areas strong north to northwesterly winds are common in the summer and from the southwest during storm events occurring during winter months.

Proposed Project activities are subject to the authority of the North Coast Unified Air Quality Management District (NCUAQMD) and the California Air Resources Board (CARB). The NCUAQMD is listed as "attainment" or "unclassified" for all the federal and state ambient air quality standards except for the state 24-hour particulate (PM_{10}) standard, which relates to concentrations of suspended airborne particles that are 10 micrometers or less in size.

In determining whether a project has significant air quality impacts on the environment, agencies often apply their local air district's thresholds of significance to projects in the review process. The District has not formally adopted specific significance thresholds, but rather utilizes the Best Available Control Technology (BACT) emissions rates for stationary sources as defined and listed in the NCUAQMD Rule and Regulations, Rule 110

– New Source Review (NSR) and Prevention of Significant Deterioration (PSD), Section 5.1 – BACT (pages 8-9) (www.ncuaqmd.org).

The Proposed Project site is located near rural residential and agricultural uses, including other cannabis activities. Sensitive receptors near the Proposed Project site primarily include rural residences to the west, southwest, and east of the Proposed Project. Based on review of 2019 aerial imagery and Humboldt County Planning Department database (Accela, 2022), 27 off-site residences and twelve (12) active commercial cannabis operations are located within 1 mile of the Proposed Project area (Figure 3, Figure 4). Two of these residences and two of the commercial cannabis operations are associated with the Proposed Project. The nearest residence (located on APN 104-232-008) to the proposed cultivation activities (CN-1) is approximately 587 feet (Appendix 1 – Project Description). Mattole Unified School District, the nearest school, and the Mattole Valley Community Center are both located approximately 1 mile west of the Proposed Project area boundary (per Google Earth).

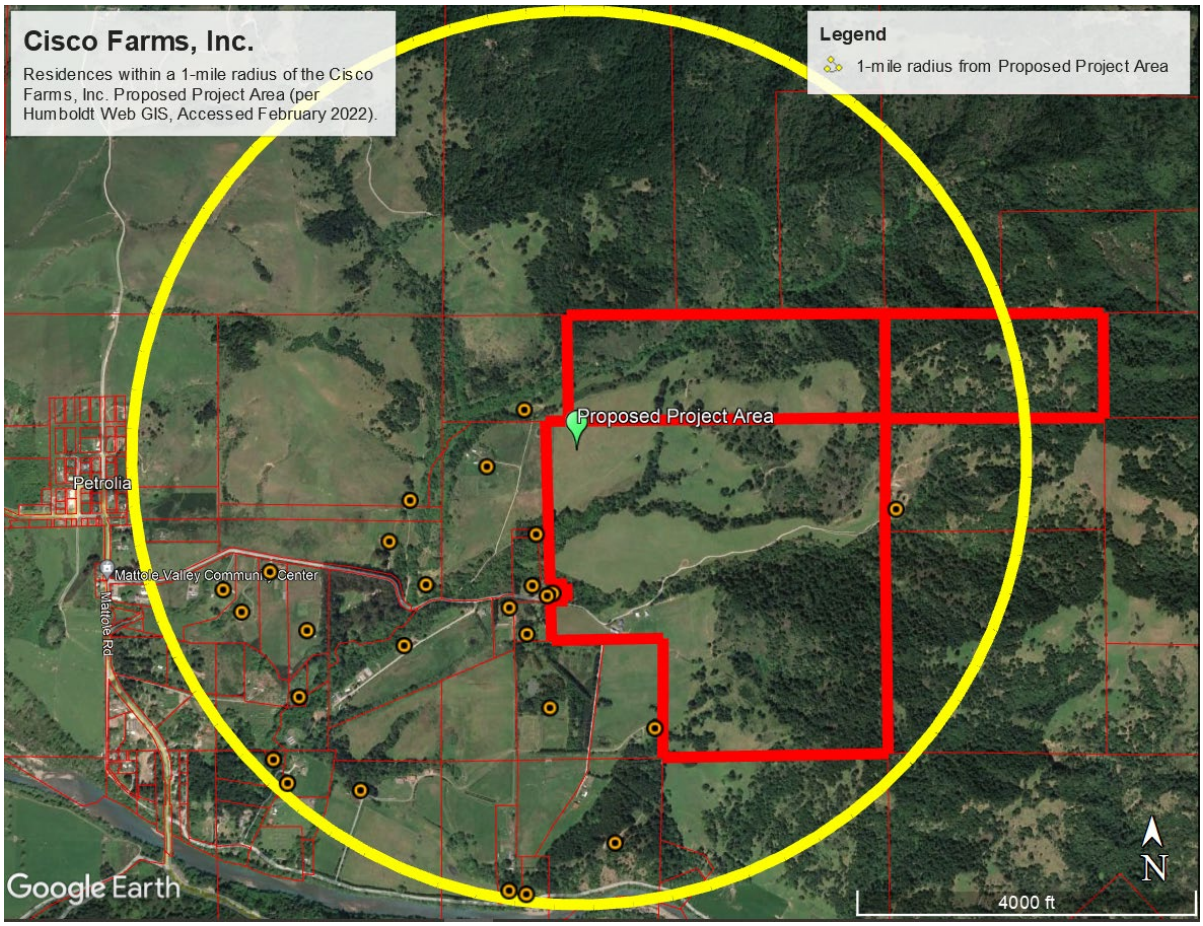


Figure 3: Residences within 1 mile of the Proposed Project Area - Residences indicated by orange circles (Source: Google Earth, 2019 Imagery)

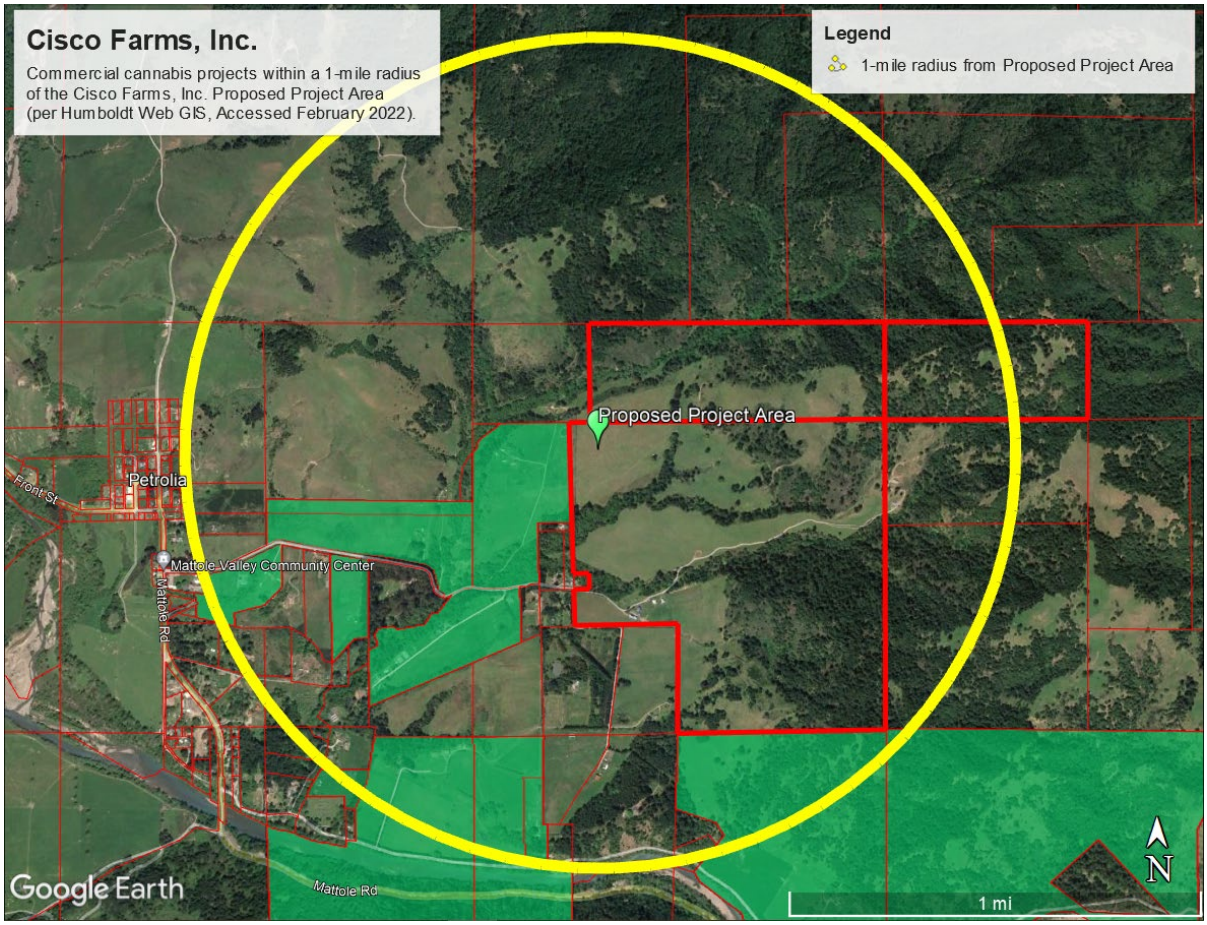


Figure 4: Active Commercial Cannabis projects within 1 mile of the Proposed Project Area (Source: Humboldt County Accela, 2022 & Google Earth, 2019 Imagery)

Analysis

a) Finding: The project would not conflict with or obstruct implementation of the applicable air quality plan. *Less than significant impact with mitigation incorporated.*

Discussion: This impact is related to consistency with the applicable air quality management or attainment plan. A potentially significant impact to air quality would occur if the Proposed Project would conflict with or obstruct the implementation of the applicable air quality management or attainment plan. Although the Proposed Project would represent an incremental increase in air emissions within the district, of primary concern is that Proposed Project-related impacts have been properly anticipated in the regional air quality planning process and reduced whenever feasible. Therefore, it is necessary to assess the Proposed Project's consistency with the applicable district air quality management or attainment plan(s).

Air quality in Del Norte, Humboldt, and Trinity counties is regulated by the NCUAQMD. The NCUAQMD's primary responsibility is to achieve and maintain federal and state air quality standards, subject to the powers and duties of the CARB. The NCUAQMD is currently listed as being in "attainment" or is "unclassified" for all federal health protective standards for air pollution (ambient air quality standards). However, under State ambient air quality standards, the air district has been designated "nonattainment" for particulate matter less than ten microns in size (PM_{10}). PM_{10} emissions include, but are not limited to, smoke from wood stoves, dust

from traffic on unpaved roads, vehicular exhaust emissions, and airborne salts and other particulate matter naturally generated by ocean surf.

The California Clean Air Act (CCAA) requires the NCUAQMD achieve and maintain State ambient air quality standards for PM_{10} by the earliest practicable date. The NCUAQMD prepared the Particulate Matter Attainment Plan, Draft Report, in May 1995 (Attainment Plan). This report includes a description of the planning area (North Coast Unified Air Quality District), an emissions inventory, general attainment goals, and a listing of cost-effective control strategies. The NCUAQMD's attainment plan established countywide goals to reduce PM_{10} emissions and eliminate the number of days in which standards are exceeded. The plan does not include project specific related requirements. However, NCUAQMD Rule 104, Section D – Fugitive Dust Emissions is used to address non-attainment for PM_{10} by prohibiting specific activities and providing reasonable precautions to prevent particulate matter from becoming airborne. Under Rule 104, Section D "no person shall allow handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne." Rule 104, Section D provides the following reasonable precautions that shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:

a. Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
b. The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
c. The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
d. The prompt removal of earth or other track out material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

Additionally, according to the Humboldt County General Plan, unpaved road dust accounts for approximately 58.2% of the County's PM_{10} emissions (2017). To comply with the General Plan and NCUAQMD Rule 104, Section D – Fugitive dust Emissions, the Proposed Project design incorporates relevant control measures identified in the PM_{10} Attainment Plan appropriate to incorporate into construction and operational activities. These measures are included as **Mitigation Measures AQ-1.** Therefore, the Proposed Project would not conflict with or obstruct implementation of the NCUAQMD Attainment plan for PM_{10} and the impacts would be less than significant with mitigation incorporated.

b) Finding: The project would not 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. *Less than significant impact with mitigation incorporated.*

Discussion: The NCUAQMD is currently listed as being in "attainment" or is "unclassified" for all federal health protective standards for air pollution (ambient air quality standards). However, under State ambient air quality standards, the air district has been designated "nonattainment" for PM_{10} (NCUAQMD website, 2021).

The Proposed Project would generate short term PM_{10} emissions from construction and operational activities.

Construction: During construction, scraping, grading, tilling, excavating, building construction, landscaping, and vehicle traffic could generate emissions. The NCUAQMD has advised that, generally, an activity that individually complies with the state and local standards for air quality emissions would not result in a cumulatively considerable increase in the countywide PM_{10} air quality violation. Potential particulate matter could be generated during construction activities and build-out of the site, in general; however, short-term construction activities that use standard quantities and types of construction equipment

are not required to be quantified and are assumed to have a less than significant impact. In addition, the Proposed Project design incorporates control measures identified in the PM_{10} appropriate to this type of project to reduce fugitive emissions. These measures are included in **Mitigation Measure AQ-1**.

The NCUAQMD and the County have not adopted thresholds of significance for construction generated PM_{10}. However, the Bay Area Quality Management District (BAAQMD) has established thresholds that can be used in for significance determination. The BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures recommended by BAAQMD are implemented for a project, then fugitive dust emissions during construction are not considered significant. BAAQMD recommends a specific set of Basic Construction Measures to reduce emissions of construction generated PM_{10} to less than significant. The BAAQMD Basic Construction Measures are consistent with NCUAQMD Rule 104, Section D, provide supplemental additional measures to control fugitive dust, and have been incorporated into **Mitigation Measure AQ-1**. Therefore, with incorporation of **Mitigation Measure AQ-1**, the construction related Proposed Project impacts would be less than significant

The NCUAQMD has indicated that it is appropriate for lead agencies to compare proposed construction emissions that last more than one year to its stationary source significance thresholds which are provided in (Table 7). If the Proposed Project's construction emissions are below these thresholds, the Proposed Project's impacts are considered to be less than significant.

The California Emission Estimator Model (CalEEMod®) Version 2020.4.0 was used to estimate emissions from Proposed Project related construction activities (Appendix 2 – CalEEMod Analysis for Cisco Farms, Inc., NorthPoint Consulting, April 2021). There are no specific default values for agricultural operations, so the most fitting Land Use Types from CalEEMod were used. Approximately 285,560 sq. ft. of "Industrial – Unrefrigerated Warehouse- No Rail" was used to calculate emissions related to the cultivation and nursery activities, 22,200 sq. ft. of "Industrial-General Light Industry" was used to calculate emissions related to the processing and drying activities, and 1,284 sq. ft. of "Residential – Mobile Home Park" was used to calculate emissions related to the modular farmworker housing. All other non-default CalEEMod values were sourced from the Cultivation and Operations Plan (Appendix 1 - Cenci Consulting, 2021) or were determined using the best available information. The estimated emissions along with the NCUAQMD significance thresholds are summarized in Table 7. As shown in the table, all construction-related emissions are less than the significance thresholds; thus, the Proposed Project's construction emissions are considered to have a less than significant impact.

Table 7: Construction Pollutant Emissions (Source: CalEEMod, 2022 - Appendix 2)

Pollutant	Proposed Project Emissions - Unmitigated		Significance Thresholds		Exceeds Threshold?
	Tons/year	Lbs./day	Tons/year	Lbs./day	
ROG	0.11	0.69	40	50	No
NO_x	1.04	6.26	40	50	No
CO	1.03	6.22	100	500	No
SO_x	0.002	0.01	40	80	No
PM_{10}	0.97	5.86	15	80	No
$PM_{2.5}$	0.18	1.1	10	50	No

Operation: During operation of the Proposed Project, the primary activities that would generate pollutant emissions would be daily vehicle traffic, delivery truck traffic, and the potential use of a back-up fuel-

powered generator during power outages. Although the use of the generator would be infrequent, generator use was considered as part of the operational impact analysis. Since the Proposed Project would result in an increase in operational trips (employees and delivery trucks), operational analysis includes emissions from these mobile sources. Proposed Project operational emissions were estimated using CalEEMod. At full build-out the Proposed Project would result in an average of 8 daily trips by full-time employees and 44 trips by seasonal contract laborers during peak seasonal events. Approximately 36 truck trips would be expected per month (approximately 9 truck trips per week). A total of 60 vehicle trips per day were used as an estimate in CalEEMod. The estimated emissions along with the NCUAQMD significance thresholds are summarized in Table 8. As shown in the table, all operational-related emissions are less than the significance thresholds, even when combining construction pollutant emissions, although temporary, from Table 7. Thus, the Proposed Project's operational emissions are considered to have a less than significant impact.

Table 8: Operational Pollutant Emissions (Source: CalEEMod Analysis, 2022 - Appendix 2)

Pollutant	Proposed Project Emissions - Unmitigated		Significance Thresholds		Exceeds Threshold?
	Tons/year	Lbs./day	Tons/year	Lbs./day	
ROG	1.27	7.65	40	50	No
NO_x	0.14	0.82	40	50	No
CO	0.56	3.38	100	500	No
SO_x	0.001	0.01	40	80	No
PM_{10}	4.35	26.28	15	80	No
$PM_{2.5}$	0.45	2.72	10	50	No

Therefore, the Proposed Project impacts are less than significant with **Mitigation Measure AQ-1** incorporated.

c) Finding: The project would not expose sensitive receptors to substantial pollutant concentrations. *Less than significant impact.*

Discussion: Sensitive receptors (e.g., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effect of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, parks, childcare centers, hospitals, convalescent homes, and retirement homes.

The nearest sensitive receptors near the Proposed Project site include rural residences to the south, west, and east. The nearest residence is located approximately 587 feet from the Proposed Project area. There are approximately 27 residences within a mile radius of the Proposed Project (Figure 3). The nearest school/park is Mattole Unified School District, located one mile west of the Proposed Project area (Google Maps, 2022). The Mattole Community Center is located across the street from the Mattole Unified School District campus, also approximately one mile west of the Proposed Project area (Google Maps, 2022). There are no hospitals, designated retirement communities, childcare centers, or other known sensitive receptors within 600 feet of the Proposed Project area.

As indicated by the air quality impact analysis under subsection b), the Proposed Project would not produce significant quantities of criteria pollutants (e.g., PM_{10}) during short-term construction activities or long-term operation.

As part of the proposed cultivation, pesticides and fertilizers would be applied to cannabis cultivation. Pesticide or fungicide application would occur within greenhouses and outside for the full sun outdoor cultivation. Chemicals would be applied directly to the plants; no aerial spraying would occur. Application is normally required to be administered a minimum of 300 feet from sensitive receptors (e.g. residences) in the case of dry pesticides and 200 feet in the case of wet pesticides. The Proposed Project area is greater than 500 feet from the nearest sensitive receptor (residence on APN 104-232-008). All other residences or sensitive receptors are located 600+ feet from the Proposed Project area. This operating restriction is an existing requirement of law and no additional mitigation is required. Therefore, the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations and the impacts would be less than significant.

d) Finding: The project would not result in emissions (such as those leading to odors adversely affecting a substantial number of people). *Less than significant impact.*

Discussion: During long-term operation of the Proposed Project there is the potential to impact air quality due to odors that would be generated by the proposed cultivation and processing activities. Odors from the Proposed Project cannabis cultivation activities would primarily be noticeable between August and October (Appendix 1 – Cultivation and Operations Plan).

The closest land uses to the Proposed Project site that could potentially be impacted by odors include surrounding residences. As described above, there are approximately 27 residences within one mile of the Proposed Project area, two of which are associated with the Proposed Project applicant (Figure 3). The approximately 25 other nearby residents could potentially experience odors from the Proposed Project cultivation activities. According to the 2020 Census, the average household size in Humboldt County was 2.41 (US Census Bureau, 2022). Based on this it is estimated that the nearby residential units would provide housing for approximately 60.25 persons, however, the vast majority of these residences are located greater than 600 feet from the Proposed Project area.

Although these nearby residents may experience odors from the facility, the low number of residents does not comprise a substantial number of people. Additionally, there are approximately twelve (12) other cultivation operations within 1 mile of the Proposed Project area (Figure 4), and another proposed commercial cannabis operation is consistent with surrounding land uses. The size of the parcel, topography, and distance to sensitive receptors would reduce any odors emitted from commercial cannabis activities. The Proposed Project site meets all siting criteria outlined in the CCLUO and is consistent with surrounding land uses. Therefore, no mitigation is necessary and Proposed Project impacts would be less than significant.

Mitigation Measures

AQ-1. During construction and operation, the following dust control measures shall be implemented:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered two times per day in areas of active construction.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All vehicle speeds on unpaved roads shall be limited to 15 mph, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
- All construction and operation equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications.

3.2.4. BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the United States Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the United States Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on Federally protected wetlands (including, but not limited to, marshes, 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

The Proposed Project site (APNs 105-101-011, 104-232-005, 104-191-001) is an approximately 517-acre parcel located off Chambers Road near the community of Petrolia. The subject parcel is currently developed for domestic and agricultural purposes. Existing onsite structures include a residence and four (4) agricultural barns. The property has historically been used for agricultural purposes. The parcel is surrounded by agricultural land, timberland, rural residential homes, and other cannabis farms and agricultural activities.

The Proposed Project site is located approximately 1.40 air miles east of Petrolia. Elevations range from 225 feet to 860 feet above sea level (Google Earth Pro, 2022). Annual average precipitation is approximately 73.93 inches per year (PRISM, 2022). The Proposed Project site is located in the Lower Mattole River HUC-12 watershed, and contains several watercourses, including Mill Creek, a perennial (Class I) watercourse, two

seasonal (Class II) watercourses, and several ephemeral (Class III) drainages (Figure 5 and Appendix 1 – Site Maps).

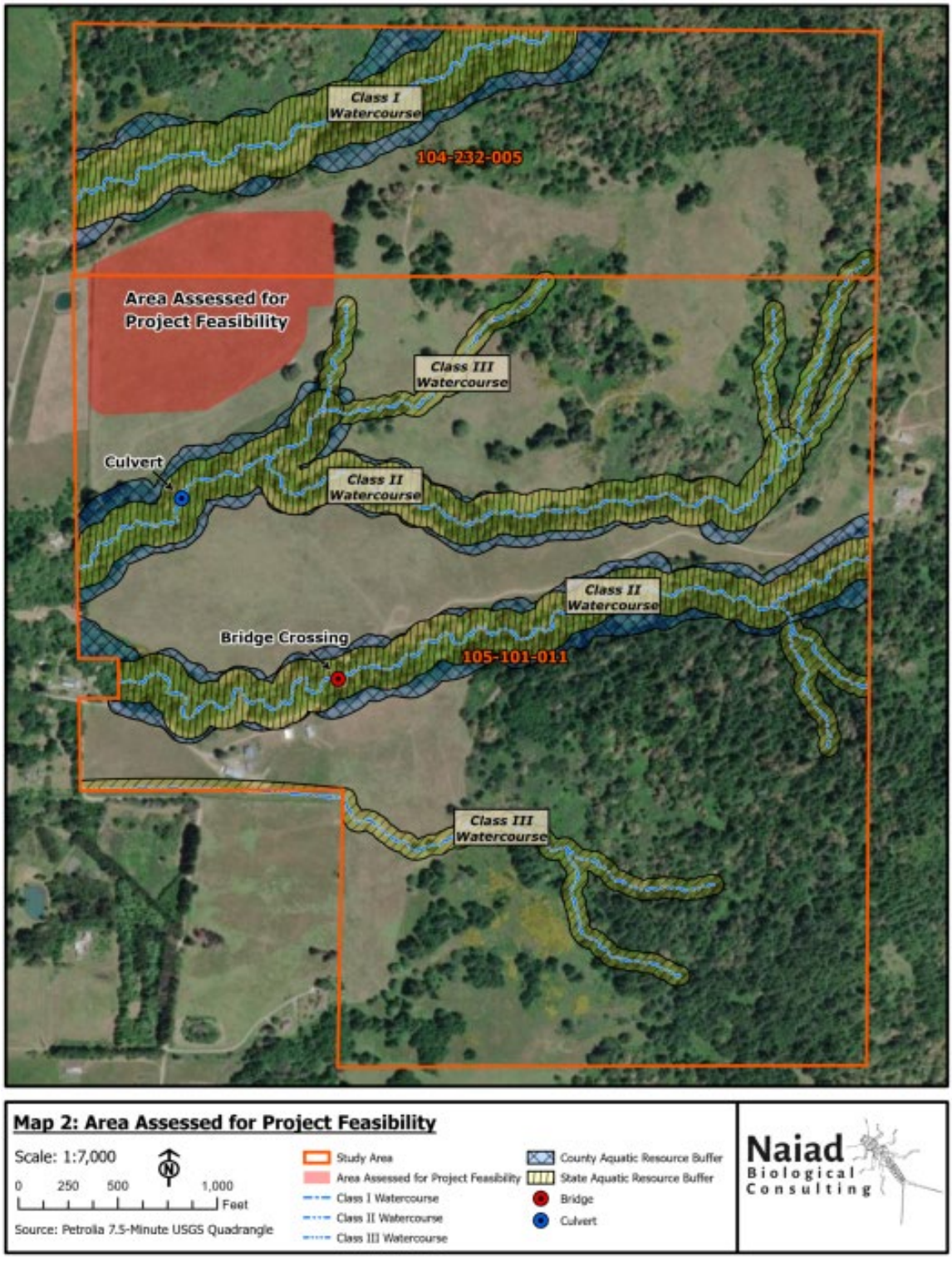


Figure 5: Site Map with Classified Watercourses (Source: Biological Report, Naiad Biological Consulting, 2021)

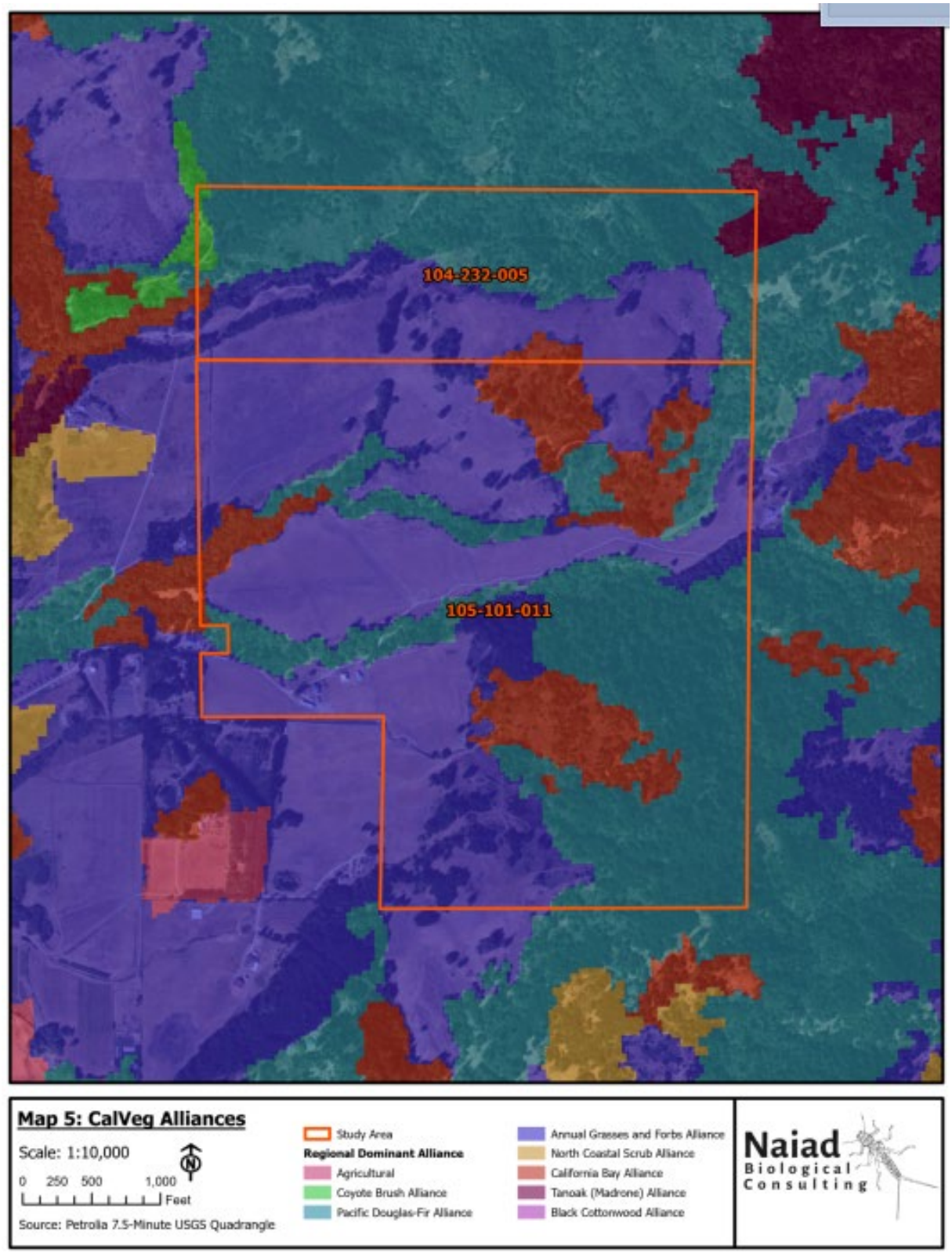


Figure 6: California Vegetative Alliances (Source: Botanical Report, Naiad Biological Consulting, 2021)

A Biological Reconnaissance and Project Feasibility Assessment Report ("Biological Report") and a Botanical Report of Special Status Native Plant Populations and Natural Communities ("Botanical Report") were prepared for the site by Naiad Biological Consulting in September 2021 (Appendix 2). The purpose of these reports was to provide information as to whether the Project site contains or potentially contains sensitive plants and wildlife species and jurisdictional wetlands. Based on the Biological Report, a Golden Eagle Survey Report was conducted (Appendix 2 – Naiad Biological Consulting, February 2022). An Invasive Species Control Plan was also prepared to manage non-native and invasive species on the parcel (Appendix 2 – Naiad Biological Consulting, October 2020).

Special-Status Plant Species: Sensitive Natural Communities and Rare Plants
Naiad Biological Consulting conducted a query of the CDFW's California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) database and collected information regarding the hydrologic, physiographic, habitat, and species-distribution of plant species. Two floristic field surveys were conducted on March 21st and June 21st of 2021, per the CDFW's "Protocols for Surveying and Evaluating Impacts to Sensitive Status Native Plant Populations and Natural Communities" (2018). Surveys were timed to maximize the floristic periods of potential rare plants. The survey encompassed the Proposed Project area.

Of the queried species, 32 special-status plant species (31 vascular and 1 lichen) and two (2) special-status habitat communities had the potential to be located onsite. No rare plants (CRPR 1 or 2) or special-status vegetation communities were identified during the botanical survey of the Proposed Project area. California Vegetative Alliances are shown in Figure 6. Monterey cypress *(Hesperocyparis macrocarpa),* a CRPR of 1B.2 in its natural range, was observed during surveys but was classified as a planted ornamental. Regardless, the Monterey cypress would not be impacted by cultivation operations. The Proposed Project area was identified as an existing highly grazed agricultural field, typical of valley and foothill grasslands within the lower foothills of the Northern Coast Ranges. The Botanical Survey concluded that no listed species were observed during the survey, and no further botanical surveys were recommended (Appendix 2 – Naiad Biological Consulting, 2021).

Special-Status Fish and Wildlife
During preparation of the Biological Report, Naiad Biological Consulting conducted a query of relevant databases (including CDFW's CNDDB, CalFlora, and the USFWS website) to determine the special-status species with the potential to be located onsite. A field survey was conducted on July 3, 2020, to observe signs of wildlife, including tracks, scat, nests, habitats, etc., and determine the potential impact to these species from the Proposed Project.

A total of 26 special-status wildlife species were identified in the 6-quad CNDDB database query of the 7.5' USGS Petrolia quadrangle: 5 amphibians, 9 birds, 5 fishes, 1 insect, 5 mammals, 1 reptile. Of those, five (5) had moderate or high potential to occur in the Proposed Project area due to presence of habitat on the project parcel or vicinity of the parcel to known habitat. These five (5) species, which include two (2) mammal species, two (2) bird species, and one (1) invertebrate species, are discussed in detail below. No fish, amphibians, or reptiles were identified as having moderate or high potential to occur in the Proposed Project area. Unless otherwise referenced, species details are sourced from the Biological Report.

Mammals (2):
North American porcupine (*Erethizon dorsatum)* – North American porcupines are a CDFW species of special concern. They are commonly found in coniferous areas, shrublands, and grasslands. The Biological Report identified a "moderate" potential for the porcupine to utilize the Proposed Project area and adjacent areas.

American badger (*Taxidea taxus*) – The American badger is a CDFW species of special concern. Badgers are most abundant in shrub, forest, and herbaceous habitats near friable soils, and open, uncultivated ground. The Biological Report identified evidence of badger activity (burrows) within the Proposed Project area.

Birds (2):
Cooper's Hawk *(Accipiter cooperii)* – Cooper's hawks are protected by CDFW and are listed on the CDFW watch list. Cooper's Hawks utilize dense stands of live oak, riparian deciduous habitat, or other forest habitats near water for foraging and nesting. The Biological Report identified a "moderate" potential of Cooper's Hawks to fly over the Proposed Project area and a "moderate" potential to forage in adjacent areas.

Golden Eagle (*Aquila chrysaetos*) - Golden eagles are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. They are also fully protected by CDFW and are on CDFW's watch list. Golden eagles typically use open habitats away from human environments and construct nests upon cliffs, trees, man-made structures, or the ground. The Proposed Project area was mapped by CDFW as being "Medium" predicted habitat for Golden Eagles, and the Biological Report identified a "moderate" potential of Golden Eagles to fly over the Proposed Project area, and a "moderate" potential to forage in adjacent areas.

Invertebrates (1):
Western bumble bee (*Bombus occidentalis*) - The western bumble bee is on the CDFW special animals list and occupies open grassy coastal prairies and Coast Range meadows. This long-tongued species may pollinate flowers with elongated corollas. The western bumble bee lives in abandoned burrows, and the Biological Report identified "moderate" potential for the species to occur onsite.

Wetlands and Waters
The final Biological Resource Assessment (Appendix 2 - Naiad Biological Consulting, 2021) investigated the site for potential wetland areas in the vicinity near Proposed Project activities. No potential wetland areas were discovered in the vicinity near the Proposed Project area, and no further wetland delineations or assessments were recommended (Appendix 2 – Naiad Biological Consulting, 2021).

A prior, initial Biological Reconnaissance and Project Feasibility Assessment Report was conducted in October 2020 by Naiad Consulting to review the property and assess potential appropriate project-related sites and identify environmental constraints. One potential wetland area, located approximately 400 feet east of the existing barn and residence, was identified onsite while investigating potential appropriate sites. The potential wetland area was not further evaluated or delineated in the final Biological Resource Assessment (2021), as the area is located over 1,700 feet from the Proposed Project area an. No project components in the final Proposed Project are located near this potential wetland area.

As mentioned above, the property contains several watercourses, including Mill Creek, a perennial (Class I) watercourse, two seasonal (Class II) watercourses, and several ephemeral (Class III) drainages (Figure 5). The Biological Report included delineation of the edge of riparian habitat of all onsite streams such that proper setbacks as required in the Humboldt County Streamside Management Area Ordinance could be mapped for incorporation into the Proposed Project's design parameters.

Analysis

a) Finding: The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. *Less than significant impact with mitigation incorporated.*

Discussion: As mentioned above, a Biological Reconnaissance and Project Feasibility Assessment Report ("Biological Report") and a Botanical Report of Special Status Native Plant Populations and Natural Communities ("Botanical Report") were prepared for the site by Naiad Biological Consulting in September 2021 (Appendix 2).

Special-Status Plant Species and Wetlands
No wetlands or potential wet areas were located in the Proposed Project area. No rare plants (CRPR 1 or 2) or special-status vegetation communities were identified during the botanical survey of the Proposed Project area. Monterey cypress *(Hesperocyparis macrocarpa),* a CRPR of 1B.2 in its natural range, was observed during surveys but was classified as a planted ornamental. Regardless, the Monterey cypress would not be impacted by cultivation operations. The Proposed Project area was identified as an existing highly grazed agricultural field, typical of valley and foothill grasslands within the lower foothills of the Northern Coast Ranges. The Botanical Survey concluded that no listed species were observed during the survey, and no further botanical surveys were recommended (Appendix 2 – Naiad Biological Consulting, 2021).

Special-status Wildlife
A total of five (5) special-status wildlife species were identified as having moderate or high potential to occur within the Proposed Project Area and/or be impacted by the Proposed Project:

Mammals
The Proposed Project area could provide habitat for two (2) mammals: the North American Porcupine and the American Badger. The North American porcupine could reside near the property and pass through the Proposed Project area while foraging, however, the Biological Report concluded that the lack of within the Proposed Project Area made it unlikely that the porcupine would utilize the open field habitat. Additionally, ample similar homogenous habitat exists throughout the parcel near the Proposed Project area. Therefore, the Proposed Project is unlikely to significantly impact this species.

The American Badger (*Taxidea taxus)* was the only rare species to be positively identified onsite. Evidence of burrows were observed within the pasture habitat of the Proposed Project area. The Biological Report concluded that there is ample habitat on the subject parcel for the badgers to utilize, and that disturbance of the Proposed Project area would leave sufficient habitat onsite for badgers. In addition, according to the Biological Report, badgers prey on pocket gophers, which are significantly higher in population in grazed meadows compared to ungrazed meadows. The Report suggested that, due to the ungrazed nature of the Proposed Project area, badgers may prefer the grazed meadows located nearby the Proposed Project area.

As evidence of badgers was observed onsite, the Biological Report included recommendations to prevent "take" of this species from construction and ground-disturbing impacts. The Report requires that the applicant should survey all areas to be disturbed prior to any construction. If any burrows are observed within the proposed disturbance area, pre-construction surveys should be completed by a qualified biologist as soon as possible. If burrows or dens are identified and deemed active, badger relocation should occur in coordination with the qualified biologist and CDFW. This recommendation to protect *Taxidea taxus* has been included as **Mitigation Measure BIO-1.**

Birds
The Proposed Project area has the potential to provide habitat for two (2) bird species: the Golden Eagle and the Cooper's hawk. Construction and operation of the Proposed Project may have the potential to

disturb sensitive bird species by impacting nesting or foraging habitat during construction, or by ongoing noise and light pollution during operation. Additional bird surveys were recommended in the Biological Report, per CDFW protocol. Following this recommendation, two (2) ground-based eagle and raptor nest surveys and a Prey Availability Survey were completed in August of 2021 and February of 2022. The surveys were focused on Golden Eagles and Cooper's hawks but surveyed for all raptor species. Surveys followed the protocol outlined by the American Eagle Research Institute. No Golden Eagles, Cooper's hawks, or other raptor species were observed soaring or foraging during the surveys, and no evidence of historical or current nests were observed. Limited prey availability for Golden eagles was noted, suggesting that the Proposed Project area offered few sources of prey for Golden Eagles. The survey concluded that, based on the results of all three surveys, it would be unlikely for Golden Eagles or other raptors to be significantly impacted by the Proposed Project. The Golden Eagle Survey Report prepared by Naiad Biological Consulting in 2022 discusses the above in more detail (Appendix 2).

To prevent impacts to migratory birds in the future, should they choose to utilize habitat in or adjacent to the Proposed Project area, **Mitigation Measure BIO-2** has been incorporated to require preconstruction surveys if construction is to occur between February 1 and August 31.

Northern Spotted Owls were not identified as having potential to be impacted by the Proposed Project. The nearest Northern Spotted Owl Activity Center (HUM 0010) is located 1.55 miles south of the Proposed Project area. The Biological Report states that the area assessed for the Proposed Project does not have Northern Spotted Owl habitat preference due to the "size, structure, and species of the trees within the Study Area, and is therefore not likely utilized for nesting, roosting, or foraging/hunting by Northern Spotted Owls" (Appendix 2 – Naiad Biological Consulting, 2021, pg. 21). The Biological Report did find that there is moderate suitable habitat for Northern Spotted Owls in the area surrounding the Proposed Project, however, as long as the Proposed Project does not generate noise levels of 70 dB or greater and does not produce light pollution, no impacts to Northern Spotted Owls would be anticipated (Appendix 2 – Naiad Biological Consulting, 2021).

Invertebrates

The Proposed Project Area has the potential to support native pollinators, including the western bumblebee, which lives in abandoned burrows or cavities and has potential nesting habitat onsite. The Biological Report concluded that there was abundant suitable habitat on the Proposed Project parcel, and that the Proposed Project would not significantly impact this species due to abundant presence of similar homogenous habitat throughout the parcel.

The Project would include two (2) stream crossing upgrades that would improve water passage and ensure the functionality of culverts in preparation for the 100-year storm event. Culvert replacements have the potential to impact sensitive species, however, the applicant would follow all restrictions on Best Management Practices as denoted in the executed Streambed Alteration Agreement No. EPIMS-HUM-18009-R1C (Appendix 2). Per the Agreement, no work on stream crossing upgrades is permitted when water is in the stream. All construction is to occur when channels are dry. Therefore, stream crossing upgrades are not likely to impact sensitive fish species that may be located onsite.

Once the Proposed Project is completed and mixed-light greenhouses, processing facilities, etc. are operational, there exists the possibility that noise and light pollution may adversely effect, either directly or indirectly, wildlife species identified as a candidate, sensitive, or special status. The onsite backup generator would only be used for emergencies. The new structures proposed would not be constructed of materials that would reflect light or cause any sources of glare that would impact surrounding land uses, or drivers on adjacent roadways.

All new lighting on the property would conform with the CCLUO and with International Dark Sky Association Standards.

The Proposed Project would also not indirectly impact special-status plant or wildlife species through the increased spread of invasive species. In fact, implementation of the Proposed Project would reduce the presence of invasive species onsite through regular monitoring and mechanical removal. According to the Invasive Species Control Plan (Naiad Biological Consulting, October 2020 – Appendix 2), a site visit was conducted by a qualified botanist on July 3rd, 2020, to observe and record the presence of invasive species on the Proposed Project site. The Cal-IPC Inventory was used to determine invasive species of concern for the site. Seven (7) invasive species with a CAL-IPC Invasiveness Rank of "Moderate" or "High" were observed onsite: bull thistle (*Cirsium vulgare),* Himalaya blackberry *(Rubus armeniacus),* Italian thistle (*Carduus pycnocephalus),* sheep sorrel *(Rumex acetosella),* Scotch broom *(Cytisus scoparius),* hedgehog dogtail *(Cynosurus echinatus),* and pennyroyal *(Mentha pulegium).* All seven (7) invasive species are most effectively managed through mechanical and hand-pulling removal techniques. Implementation of the Proposed Project would reduce the presence of invasive species onsite through regular monitoring and mechanical removal of invasive species. Therefore, no indirect impact to special-status plants or wildlife is anticipated as a result of invasive species.

With incorporation of **Mitigation Measure BIO-1 and BIO-2,** adherence to the Performance Standards in the CCLUO, compliance with the SWRCB Cannabis General Order and Policy, and adherence to the recommendations in the Biological Report, the Proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

b) Finding: The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. *Less than significant impact.*

Discussion: According to the Biological Report, no wetlands or wet areas were observed onsite. Riparian habitat exists along Mill Creek, a perennial stream north of the Proposed Project area, as well as along the two (2) intermittent Class II streams on the property and some ephemeral streams on the property. The Proposed Project has been specifically designed to maintain riparian setbacks and is set back at least 150 feet from perennial watercourses and at least 100 feet from intermittent watercourses. The edge of riparian habitat was mapped in the Biological Report, and all buffers exceed Streamside Management Area Ordinance setback requirements from edge of riparian habitat. Since, during construction, the Proposed Project would disturb more than one acre of the site, the Proposed Project would be subject to the requirements State Water Resources Control Board (SWRCB) Construction General Permit (CGP). The SWRCB CGP would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) which documents the stormwater dynamics at the site, the Best Management Practices (BMPs) and water quality protection measures that are used, and the frequency of inspections. BMPs are activities or measures determined to be practicable, acceptable to the public, and cost effective in preventing water pollution or reducing the amount of pollution generated by non-point sources. Implementation of the SWPPP would ensure that the riparian habitat along Mill Creek and the intermittent watercourse closest to the Proposed Project area are protected during construction activities and long-term operation of the Proposed Project.

Once the proposed site is operational, the existing Site Management Plan (SMP) would be updated in accordance with SWRCB Cannabis General Order 2019-0001-DWQ. The updated SMP would detail operational Best Practicable Treatment or Control (BPTC) Measures which would be installed and adhered to for the duration of the Proposed Project, such as revegetating any bare or exposed soils, ensuring secondary containment and proper storage of all liquid products (including liquid fertilizers, pesticides, amendments, and

petroleum products), and proper storage and disposal of waste materials (including organic plant matter and refuse). Such actions would reduce the potential for any materials from the Proposed Project to become pollutants. To further prevent runoff to riparian areas, water conservation and containment measures would be implemented including the use of hand irrigation or drip irrigation with sensors to prevent excessive water use, and the maintenance of a stable, vegetated buffer between the cultivation area and the riparian zone.

With the implementation operating restrictions provided in this document, and compliance with SWQCB Construction General Order and Cannabis General Order, and the County's grading regulations, potential impacts to sensitive communities would be less than significant.

c) Finding: The project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. *Less than significant impact*.

Discussion: As described above, no wetlands or wet areas as defined by Section 404 of the Clean Water Act were identified onsite. All Proposed Project development is sited outside of all minimum setbacks from streams as required by the SWRCB and Humboldt County.

Construction of the Proposed Project would occur during the dry months when it is not raining and appropriate BMPs would be installed. All construction materials, including gravel and soils would be covered and fiber rolls would be installed around the perimeter of all construction areas to ensure no sediment discharges into Waters of the US. Spoils piles would be covered, and fiber rolls would be installed around the perimeter of construction areas to ensure no sediment discharges into Waters of the United States (US) or Waters of the State.

Once the Proposed Project is operational, a SMP would be created in accordance with SWRCB Cannabis General Order 2019-0001. The SMP would detail operational Best Practicable Treatment or Control (BPTC) Measures which would be installed and adhered to for the duration of the Proposed Project, such as revegetating any bare or exposed soils, ensuring secondary containment and proper storage of all liquid products (including liquid fertilizers, pesticides, amendments, and petroleum products), and proper storage and disposal of waste materials (including organic plant matter and refuse). Such actions would reduce the potential for any materials from the Proposed Project to become pollutants. To further prevent runoff to riparian areas, water conservation and containment measures would be implemented including the use of hand irrigation or drip irrigation with sensors to prevent excessive water use, and the maintenance of a vegetated buffer between the cultivation area and the riparian zone.

Therefore, the Proposed Project as proposed and in compliance with regulatory requirements, would not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant.

d) Finding: The project will 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. *Less than significant impact with mitigation incorporated.*

Discussion: Wildlife movement corridors are areas that connect suitable wildlife habitat areas in an otherwise fragmented region. The site is in a rural area of Humboldt County and is currently used for residential and livestock uses, and is surrounded by residential, agricultural, livestock, and timber uses. The area in which the greenhouses and accessory facilities would be located do not contain habitats unique to the area such that the removal of the habitat would preclude wildlife from moving through the site. As discussed above, the site has been designed to meet minimum setback requirements and no work would be done directly within the riparian

areas; therefore, the Proposed Project would not directly interfere with movement of fish and other aquatic species.

Mitigation measures would be implemented during construction to reduce potential impacts, as discussed above, to migratory wildlife, including migratory birds. Therefore, 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. Impacts are less than significant with implementation of **Mitigation Measures BIO-2.**

e) Finding: The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *Less than significant impact.*

Discussion: The Proposed Project would not involve the removal of any trees. In addition to the general biological resources policies in the County General Plan, the County maintains Streamside Management Areas (SMAs) to protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and other conditions detrimental to water quality. All SMA buffers would be exceeded and no trees are proposed to be removed. Therefore, the Proposed Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance and the impact would be less than significant.

f) Finding: The project would 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. *No impact.*

Discussion: According to the U.S. Fish & Wildlife Service Environmental Conservation Online System (ECOS), the Proposed Project site is not located within the boundaries of a Habitat Conservation Plan. Habitat Conservation Plans (HCP) in Humboldt County include the following: 1) Green Diamond Resource Company California Timberlands & Northern Spotted Owl (formerly Simpson Timber Company); 2) Humboldt Redwood Company (formerly Pacific Lumber, Headwaters); 3) Regli Estates; and 4) Humboldt Bay Municipal Water District Habitat Conservation Plan. These Habitat Conservation Plans primarily apply to forest lands in the County. According to the CDFW website, the Proposed Project site is not located in the boundaries of a Natural Community Conservation Plan (CDFW, 2019). The conservation plans for Humboldt County, listed on California Regional Conservation Plans Map on the CDFW website, include the Green Diamond and Humboldt Redwoods Company (previously Pacific Lumber Company) Habitat Conservation Plans.

In addition, the Proposed Project is located on private property and would continue to use the land for agricultural purposes. No trees would be removed as a result of the Proposed Project. Therefore, the Proposed Project would not conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan.

Mitigation Measures

BIO-1. Preconstruction surveys for American badgers (*Taxidea taxus)* shall be conducted prior to any ground disturbance or construction in the Proposed Project area. Surveys shall be conducted by a qualified biologist no more than one week prior to ground disturbance. If active badger dens are determined to be present, badger relocation to other onsite suitable habitat shall occur in coordination with CDFW.

BIO-2. For all construction-related activities that take place within the nesting season, accepted as February 1 through August 31, a preconstruction nesting-bird survey for migratory birds, including Cooper's hawk (*Accipiter cooperii)* and Golden eagle (*Accipitridae chrysaetos),* shall be conducted by a qualified biologist no more than two weeks prior to construction within the Proposed Project area and a buffer zone determined by the qualified biologist, depending on the species nesting. The timing of surveys shall be determined in

coordination with the CDFW. If active nests are found, a no-disturbance buffer zone shall be established, the size of which the biologist shall determine based on nest location and species. Within this buffer zone, no construction shall take place until the young have fledged or until the biologist determines that the nest is no longer active.

3.2.5. CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Setting

The Proposed Project site (APNs 105-101-011, 104-232-005, 104-191-001) is an approximately 517-acre parcel located off Chambers Road approximately 1.40 air miles east of Petrolia. The subject parcel is currently developed for domestic and agricultural purposes. Existing onsite structures include a residence and four (4) agricultural barns. The property has historically been used for agricultural purposes. The parcel is surrounded by agricultural land, timberland, rural residential homes, and other cannabis farms and agricultural activities. The project site was traditionally occupied by the Mattole (or Bettol) Tribe, also known as the "Kuneste" (Appendix 2 – William Rich and Associates, 2021).

The Native American Heritage Commission (NAHC) was contacted on August 4, 2021 to request a tribal consultation list. A response was received dated September 1, 2021, which included a consultation list of tribes traditionally and culturally affiliated with the geographic area of the Proposed Project. On September 7, 2021, consultation requests were sent to all Native American groups included in the consultation list of tribes received from the NAHC. A response from the Tribal Historic Preservation Officer (THPO) of Blue Lake Rancheria was received via email on September 12, 2021, which indicated that the project is outside the area of concern for cultural resources mapped for Blue Lake Rancheria. Blue Lake Rancheria had no comments and declined AB 52 Consultation. No additional responses to requests for consultation were received within the 30-day response window.

A Cultural Resources Investigation Report was prepared for the property by William Rich, M.A., of William Rich and Associates in May 2021 (Appendix 2). The purpose of the investigation was to document whether cultural resources were present within the Proposed Project area, and whether any present cultural resources would be considered "Tribal Cultural Resources" or "historic resource" under CEQA. The report included data queries from the National Register of Historic Places (NRHP), Determinations of Eligibility for the NRHP, the California Register of Historical Places, and the California listing of Historical Landmarks.

The Cultural Resources Investigation Report included an examination of archaeological site records and survey reports in the area as identified by the Northwest Information Center (NWIC). No previous surveys in the vicinity have included the Proposed Project area. Four other surveys have included small areas within APNs

104-232-005 and 105-101-011 (S-039935, S-041906, S-041907, and S-043365), none of which found resources within the subject parcels or within ¼ mile. One resource, Langdon's Old Mill Berm (P-12-003796) is located ¼ mile west of the subject parcels.

During report preparation, the Bear River Band of Rohnerville Rancheria and the InterTribal Sinkyone Wilderness Council were contacted. No responses had been received as of May 2021. The Cultural Resources Investigation Report also included a field survey which encompassed all of the Proposed Project area. The field surveys occurred on April 1 and September 21, 2020. The Proposed Project area was investigated for the presence of archaeological deposits, historic features, or other cultural resources. The report concluded that no historical resources, as defined in CEQA, Article 4, Section 15064.5 (a), were identified within the Proposed Project area or within a 600-foot buffer from the Proposed Project area (William Rich and Associates, 2021).

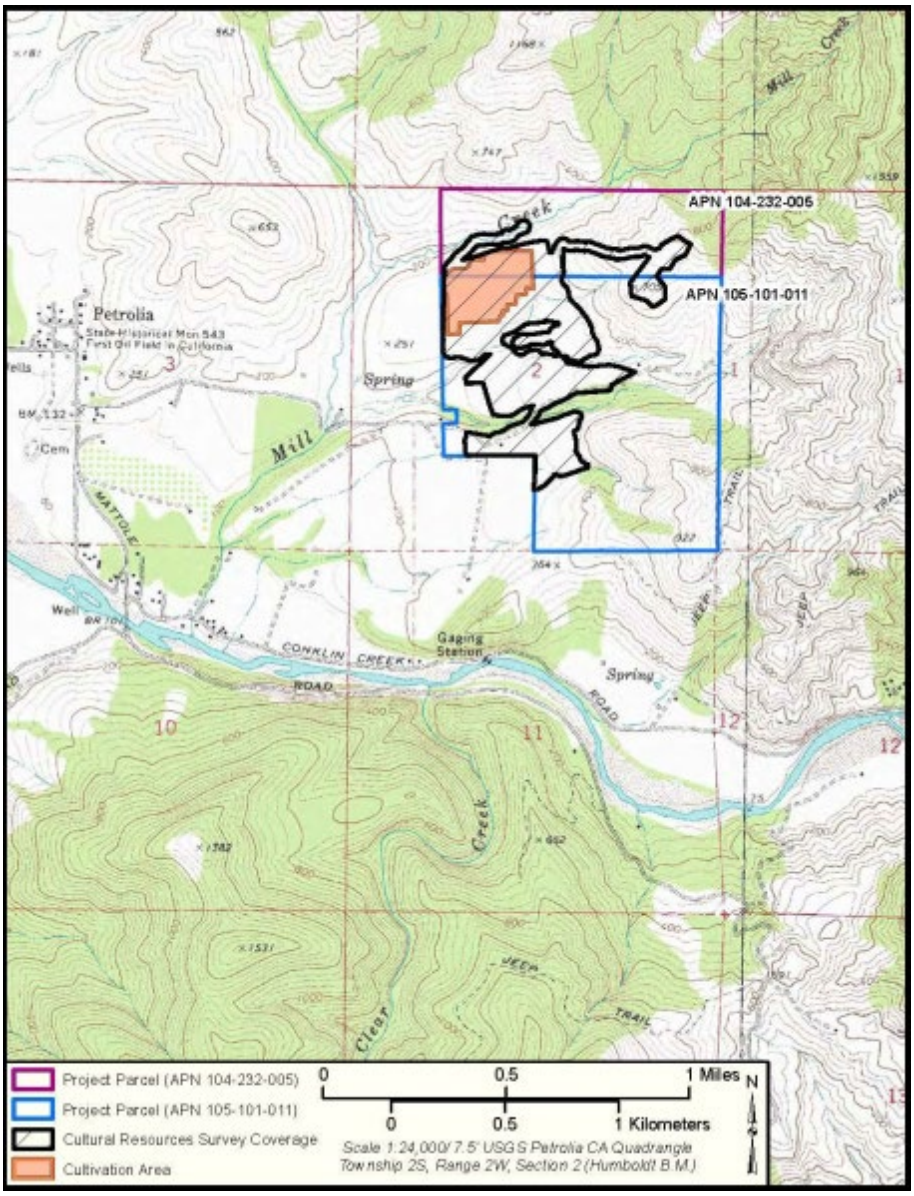


Figure 7: Cultural Resources Survey Coverage Map (Source: Appendix 2 - William Rich and Associates, 2021)

Analysis

a) Finding: The project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5. *Less than significant with mitigation incorporated*.

Discussion: The Cultural Resources Investigation Report completed by William Rich and Associates (Appendix 2) identified no historical resources as defined by Section 15064.5 within the Proposed Project area or property, nor were there any previous records of historical resources located on the subject property. With the incorporation of proposed **Mitigation Measure CUL-1**, the impact would be less than significant.

b) Finding: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. *Less than significant impact with mitigation incorporated*.

Discussion: The Cultural Resources Investigation Report completed by William Rich and Associates (Appendix 2) identified no archaeological resources as defined by Section 15064.5 within the Proposed Project area or property, nor were there any previous records of archaeological resources located on the subject property. However, due to the historic and prehistoric uses of the project site, there is potential of discovering unknown subsurface archaeological resources during the proposed construction activities, therefore, Mitigation Measure CUL-1 is included to ensure that potential project impacts on cultural resources are eliminated or reduced to less than significant levels. With the incorporation of **Mitigation Measure CUL-1** the impact would be less than significant.

c) Finding: The project would not disturb any human remains, including those interred outside of formal cemeteries. *Less than significant impact with mitigation incorporated.*

Discussion: The Cultural Resource Investigation Report completed by William Rich and Associates (2021) did not identify any human remains on the project site. However, due to the historic and prehistoric uses of the project site, there is potential of discovering unknown human remains during the proposed construction activities, therefore, the inadvertent discovery protocol, **Mitigation Measure CUL-1** is included. With the proposed mitigation, the impact would be less than significant.

Mitigation Measures

CUL-1. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 50-foot buffer of the discovery location, per the Cultural Resources Investigation Report. Work near the archaeological find(s) shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

If human remains are discovered during project construction, work would be stopped at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner would be contacted to determine if the cause of death must be investigated. If the coroner determines that the re- mains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner would contact the NAHC. The descendants or most likely descendants of the deceased would be contacted, and work would not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

3.2.6. ENERGY

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

Setting

Electricity at the project site is currently provided by an existing 200-amp service from Pacific Gas and Electric Company (PG&E). The Proposed Project would utilize solar and PG&E to power the proposed facilities, including a proposed 600-amp electrical upgrade. Energy use would require a proposed electrical upgrade from PG&E and solar panels. Use of any on-site generators would be limited power outage events.

The State of California Building Energy Efficiency Standards under the California Building Code (CBC), known widely as Title 24, outline requirements for all new commercial and residential construction projects. Title 24 is part of California's wider strategy to require all new commercial construction projects to be zero net energy by 2030 (California Energy Efficiency Strategic Plan, 2011). Title 24 standards would apply to any buildings seeking a commercial building permit from the Humboldt County Building Department, including the proposed 30' x 100' processing structure and the (4) 40' x 8' modular employee housing units.

The Humboldt County General Plan includes an Energy Element (Humboldt County, 2017). The Energy Element promotes self-sufficiency, independence, and local control in energy management and supports diversity and creativity in energy resource development, conservation, and efficiency. The Energy Element notes that key renewable energy resources include biomass, wind, wave, and small run-of-river hydroelectric. According to the Energy Element, local biomass resources are used to provide about 25% to 30% of the County's electricity needs. Roughly half of the electricity serving Humboldt County is generated at the Pacific Gas and Electric Company Humboldt Bay Generating Station. The County imports about 90% of its natural gas; the rest is obtained locally from fields in the Eel River valley.

The County of Humboldt has prepared a draft Climate Action Plan for review in October 2021, which is currently being circulated. It has not been adopted as of the writing of this report. The CCLUO requires 100% renewable energy source for all proposed cannabis projects and includes Performance Standards for Energy Use.

Analysis

a) Finding: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. *Less than significant impact with mitigation incorporated.*

Discussion: Power for the Proposed Project would be needed for cultivation (fans and lights), nursery, drying, processing activities, security, and farmworker housing. At full build-out, the Proposed Project would require approximately 639,962 kWh of energy annually (Table 6). The majority of the power would be for the mixed-light cultivation, which is estimated to use approximately 456,889 kWh annually. The proposed commercial nursery would use approximately 126,043 kWh and the processing activities would use approximately 31,581 kWh annually. Farmworker housing, drying and security/general site utility would use the least amount of energy, at 12,892 kWh, 9,921 kWh, and 2,637 kWh annually, respectively (Appendix 1 - Cultivation and Operations Plan). Energy usage would fluctuate throughout the year, with peak energy usage during the months of May, July, and August, each estimated at approximately 98,000 kWh per month (Appendix 1 - Cultivation and Operations Plan).

Roof-mounted solar photovoltaic panels would be installed on the proposed structures. Specifically, a 52.5 kW system would be installed on each of the four (4) 4,800-sq. ft. drying buildings, a 33 kW-system would be installed on each of the two (2) indoor 3,000-sq. ft. commercial nursery buildings (CN-3), a 33 kW-system would be installed on the 3,000-sq. ft. processing building, and a 3.5kW system would be installed on each of the four (4) 320-sq. ft. modular farmworker housing structures. In total, the proposed photovoltaic solar power system would have an energy capacity of 323 kW, which would generate approximately 565,896 kWh of annual energy production, assuming 4.8 annual average daily peak sun hours in Petrolia (Appendix 1 – Site Maps, Renewable Energy Table).

The 565,896 kWh of annual energy production represents approximately 88% of the total project energy demand. The remaining energy would be sourced from the proposed PG&E upgrade. The project would be built out over a five-year period and subsequently energy would gradually increase over the same period. At no time would the project build-out or intensity exceed the available energy (e.g., during the first operational year all cultivation would be full-sun or light-deprivation with limited energy demand). This has been incorporated as **Mitigation Measure EN-1.**

Generators would not be utilized as a source of power. A back-up generator would remain onsite for emergency purposes only.

Renewable energy is proposed to meet all of the energy demand for this project. **Mitigation Measure EN-1** has been included to ensure that all power for the Proposed Project comes from renewable energy sources and to ensure that the scale of Project build-out is developed in concert with available power supply. No aspect of the project would result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. With mitigation incorporated, a less than significant impact would occur.

b) Finding: The project would not conflict with or obstruct a state or local plan for renewable energy and energy efficiency. *Less than significant impact*.

Discussion: The project would not conflict with the Humboldt County General Plan Energy Element. The project would only use the amount of electricity required for its operations, supplied in full by renewable energy, and not in a wasteful manner. A less than significant impact would occur.

Mitigation Measures

EN-1 Power supply shall be developed to support the scale of the Proposed Project during phased build out. Mixed-light cultivation shall not occur until required power sourced from a renewable source is brought to the site (e.g., installation of solar power or completion of a PG&E upgrade). Prior to the onset of power, proposed cultivation shall be outdoor cultivation cultivated using light-deprivation techniques in greenhouses. At no point in time shall onsite activities exceed existing site power capacity.

3.2.7. GEOLOGY AND SOILS

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 is- sued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located in a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Setting

The Proposed Project site is a 517-acre parcel that is located east of the community of Petrolia in the unincorporated area of Humboldt County in the Lower Mattole River USGS HUC-12 watershed. All proposed development would occur on Benbow Soils, identified by Map Unit Symbol 152 in Figure 8 (Web Soil Survey, 2022). Benbow soils range from very gravelly loam to sandy loam, and are classified as well-drained, non-prime soils (Appendix 2 - Web Soil Survey Type Map).

The Proposed Project site is located within Northern California's Coast Ranges Geomorphic Province, which is a geologically active region at risk for strong ground shaking. Humboldt County is located within the two highest of five seismic risk zones specified by the Uniform Building Code. The Cascadia Subduction Zone runs north offshore of Humboldt, Del Norte, Oregon, and Washington. Landslides and soil slips are common due to the combination of sheared rocks, shallow soil profile development, steep slopes, and heavy seasonal precipitation (Humboldt County 2025 General Plan Update. Natural Resource and Hazards Report; Pg. 10-9).

The Proposed Project site is situated in an active earthquake zone, as is all of Humboldt County. The nearest quaternary fault is the North Fork Road thrust fault zone, the southern extent of which is located in the Proposed Project area (Figure 9). Other nearby faults and fault zones include the Unnamed fault SE of Cape Mendocino and the Honeydew Fault zone. The Proposed Project is not located within an Alquist Priolo Zone. The nearest Alquist Priolo Zone is located approximately 20 miles south of the project site, near the community of Shelter Cove (Humboldt County Web GIS, 2022).

Historic landslides have been mapped in the eastern portion of the subject property, on APN 104-191-001 The subject property contains a historic landslide in the eastern forested portion of the property (Humboldt County Web GIS, Figure 9).

The property is not listed as an area of potential liquefaction and is located within an area Low Instability (Humboldt County Web GIS, 2022).

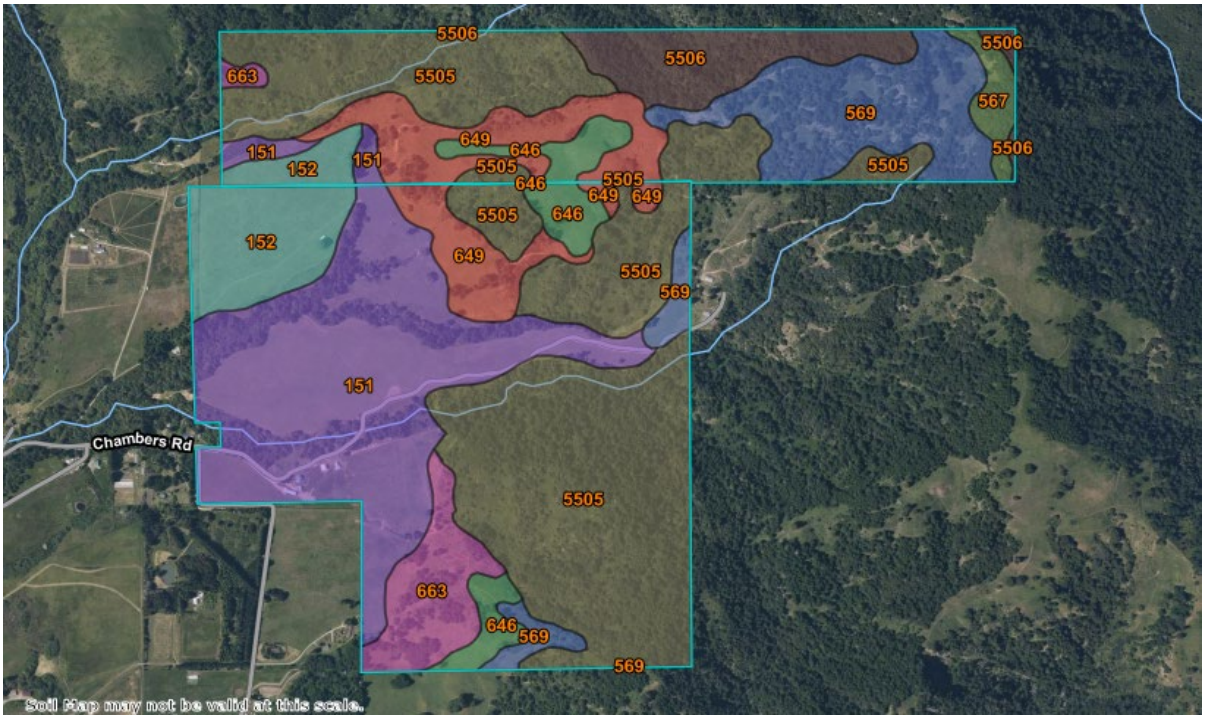


Figure 8: Proposed Project Site Soil Map Units - Proposed Project Area located entirely on Benbow Soils, Unit 152 (Source: Web Soil Survey, 2022 - Appendix 2)

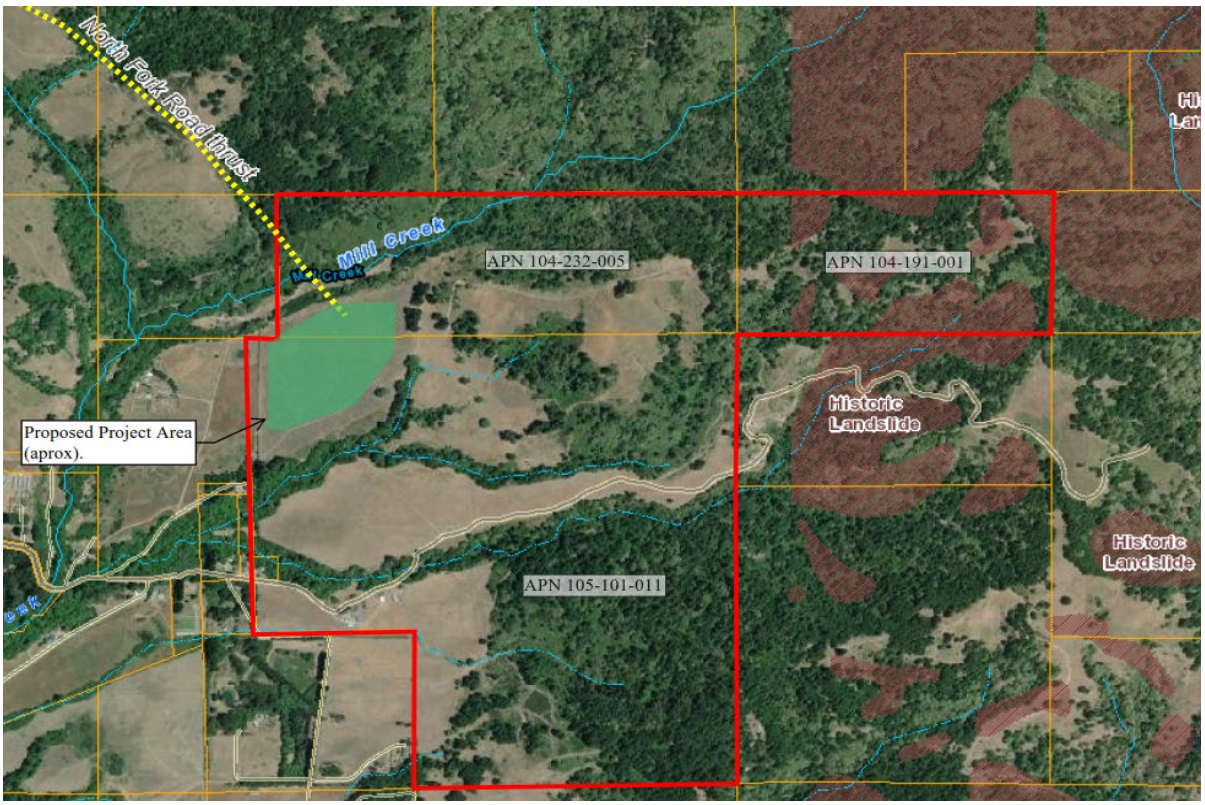


Figure 9: Earthquake Fault and Historic Landslide on Subject Parcel (Source: Humboldt Web GIS, 2022)

Analysis

a. i) Finding: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. *Less than significant impact.*

Discussion: Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude and nature of fault rupture can vary for different faults or even along different strands of the same fault. Surface rupture can damage or collapse buildings, cause severe damage to roads and pavement structures, and cause failure of overhead as well as underground utilities.

There are no earthquake faults delineated on Alquist Priolo Fault Zone maps within the project area (California Geological Survey, 2010 and Humboldt Web GIS, 2022). The closest fault is the North Fork Road thrust fault zone, an undifferentiated quaternary fault that overlaps minimally with the Proposed Project area. No earthquakes have been associated with this fault (USGS, 2022). Since the project area is not traversed by a known active fault and is not within 200 feet of an active fault trace, surface fault rupture is not considered to be a significant hazard for the project site any more than in other areas of earthquake-prone Humboldt County. Therefore, the project would not expose people or structures to substantial adverse effects from a fault rupture and the impact would be less than significant.

a. ii) Finding: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. *Less than significant impact.*

Discussion: Earthquakes on active faults in the region have the capacity to produce a range of ground shaking intensities in the project area. Ground shaking may affect areas hundreds of miles distant from an earthquake's epicenter. Ground motion during an earthquake is described by the parameters of acceleration and velocity as well as the duration of the shaking. A common measure of ground motion is peak ground acceleration (PGA). The PGA for a given component of motion is the largest value of horizontal acceleration obtained from a seismograph. PGA is expressed as the percentage of the acceleration due to gravity (g). Moderate earthquake hazard areas are defined as areas with ground accelerations of less than .092g and Violent earth- quake hazard areas have ground accelerations of 0.65g to 1.24g. The California Geological Survey, Probabilistic Seismic Hazards Mapping Ground Motion Page (www.conservation.ca.gov) indicates a maximum PGA on the order of 0.61g for a seismic event with a 10 percent probability of exceedance in 50 years (design basis earthquake).

See discussion in a, i), above. There are no earthquake faults delineated on Alquist Priolo Fault Zone maps within the Proposed Project area. However, the Proposed Project area is located within a seismically active area of Northern California and some degree of ground motion resulting from seismic activity in the region is expected during the long-term operation of the project. The State of California provides minimum standards for building design through the California Building Code (CBC). Where no other building codes apply, CBC Chapter 29 regulates excavation, foundations, and retaining walls. The CBC applies to building design and construction in the State and is based on the federal Uniform Building Code (UBC) used widely throughout the country. The CBC has been modified for California conditions with numerous more detailed and/or more stringent regulations. Specific minimum seismic safety and structural design requirements are set forth in CBC Chapter 16. The Code identifies seismic factors that must be considered in structural design.

The Proposed Project structures would be required to follow all requirements outlined in the CBC. In addition, an R-2 Soils Report would be developed for all proposed buildings during the permitting process prior to

construction to identify site-specific constraints. Therefore, the Proposed Project would not expose people or structures to substantial adverse effects involving strong seismic ground shaking.

a. iii) Finding: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. *No impact.*

Discussion: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluidlike behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables and buildings with shallow foundations.

According to the Humboldt County Web GIS system (2022), the project site is not designated as an area subject to liquefaction. Therefore, the Proposed Project would not expose people or structures to substantial adverse effects involving seismic-related ground failure, including liquefaction, and there would be no impact.

a. iv) Finding: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. *Less than significant impact.*

Discussion: Slope failures, commonly referred to as landslides, include many phenomena that involve the downslope displacement and movement of material, either triggered by static (i.e., gravity) or dynamic (i.e., earthquake) forces. Earthquake motions can induce significant horizontal and vertical dynamic stresses in slopes that can trigger failure. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion during an earthquake. The youthful and steep topography of the coast range is known for its potential for landslides.

The Proposed Project area does not contain any areas of known high slope instability. All historic landslides on the Proposed Project property are located in the eastern area of APN 104-191-001, where slopes are steeper and no development is proposed (Figure 9). Therefore, the Proposed Project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

b) Finding: The project would not result in substantial soil erosion or the loss of topsoil. *Less than significant impact.*

Discussion: Scraping, grading, ground disturbance, and the removal of on-site groundcover and vegetation (e.g., grasses) within the project footprint would occur during construction of the proposed structures, greenhouses, and nursery. Given that Building Code requirements relating to soil stability would be adhered to during construction as part of the Building Permit, the relatively flat topography of the project site and that the Proposed Project must adhere to the requirements of the SWRCB Cannabis General Order 2019-0001-DWQ and SWRCB Construction General Permit (CGP), which stipulates employment of Best Management Practices (BMP's) and Best Practicable Treatment or Control measures (BPTCs), and the standard erosion control measures of the Humboldt County General Plan, the Proposed Project is not expected to result in significant soil erosion or loss of topsoil during the construction phase or for the life of the Proposed Project.

Soil qualities can be an indicator of the potential loss of topsoil due to disturbance from proposed development. The Proposed Project area is in Benbow soils, which have a low wind erodibility group index rating of 8, meaning that the area proposed for development is not susceptible to wind erosion (Web Soil Survey, 2022). Additionally, Benbow soils have a very low K factor of 0.05, indicating that the soil is not very susceptible to sheet and rill erosion by water (Web Soil Survey, 2022).

The Proposed Project does not involve the removal of any vegetation outside of the Proposed Project footprint that could result in erosion. Hand watering or drip irrigation methods minimize the over-irrigation of plants and subsequent runoff. Additionally, to prevent runoff to riparian areas, water conservation and containment measures would be implemented including the maintenance of a stable, vegetated buffer between the cultivation areas and riparian zone. Therefore, the Proposed Project would not result in substantial soil erosion or the loss of topsoil and a less than significant impact would occur.

c) Finding: The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. *Less than significant impact.*

Discussion: According to Humboldt County GIS data, the parcel is not mapped within an area of potential liquefaction. The National Earthquake Hazards Reduction Program (NEHRP) denotes project soils as Geological Unit C, indicating very dense soil and soft rock (NEHRP, 2022). Design and construction of the project would incorporate appropriate engineering practices to ensure seismic stability as required by the CBC and county standards. Therefore, the Proposed Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse and a less than significant impact would occur.

d) Finding: The project would not be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property. *Less than significant impact.*

Discussion: Expansive soils possess a "shrink-swell" characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time due to expansive soils, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Benbow soils (Appendix 2 - Web Soil Survey, 2022) are characteristic of sandy to gravely loam, which are not typically expansive soils. See discussions above. Therefore, the Proposed Project would not be located on expansive soils creating substantial risks to life or property. Impacts would be less than significant, and no mitigation would be necessary.

e) Finding: The project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. *Less than significant impact.*

Discussion: The existing onsite residence includes an unpermitted septic tank and leach field. The proposed processing facility and proposed modular farmworker housing units would require a new onsite wastewater treatment system. The proposed new system would be located just south of the farmworker housing units (Appendix 1 – Site Map).

State law requires permits for onsite systems to ensure that they are constructed and sited in a manner that protects human health and the environment. A Septic Feasibility Study, conducted by OurEvolution Engineering (August 2021), analyzed the soils and found that the proposed location would be adequate to support a safe and effective onsite wastewater treatment system (Appendix 2). The Septic Feasibility Study included an on-site analysis of the proposed septic system. Two 10-ft. deep test pits were excavated at the locations of the proposed primary and reserve leach fields. Soil samples were collected and tested for bulk density and particle size analyses by North Coast Laboratories. Results showed that Zone 2 soils are present at both test pit locations, demonstrating that, in accordance with the Humboldt County Onsite Wastewater Treatment System Regulations and Technical Manual, soil properties can be used to calculate the system size and further percolation testing is not required (Appendix 2 - Septic Feasibility Study, 2021). Additionally, no

groundwater or impermeable layers were observed in pits. The septic tank, leach field, and secondary leach field for the processing building would be located outside the wetland and riparian setbacks (Appendix 1 – Site Maps). A permit would be obtained through the Division of Environmental Health prior to installation of the onsite wastewater treatment system.

Therefore, the Proposed Project would not have soils incapable of adequately supporting the use of septic tanks for the disposal ofwastewater. In addition, the system would be reviewed and approved by the County Division of Environmental Health. Impacts would be less than significant, and no mitigation would be necessary.

f) Finding: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. *Less than significant impact with mitigation incorporated*.

Discussion: Regional uplifting and other seismic activity in the area have limited the potential for discovery of paleontological resources. However, there is a potential for fossils to be discovered and inadvertently damaged during project construction even in an area with a low likelihood of occurrence. As such an inadvertent discovery protocol for paleontological resources has been included as Mitigation Measure CUL-1. With the proposed **Mitigation Measure GEO-1**, the Proposed Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Mitigation Measures

GEO-1. If paleontological resources are encountered during implementation of the Project, ground disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist shall be retained by the developer to make an evaluation of the find. If a significant paleontological resource(s) is discovered on the property, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

3.2.8. GREENHOUSE GAS EMISSIONS

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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

The Proposed Project site is located within the North Coast Air Basin, which is under the jurisdiction of the North Coast Air Quality Management District (NCAQMD). The NCAQMD applies air pollution regulations to all major stationary pollution sources and monitors air quality. GHGs are emitted into the atmosphere around from a variety of sources, including the combustion of fuel for energy and transportation, cement manufacturing, and refrigerant emissions. GHGs are gases that have the ability to trap heat in the atmosphere, a process that is analogous to the way a greenhouse traps heat. GHGs are emitted from human activities, as well as through natural processes. Increasing GHG concentrations in the atmosphere are leading to global climate change.

The primary GHGs that are of concern for development projects include Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. Emissions of CO_2 are largely by-products of fossil fuel combustion and CH_4 results from off-gassing associated with agricultural practices and landfills (California Air Resources Board, 2017; Humboldt County General Plan, 2017).

Greenhouse gases are regulated on federal, state, and local levels. At the state level, Assembly Bill (AB) 32 Scoping Plan (2017 Update) contains the main strategies California will use to reduce GHG emissions. AB 32 was originally passed by the California Global Warming Solutions Act of 2006 and details strategies and greenhouse gas reduction goals for projects across the state, including the now-achieved requirement to reduce statewide GHG emissions to 1990 levels by 2020 (a 28% reduction). In 2016, AB 32 was amended to require California to reduce GHG emissions to 40% below 1990 levels by 2030 (California Air Resources Board, 2017).

Locally, Humboldt County is complying with AB 32 to reduce GHG emissions to 40% below 1990 levels by 2030. The County has been coordinating with other local agencies to finalize a regional Climate Action Plan (CAP) to reduce greenhouse gas (GHG) emissions throughout Humboldt County. The first draft of the CAP was released in 2012. The CAP explores locally oriented strategies to reduce emissions from vehicle travel, electricity consumption, natural gas use and other sources of GHGs. The current Humboldt Regional Climate Action Plan, Environmental Review Draft, October 21, 2021, document is currently under review by City and County staff. An updated version was not available at the time of the preparation of this document, so the 2012 version was used for reference and project analysis.

The County has existing programs and policies in place that reduce and minimize GHG emissions:

- Draft Humboldt County Regional Climate Action Plan (2012)
- Air Quality Element, Humboldt County General Plan (2017)
- Commercial Cannabis Land Use Ordinance (2018)
- California Air Resources Board Climate Change Scoping Plan (2017)
- NCUAQMD Particulate Matter Attainment Plan (1995)

Sources of greenhouse gas emissions from the project would occur during short-term construction activities (e.g. equipment) and long-term operation of the project (e.g. lights, fans, odor control measures, vehicle/truck traffic, equipment, residential energy use, and back-up generators used during power outages). Propane would be used in the nurseries.

a) Finding: The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. *Impacts are less than significant.*

Discussion: The Proposed Project would significantly impact greenhouse gas (GHG) emissions if it were to generate substantial GHG emissions exceeding the CEQA thresholds of significance adopted by the NCAQMD and Humboldt County. NCAQMD and Humboldt County have not adopted thresholds of significance for GHG emissions from non-stationary sources. However, the Bay Area Quality Management District (BAAQMD) has established GHG thresholds that can be used in for significance determination. These thresholds are used by other counties in California without adopted thresholds of significance. Thus, for the analysis of GHG emissions, BAAQMD's GHG thresholds are used to evaluate the significance of the Proposed Project's GHG emissions. For land use development projects, the BAAQMD GHG threshold is "annual emissions less than 1,100 metric tons per year (MT/yr) of CO2e" (BAAQMD, 2017).

Mobile sources of greenhouse gases from the Proposed Project would include equipment used during short-term construction and vehicle/truck traffic from long-term operation. All construction equipment would be maintained to meet current emissions standards as required by the California Air Resources Board (CARB). The bulk of operational greenhouse gas emissions would come from vehicle and truck traffic as the Proposed Project is in a rural location in the unincorporated area of Humboldt County, trips from larger metropolis areas (e.g., Eureka), are a source of greenhouse gas emissions. However, the Proposed Project has incorporated four (4) modular farmworker housing units to provide housing and reduce trip mileage for some employees. The Community Support Facilities of processing and nursery would provide services for other local farms in the Petrolia/Honeydew area which do not currently have ample access to such facilities, which could reduce the frequency of trips to Eureka or Garberville by other local cultivators. Additionally, the applicant would encourage carpooling where possible to reduce vehicle trips.

In addition, the Proposed Project would be electrically powered exclusively by renewable energy sources, primarily through a solar panel system. By installing a 323-kW capacity solar system to power the majority of the activities, the project greatly reduces greenhouse gas emissions from operational energy use (e.g. lights, fans, residential energy use). All buildings would be designed to meet or exceed Title 24 requirements, in accordance with the California Building Code. Propane would be used in the nurseries to provide some heating for juvenile plant propagation.

Construction and operation GHG emissions were estimated using the California Emission Estimator Model (CalEEMod®) Version 2020.4.0 (Appendix 2). Information for the CalEEMod Analysis was derived from applicant information and correspondence, and default parameters were used where appropriate (e.g., construction equipment list). Mitigation measures available in the model, such as carpooling, Title 24 compliance, the offset of propane use, and use of renewable energy, were not included in the analysis and

therefore the CalEEMod analysis represents a conservative estimation of Project emissions. The results are summarized in Table 9.

Table 9: Proposed Project Greenhouse Gas Emissions (Source: CalEEMod, 2022)

Emission Source	CO_2e (MT/yr)	BAAQMD Threshold (MT/yr)	Exceeds Threshold?
Construction - Unmitigated	156.3	1,100	No
Operation - Unmitigated	103.0	1,100	No

As can be seen in Table 9, emissions of GHGs would be below the BAAQMD CEQA threshold, and therefore significant or cumulative impacts to the environment due to GHG emissions from the project are not likely. Thus, the Proposed Project would not generate GHGs, either directly or indirectly, that would have a significant impact on the environment and impacts would be less than significant.

b) Finding: The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gas. *Less than significant impact*.

Discussion: The Proposed Project would significantly impact greenhouse gas (GHG) emissions if it were to conflict with an adopted plan, policy or regulation intended to reduce GHG emissions. The project proposes a facility that would involve the cultivation and processing of cannabis. For the purposes of this analysis, the Proposed Project was evaluated against the following applicable plans, policies, and regulations (also listed above).

1) Humboldt County Draft Climate Action Plan (2012)

Humboldt County prepared a Draft Climate Action Plan in 2012 which includes a comparison of greenhouse gas emissions from 2006 and 1990. The emissions of carbon dioxide equivalents in unincorporated Humboldt County in 2006 were shown to have declined by approximately a half million metric tons when compared to 1990 levels. This decrease may be attributed to a decline in industrial emissions in Humboldt County since 1990 related to a decline in the lumber industry and closure of several major industrial facilities related to timber processing. The County's 2012 Draft Climate Action Plan contains strategies for reducing greenhouse gas emissions. As discussed above, an updated Climate Action Plan is currently under review. This project, as proposed, mitigated, and conditioned, is consistent with the following GHG reduction strategies listed in the County of Humboldt Climate Action Plan:

- *Reduce length and frequency of vehicle trips:* See discussion above. The Proposed Project would inherently increase vehicle trips to the property, as a commercial use is being proposed. At full build-out, the Proposed Project would result in an average of 8 daily trips by full-time employees and 44 trips by seasonal contract laborers during peak seasonal events and 0-2 daily truck trips. Thus, at peak season during full build out, the maximum daily vehicle trips would be approximately 54, which classifies the project as a "small project", having fewer than the Governor's Office of Planning and Research (OPR) threshold of 110 daily new trips (Office of Planning and Research, 2018). The project design has incorporated farmworker housing to help reduce trips for some employees. The Proposed Project would also serve as a Community Support Facility for the surrounding Petrolia and Honeydew areas, supporting nearby farms who could now utilize the processing and nursery services proposed in this project rather than traveling to a larger metropolis area (e.g., Eureka or Garberville), subsequently reducing vehicle trips.
- *Promote the revitalization of communities in transition due to the decline of resource-based industries:* This Proposed Project would provide nursery and processing activities as Community Support Facilities to the Petrolia and Honeydew areas. Additionally, it would employ 12 full-time employees

and up to 22 seasonal/contract laborers in the area, helping facilitate economic development in rural Humboldt County.

2) Humboldt County General Plan – Air Quality Element (2017)

The Air Quality Element of the Humboldt County General Plan (Chapter 15) describes the County's policies to reduce greenhouse gas emissions and mitigate climate change. The General Plan provides greenhouse gas-related Goals and Policies for projects to meet, including the following relevant policies:

- *AQ-P1. Reduce Length and Frequency of Vehicle Trips:* See discussion above.
- *AQ-P11. Review of Projects for Greenhouse Gas Emission Reductions,* which states that the County shall evaluate GHG emissions of new large-scale commercial projects for compliance with state regulations and require feasible mitigation measures to reduce GHG emissions. See discussion above.
- *AQ-P14. Solar Electric System Capacity,* which states that the County shall encourage and provide incentives to increase solar electric capacity in residential, commercial, and industrial sectors. The Proposed Project proposes the use of renewable energy.
- *AQ-P15. Energy Efficient Building Design,* which states that the County shall encourage and provide incentives for construction of buildings beyond Title 24 requirements. The Proposed Project would meet Title 24 requirements.

3) Humboldt County Commercial Cannabis Land Use Ordinance (CCLUO, 2018)

The CCLUO requires that all electricity for new commercial cannabis projects must be exclusively provided by a "renewable energy source", defined as generating power without the use of petroleum or other fossil fuels (CCLUO, 2018) The Proposed Project would be powered by photovoltaic panels and a renewable energy plan from on-grid PG&E power, and thus complies with the renewable energy Performance Standards of the CCLUO.

4) California Air Resources Board Climate Change Scoping Plan (2017)

The 2017 Climate Change Scoping Plan developed by the California Air Resources Board (CARB) provides context and strategies to help achieve statewide greenhouse gas emission reduction goals. Appendix B of the Scoping Plan includes suggested actions that local governments can take to support the State's climate goals. The Project is consistent with the following applicable GHG reduction measures identified in the Scoping Plan:

- *Energy Efficiency / Green Building Strategy:* The proposed buildings associated with the project would comply with the California Building Code and California Energy Code and thus would include the required energy features to be consistent with this measure.
- *Renewable Portfolio Standard to achieve 60% renewable energy mix statewide by 2030:* The Proposed Project would source energy from solar and PG&E. Solar is inherently a renewable energy source, and PG&E currently obtains 33% of its power supply from renewable energy sources, which is on track to meet the 60% renewable energy mix by 2030 (PG&E website, Accessed April 2022). If utilizing PG&E, the project would be required to enroll in a PG&E renewable energy program, such as the "100% Solar Choice" plan or the "RePower+" plan (PG&E, 2022).
- *Million Solar Roofs Program:* The Proposed Project would comply with Title 24 energy requirements, which requires new buildings to be "solar ready". The Proposed Project includes a 323-kW capacity roof-mounted solar photovoltaic power system.

5) NCUAQMD Particulate Matter Attainment Plan

The NCUAQMD prepared a Particulate Matter Attainment Plan, Draft Report, in May 1995 with the goal of achieving and maintaining state ambient air quality standards for PM_{10}. This report includes a description of the planning area (North Coast Unified Air District), and emissions inventory, general attainment goals, and a listing of cost-effective control strategies. The NCUAQMD's attainment plan established goals to reduce PM_{10} emissions and eliminate the number of days in which standards are exceeded. The plan includes

three areas of recommended control strategies to meet these goals – transportation, land use and burning. Control measures for these areas are included in the Attainment Plan. Compliance with the control measures in the Particulate Matter Attainment Plan would not only result in a reduction of PM_{10} emissions but would also result in a reduction of GHG emissions. Control strategies focused on reducing transportation emissions, more efficient land use patterns, and reducing emissions from burning activities would also reduce the amount of GHG emissions. The proposed facility would be designed to meet all California Building Code and Title 24 Standards. Heating for the nurseries would be achieved through the use of commercial propane heaters, not woodstoves or fireplaces, thus reducing GHG emissions generated from heating during long-term operation of the 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.

Mitigation Measures

None.

3.2.9. HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 2 miles of a public airport or public use airport, would the project result in a safety hazard 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

The Proposed Project involves cannabis cultivation, processing (including harvesting, bucking, drying, and trimming), a commercial nursery, and farmworker housing. Agricultural chemicals, including fertilizers, soil amendments, pesticides, fungicides, and petroleum products, including diesel and gasoline, would be used for agricultural operations. The project site is located in Humboldt County near the community of Petrolia, and has historically been used for agricultural purposes.

The State Water Resources Control Board (SWRCB) Geotracker website (accessed February 2022) did not identify any cleanup sites on the subject parcel. The nearest Cleanup Program Site is the "Petrolia Elementary School" Cleanup Program, a closed diesel cleanup site located at 29289 Chamber Road approximately 2,500 feet from the Proposed Project area. Additionally, the Department of Toxic Substances Control (DTSC) EnviroStor website (accessed February 2022) did not identify any mapped hazardous waste or cleanup sites within a mile of the Proposed Project area.

The Proposed Project site has a CalEnviroScreen score between 26-30% (CalEnviroScreen 3.0, accessed February 2022). The CalEnviroScreen mapping tool helps identify California communities that are most affected by sources of pollution, and where people are often especially vulnerable to pollution effects. The scores are mapped so that different communities can be compared. Scores range between 1-100%. An area with a high score is one that experiences a much higher pollution burden than areas with low scores. The low score of 26-30% indicates that the subject parcel is not likely to be recognized as a highly disadvantaged area from environmental pollution.

The closest school to the project site is the Mattole Unified School District, approximately 1 mile west of the project site. The closest airport is Rohnerville Airport, which is approximately 17 air miles northeast of the project site. According to the Humboldt County WebGIS, the Proposed Project site is located in a Moderate Fire Hazards Severity Zone. No portion of the subject property is located within a FEMA Flood Zone or a dam failure inundation zone (Humboldt Web GIS, 2022). The project is not located in the Coastal Zone and would not be impacted by a tsunami or sea level rise.

Analysis

a) Finding: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. *Less than significant impact.*

Discussion: The Proposed Project site would be developed for the cultivation and processing of cannabis, which typically uses hazardous materials including fertilizers, herbicides, pesticides, petroleum products, as well as vehicle and equipment fluids and lubricants. These materials would be transported to the site and used at the facility. No disposal of hazardous materials would occur as part of the Proposed Project.

The risks associated with the routine transport, use, and storage of these materials during construction are anticipated to be relatively small. With appropriate handling and disposal practices consistent with the SWRCB Cannabis General Policy and General Order WQ 2019-0001-DWQ, there is relatively little potential for accidental release of hazardous materials during construction or operation. Storage and handling of materials would employ BMPs and BPTCs. The Site Management Plan required by the General Order, would include provisions for safely refueling equipment, and spill response and containment procedures.

Fertilizers, nutrients, and soil amendments anticipated to be used include Earth Juice Rainbow Mix Pro Grow/Bloom, General Hydroponics Grow, oyster shell, gypsum, lime, dolomite, azomite, compost, and worm castings. Other legal fertilizers, nutrients, and soil amendments similar to the above could also be used during operations. Pesticides anticipated to be used include sulfur products, neem oil and other plant oils (e.g. garlic,

cottonseed, corn, clove, etc.), Green Cleaner, Dr. Zymes, Regalia *(Reynoutria sachalinensis)*, Grandevo *(Chromobacterium subtsugae)*, Venerate XC, & biological controls (e.g., ladybugs) (Appendix 1 – Cultivation and Operations Plan). Pesticides and fertilizers would be applied directly to plants, and would be applied over 550 feet from the nearest residence.

Petroleum products, including gasoline and diesel, are currently stored onsite to maintain existing residential and agricultural operations (e.g. to power tools, equipment, etc.). Petroleum products associated with the Proposed Project would include gasoline and diesel stored in small-quantity sealed containers (e.g. 5-gallon gas cans). All petroleum products would be stored within secondary containment. Refueling of small equipment (e.g. weed whacker, tools, generator, etc.) would be conducted onsite over secondary containment and greater than 100 feet from any watercourses. Refueling of larger equipment (e.g., tractor or backhoe) would be conducted offsite at a properly licensed facility.

BMP's and BPTCs outlined in the Cannabis General Order (refer to Attachment A of the Order on the SWRCB website) would be employed when storing, handling, mixing, application and disposal of all fertilizers, pesticides and fungicides. All nutrients, pesticides and fungicides would be located in a locked storage room, and contained within water-tight, locked and labeled containers in accordance with manufactures' instructions. Application rates would be tracked and reported with the end of the year monitoring report required in the Site Management Plan. Employees responsible for application are trained to handle, mix, apply or dispose of pesticides/fungicides with proper hand, eye, body, and respiratory protection in accordance with the manufacturer's recommendations.

In addition, the Proposed Project has enrolled State Water Resources Control Board (SWRCB) for coverage under Order No. WQ 2019-001-DWQ (Cannabis General Order – WDID 1_12CC428193). A Notice of Applicability was issued by the SWRCB for the site (Appendix 2). To comply with the Cannabis General Order, a Site Management Plan is being prepared. The SWRCB program and County ordinance have "standard conditions" applicable to cannabis operations that address impacts from the storage and use of hazardous materials which include the following requirements:

- Any pesticide or herbicide product application would be consistent with product labeling and be managed to ensure that they would not enter or be released into surface or groundwater;
- Petroleum products and other liquid chemicals would be stored in containers and under conditions appropriate for the chemical with impervious secondary containment; and
- Implementation of spill prevention, control, and countermeasures (SPCC) and have appropriate cleanup materials available onsite.

With appropriate storage, handling, and application practices that comply with the requirements of the NCRWQCB and Humboldt County, it is not anticipated that the use of these materials at the facility would pose a significant hazard. Therefore, the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) Finding: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. *Less than significant impact.*

Discussion: See above discussion. The Proposed Project involves the cultivation and processing of cannabis which is a use that typically uses hazardous materials including fertilizers, herbicides, pesticides, petroleum products, as well as vehicle and equipment fluids and lubricants. As described in subsection a), fertilizers, pesticides, lubricants and oils (less than 5-gallons), and diesel (less than 10-gallons) would be stored and used

at the site. The fertilizers, and pesticides used by the project would primarily be in five-gallon containers and stored within the proposed facility for containment.

If required, the applicant would file a Hazardous Materials Business Plan with the County Division of Environmental Health for the storage and handling of the various materials described above at the site. With appropriate storage, handling, and application practices, it is not anticipated that the use of these materials would pose a significant hazard. In the event of foreseeable upset and accident conditions, it is unlikely that these hazardous materials would be released in a manner that would create a significant hazard to the public or the environment. Therefore, the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) Finding: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. *No impact.*

Discussion: There are no schools located within one-quarter mile of the project site. The Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur and no mitigation would be necessary.

d) Finding: The 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 not create a significant hazard to the public or the environment. *No impact.*

Discussion: The Proposed Project site was not included on a site which is included on a list of hazardous materials sites, and no hazardous sites were identified within 2,000 feet of the project site (SWRCB Geotracker website and DTSC EnviroStor, 2022). Because the Proposed Project is not listed as a hazardous materials site, implementation of the Proposed Project would not create a significant hazard to the public or the environment. No impact would occur, and no mitigation would be necessary.

e) Finding: For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area. *No impact.*

Discussion: The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airport is Rohnerville Airport, located over 17 miles away. Therefore, the Proposed Project would not result in a safety hazard for people residing or working in the project area. No impact would occur, and no mitigation would be necessary.

f) Finding: The project would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. *Less than significant impact.*

Discussion: The Proposed Project would use existing roadways (Chambers Road) in Petrolia to access the project site. A Road Evaluation conducted by OurEvolution Engineering (Appendix 2) concluded that Chambers Road is developed to Category 4 Road standards and subsequently could accommodate the Proposed Project. At the project site, onsite roads would include emergency turnarounds (Appendix 1 – Site Maps). The proposed access improvements would improve emergency access and circulation to and within the project site. Additionally, the applicant would supply local emergency services with the gate code or would install a lockbox for emergency access only.

The Proposed Project would be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The

County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space (CALFIRE, 2017). The improvement plans for the Proposed Project would be reviewed to verify compliance with the County's Fire Safe Ordinance which would ensure that adequate access for emergency response and evacuation is provided. As such, this project would not interfere with any emergency response or evacuation plan. Therefore, the Proposed Project would not impair the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Finding: The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to an urbanized area or where residences are intermixed with wildlands. *Less than significant impact.*

Discussion: The Proposed Project would be required to comply with the Humboldt County Fire Safe Ordinance (County Code Section 31111 et seq), which CalFire has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and setback distances for maintaining defensible space. The project site is accessed by Chambers Road, which is developed to Category 4 standards (Road Evaluation, 2021 – Appendix 2). improvement plans for the Proposed Project would be subject to approval by the Humboldt County Building Department to verify compliance with the County's Fire Safe Ordinance which would ensure that adequate access for emergency response and evacuation is provided.

Fire protection in Humboldt County is provided by local districts, cities, and CALFIRE. The project site is within the Petrolia Fire Protection District Fire Response Area. CALFIRE identifies fire hazard severity zones in State Responsibility Areas (SRA) throughout California. According to Humboldt County Web GIS mapping, the project area is located in a moderate fire hazard severity zone within the SRA. The County of Humboldt Office of Emergency Services coordinates emergency response in Humboldt County through the Humboldt Operational Area. The Humboldt Operational Area is composed of the County of Humboldt, serving as the lead agency, and all political subdivisions (cities and Special Districts) within the county.

The risk of causing a wildfire would not be significant during construction and operation because the project activities would comply with state and local requirements. Equipment shall be "fire-safe", i.e. operating under a fire safety plan and equipped with spark arrestors. The access road shall be maintained in a state such that it is free of vegetation during times of activity.

Fueling of vehicles/equipment during construction activities would occur off-site or be transported and dispensed from pick-up trucks equipped for such a purpose. During long-term operation of the project, fuel would be stored on-site for equipment use in containers designed for fuel storage that includes secondary containment.

As required by fire code, all of the existing and proposed buildings, except the greenhouse structures and the drying barn, would be developed with fire suppression systems. In addition, SRA improvements include management of trees and vegetation around existing structures to maintain the required 100-foot defensible space and all structures on the property meet the 30-foot SRA setback requirement from property lines. Therefore, the Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Potential impacts would be less than significant and no mitigation would be necessary.

Mitigation Measures

None.

3.2.10. HYDROLOGY AND WATER QUALITY

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Setting

The project site is located within the Lower Mattole River HUC-12 Watershed in the unincorporated area of Humboldt County near the community of Petrolia. The Mattole River watershed encompasses approximately 304 square miles and originates in northern Mendocino County. The Proposed Project site contains elevations ranging from 225 to 860 feet above sea level and receives an average of 74 inches of rain per year, though precipitation can vary widely from year to year.

The property contains several watercourses, including Mill Creek, a perennial (Class I) watercourse, two seasonal (Class II) watercourses, and several ephemeral (Class III) drainages. Appropriate buffers (150 ft., 100 ft., and 50 ft., respectively) have been designated for these watercourses in accordance with County and State requirements. All watercourses generally flow westerly through the parcel and are tributaries to the Mattole River. No mapped wetlands were identified on the project parcel. The site is not connected to a municipal storm drainage system.

Three (3) stream crossings (STX) exist onsite, including one bridge (STX-1) and two culverts (STX-2 and STX-3). STX-1 is a bridge located on an unnamed Class II intermittent watercourse that was replaced in 2008 as part of a state-funded fisheries restoration project and is in good condition. STX-2 is an existing 48-inch diameter plastic culvert located on a Class II intermittent watercourse that is proposed to be upgraded to a 72-inch diameter arched culvert to sufficiently pass the expected 100-year streamflow event and associated debris. STX-3 is an existing 36-inch diameter plastic culvert located on a Class III ephemeral watercourse that is proposed to be upgraded to a 60-inch diameter culvert to sufficiently pass the expected 100-year streamflow event and associated debris. The California Department of Fish and Wildlife (CDFW) has been notified of the two proposed stream crossing upgrades (STX-2 and STX-3) and have authorized the replacements under executed Streambed Alteration Agreement No. EPIMS-HUM-18009-R1C (Appendix 2).

The Mattole River is not state or federally designated under the Wild and Scenic Rivers Act (National Wild and Scenic Rivers System, 2021). The first 1.5 miles of the Mattole River Estuary are proposed to be designated as Wild and Scenic but have not yet been designated as of the date of this document.

The Mattole River is listed as an "Impaired" waterbody per section 303(d) of the Clean Water Act, for excessive sediment and high temperatures. Listing a waterbody as impaired for a particular constituent or stressor requires the development of ae Total Maximum Daily Load (TMDL), which is a pollution control plan for the waterbody and the associated constituent or stressor. The TMDL identifies the quantity of the constituent that can be safely assimilated by a waterbody without violating water quality standards. A TMDL for sediment and temperature in the Mattole River was adopted by the U.S. Environmental Protection Agency (EPA) on December 30, 2002. The Mattole River Sediment TMDL was included in Resolution R1-2004-0087, Total Maximum Daily Load Implementation Policy for Sediment Impaired Receiving Waters in the North Coast Region, adopted by the North Coast Regional Water Quality Control Board in November 2004. The TMDL includes numeric targets, source analysis, and sediment loading rates within the watershed (EPA 2002). The primary purpose of the TMDLs for the Mattole River is to ensure that beneficial uses of related to the cold water fishery in the Mattole River watershed.

The Proposed Project is located in the Mattole River Valley Groundwater Basin (Number 1-28). The Mattole River Valley Groundwater Basin encompasses approximately 5 square miles. The Mattole River Valley groundwater Basin is not one of the 517 prioritized groundwater basins and sub-basins in California by the California Department of Water Resources (DWR) as part of the Sustainable Groundwater Management Act.

No portion of the property is located within a FEMA Flood Zone or dam failure inundation zone.

Cisco Farms, Inc., enrolled with the State Water Resources Control Board (SWRCB) for Tier 1, Low Risk coverage in March of 2021 under the Cannabis General Order (WDID 1_12CC428193). Prior to commencing operations onsite, a Site Management Plan will be developed utilizing Best Practicable Treatment or Control (BPTC) measures in accordance with the SWRCB's recommendations in the Cannabis General Order and Policy. Additional filings, monitoring, and furnishing of supporting documents once the Project is fully approved and developed would be coordinated with the SWRCB. The drainage and erosion control measures described below are required components of the SMP.

The SMP would include erosion prevention and sediment control BPTC Measures designed to prevent, contain, and reduce sources of sediment. The SMP also includes corrective actions to reduce sediment delivery and prevent erosion. Two existing culverted stream crossings are proposed to be upgraded to ensure passage of the 100-year streamflow event. Ongoing BPTC Measures would be implemented throughout the life of the project, including proper storage of all liquid materials in secondary containment, safe storage of site refuse, site winterization activities, and ongoing monitoring of the site. All hazardous materials, including pesticides, fertilizers, soils, spoils piles, and cultivation waste, would be properly stored outside of riparian setbacks to protect water quality.

Analysis

a) Finding: The project would not violate any water quality standards or waste discharge requirements. *Less than significant impact.*

Discussion: Construction of the Proposed Project would include grading, storage and use of construction materials, and the operation of heavy equipment. Until construction at the site is complete, soil and pavement particulate may become entrained in stormwater resulting in sediment being discharged from the site. In addition, stormwater discharge may include debris, particulate, and petroleum hydrocarbons as a result of improper storage of construction materials, improper disposal of construction wastes, discharges resulting from construction dewatering activities, and spilled petroleum products. No construction would occur in or within 150 feet of Class I (perennial) watercourses, 100 feet of Class II (intermittent) watercourses, or 50 feet of Class III (ephemeral) watercourses. No wetlands were identified onsite.

There is an existing unpermitted septic system that serves the existing residence, and a new septic system is proposed to accompany the processing facility as part of the Proposed Project. A Septic Feasibility Study was conducted by OurEvolution Engineering (August 2021), which analyzed the soils and found that the proposed location of the new septic system (Appendix 1 – Site Maps) would be adequate to support a safe and effective onsite wastewater treatment system (Appendix 2). The proposed septic system would be designed and reviewed by a professional engineer with an appropriately sized leach field and septic tank prior to approval from the Humboldt County Department of Environmental Health. Portable toilets and handwashing facilities would be provided onsite and serviced by a licensed provider prior to construction of the processing building.

Irrigation of plants would of hand watering and drip irrigation and conservation and containment measures to prevent excess water use. Vegetated buffers between the cultivation activities and the riparian areas would be maintained.

With the implementation of operating restrictions, and compliance with SWRCB Construction General Permit and Cannabis General Order, the Proposed Project would not violate any water quality standards or waste discharge requirements. Impacts would be less than significant, and no mitigation would be necessary.

b) Finding: The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. *Less than significant impact.*

Discussion: Water for irrigation for the Proposed Project, including cultivation and nursery activities, would be provided exclusively by rainwater catchment and 2,850,000 gallons of associated storage (a 2.65-million gallon pond and thirty-eight (38) proposed 5,000-gallon water tanks) and would total approximately 2,154,095 gallons, including 1,807,276 gallons for mature plant cultivation and 346,819 gallons for nursery activities (Table 2). See the Cultivation and Operations Plan in Appendix 1 for further details.

Water for irrigation would be served exclusively by rainwater. The total rainwater collection potential, including surface area of the pond, greenhouses, dry buildings, and the proposed processing and nursery buildings, during an average rainfall year of 73.93 inches is approximately 8,301,376 gallons (Table 3). During drought years, the total collection potential varies from 3,058,697 gallons to 3,974,959 gallons, depending on the dataset used to estimate the lowest rainfall on record (Table 3 – Project Description), which is sufficient to meet the proposed demand, even during the minimum precipitation year on record of 27.24 inches and accounting for pond evaporation.

Non-irrigation water for domestic uses, including drinking, plumbing, and processing (e.g., handwashing, surface and tool cleaning, and toilet flushing) would be sourced from a proposed on-site well. Demand for non-irrigation water would total approximately 111,709 gallons annually, including 10,429 gallons for processing activities and 101,280 gallons for water use associated with the farmworker housing.

The proposed well would be drilled on APN 104-232-005, on the border of the Mattole River Valley Groundwater Basin (Figure 10, see also Site Map in Appendix 1). The Mattole River Valley Groundwater Basin (#1-28) extends from the Mouth of the Mattole River at the Pacific Ocean inland to the alluvial plains of the mainstem and north fork Mattole River (DWR, 2004), with a mapped surface area of 3,150 acres. The basin is bounded to the northwest by tertiary marine sedimentary rocks of the Wildcat series, and to the south and east by undifferentiated marine Cretaceous deposits of greywacke sandstone and shale (DWR, 2004). Reported groundwater extraction for agricultural use is 140 acre-feet (AF), and for industrial and municipal use is 7 AF, for a total of 147 AF annual groundwater demand. DWR (2004) reports deep percolation of applied water, implied as irrigation return flows, to be 87 AF.

The demand from the proposed well as a result of this project would be approximately 111,709 gallons, or 0.434 AF, for non-irrigation uses. This represents approximately 0.3% of the 140 AF of agricultural groundwater demand and only 0.29% of overall groundwater demand in the Mattole River Valley Groundwater Basin (DWR, 2004). When drilled, the proposed use for groundwater would be consistent with uses in the area and would represent only a small fraction of groundwater used in the area. Therefore, the project would not substantially decrease groundwater supplies.

The Mattole River Valley Groundwater Basin has not been identified by the California Department of Water Resources (DWR) as a critically overdrafted basin. Critically overdrafted is defined by DWR as, “A basin subject to critical overdraft when continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts." In addition, as part of the California Statewide Groundwater Elevation Monitoring (CASGEM) Program, DWR created the CASGEM Groundwater Basin Prioritization statewide ranking system to prioritize California groundwater basins in order to help identify, evaluate, and determine the need for additional groundwater level monitoring. California’s groundwater basins were classified into one of four categories high-, medium-, low-, or very low-priority. The Mattole River Valley was ranked as a very low-priority basin by the CASGEM ranking system (DWR, 2021).

If the well is unable to be used for domestic water for any reason, the applicant would add up to an additional 70,000 additional rainwater catchment storage tanks in the area proposed for storage tanks. This amount is approximately the amount that would be needed for employee and processing usage during the typical dry months of May – October.

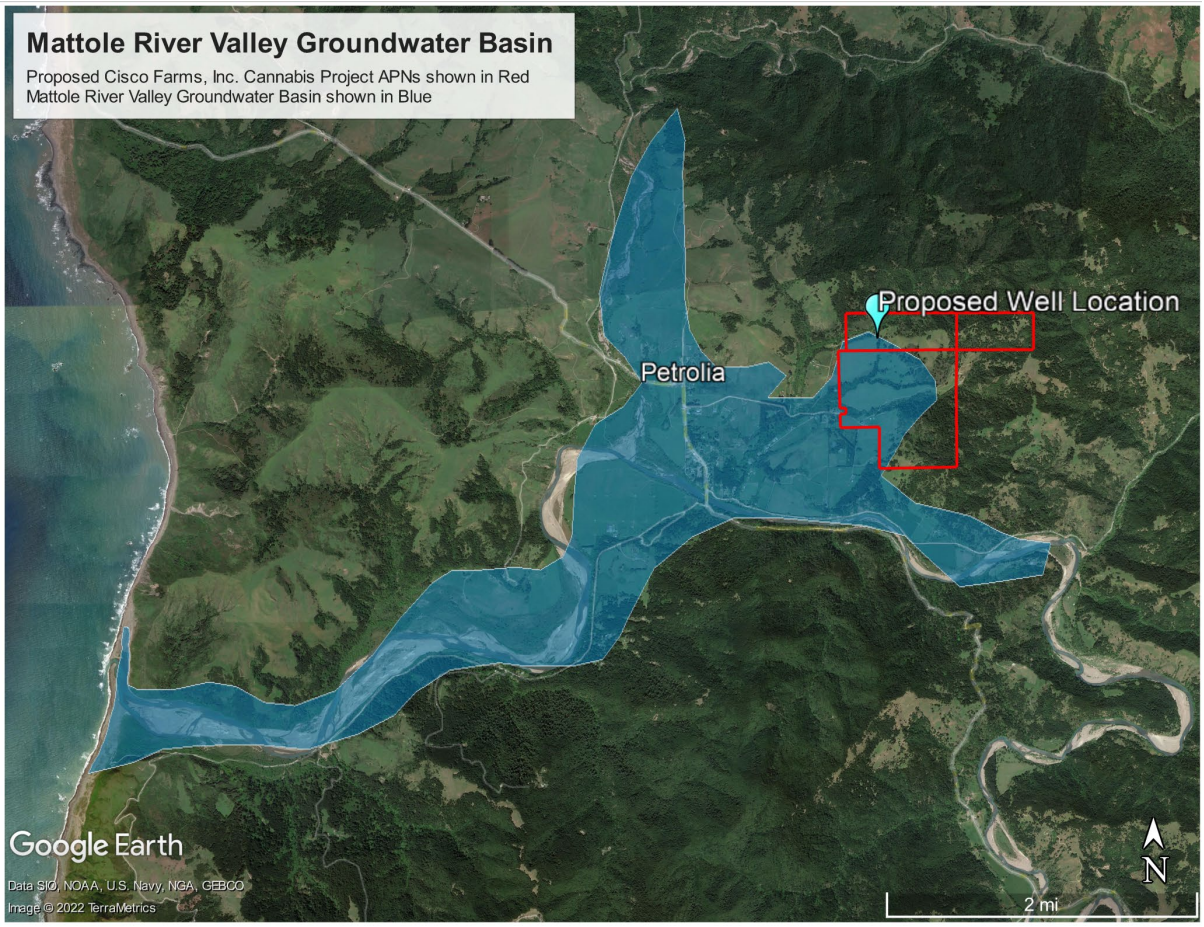


Figure 10: Mattole River Valley Groundwater Basin, Proposed Project APNs, and Proposed Well Location (Source: Google Earth, 2022)

The Proposed Project proposes to capture and store rainwater for irrigation use that may have otherwise recharged the groundwater basin. Total irrigation demand from rainwater is approximately 2,154,095 gallons. Additionally, it is estimated that approximately 677,929 gallons of collected rainwater would evaporate from the pond during the hotter, dryer summer and fall months. Combining irrigation demand and projected evaporation, the total rainwater demand from the Proposed Project would be 2,832,024 gallons or 8.7 AF. Approximately 73.9 inches and 27.2 inches of rain would fall across the 517-acre property during an average and dry year, respectively. This equates to 3,184 AF and 1,172 AF, respectively. The 8.7 AF of total demand of rainwater associated with the Proposed Project (including evaporation) represents only a fraction - approximately 0.27% and 0.75% - of total rainfall that falls on the property during an average and dry rainfall year, respectively.

Therefore, the Proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts would be less than significant, and no mitigation would be necessary.

c. i) Finding: The project would not 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 result in substantial erosion or siltation on- or off- site. *Less than significant impact.*

Discussion: No alterations or re-routings of watercourses is proposed. Three (3) stream crossings exist onsite, including one bridge (STX-1) and two culverted crossings (STX-2 & STX-3), which would both be upgraded and improved as a result of the Proposed Project. none of which would be negatively impacted or altered by the proposed project. STX-2 is an existing 48-inch diameter plastic culvert located on a Class II intermittent watercourse that is proposed to be upgraded to a 72-inch diameter arched culvert to sufficiently pass the expected 100-year streamflow event and associated debris. STX-3 is an existing 36-inch diameter plastic culvert located on a Class III ephemeral watercourse that is proposed to be upgraded to a 60-inch diameter culvert to sufficiently pass the expected 100-year streamflow event and associated debris. The improvement of two (2) stream crossings has been approved by the CDFW in the executed SAA.

With the implementation of operating restrictions, and compliance with SWRCB Construction General Permit and Cannabis General Order, the Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. Rather, impacts to onsite stream crossings would be positive, as they would be improved to pass flows from the 100-year storm event. The applicant would follow all stream crossing upgrade requirements as outlined in the executed SAA by the CDFW. Impacts would be less than significant, and no mitigation would be necessary.

c. ii) Finding: The project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. *Less than significant impact.*

Discussion: The Proposed Project would increase the amount of impermeable surface within the project site by approximately 178,360 sq. ft. (approximately 4 acres), through construction of greenhouses, drying buildings, the processing building, and the modular farmworker housing units. The three (3) acres of full-sun outdoor cultivation was not included in this calculation due to retained permeability. The project site is located within the Lower Mattole River Watershed HUC-12 watershed, which has a contributing acreage of 38,550 acres. The approximately 4 acres of impermeable surface created by the project represents 0.7% of the total parcel size (517 acres) and approximately 0.01% of the Lower Mattole River Watershed drainage area. Rainwater from some of the proposed impervious surface areas would be plumbed to the 2.65-million gallon rainwater catchment pond and tanks and stored for irrigation use. Further, no surface runoff from irrigation would be generated from the cultivation activities. Irrigation of plants would consist of hand watering and drip irrigation and conservation and containment measures to prevent excess water use. The increase in runoff due to the new impermeable surfaces would be minimal.

With the implementation of operating restrictions, and compliance with SWRCB Construction General Permit and Cannabis General Order, the Proposed Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The project impacts would be less than significant impact.

c. iii) Finding: The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. *Less than significant impact.*

Discussion: The site is not connected to a municipal storm drainage system. The three (3) onsite stream crossings would either be unaffected or improved by approval of the Proposed Project (see discussion in c)i, above). The Proposed Project would increase the amount of impermeable surface within the project site by 178,360 sq. ft. (approximately 4 acres), or 0.7% of the total parcel size and 0.01% of the Lower Mattole River

contributing drainage area (see discussion in c)ii, above). Rainwater from some of the proposed impervious surface areas would be plumbed to the 2.65-million-gallon rainwater catchment pond and tanks and stored for irrigation use. Further, no surface runoff from irrigation would be generated from the cultivation activities. Irrigation of plants would consist of hand watering and drip irrigation and conservation and containment measures to prevent excess water use. The increase in runoff due to the new impermeable surfaces would be minimal.

Site operations would conform to Best Practicable Treatment or Control Measures from the SWRCB Cannabis Policy and General Order to reduce erosion and sedimentation onsite. With the implementation of operating restrictions, and compliance with SWRCB Construction General Permit and Cannabis General Order, the Proposed Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant, and no mitigation would be necessary.

c. iv) Finding: The project would not impede or redirect flood flows. *No impact.*

Discussion: No portion of the property or Proposed Project is not located within a FEMA Flood zone. Therefore, the project would not impede or redirect flood flows.

d) Finding: The project would not in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. *No impact.*

Discussion: The Proposed Project is not in an area that is at risk from flood hazard, seiche, or tsunami. The proposed 2.65-million-gallon pond would be designed by an engineer and approved by the Humboldt County Building Department prior to construction. An engineered grading permit for the proposed pond was submitted to the Humboldt County Planning and Building Department on March 15th, 2021 (BLD-2021-53539). Permit BLD-2021-53539 is ready to issue once the Conditional Use Permit for the Proposed Project is approved. The project is not located near a large body of water capable of producing a seiche and is not located near the coast in a tsunami inundation area. Therefore, the Proposed Project would not result in inundation by flood hazard, seiche or tsunami.

The Proposed Project includes construction of a 2.65-million-gallon pond. The pond would be designed by a professional engineer and a grading permit would be approved by the Humboldt County Building Department prior to construction. No other levee or dam construction is associated with the Proposed Project. As noted previously, the Proposed Project would not be located within a 100-year flood zone and would not expose people or structures to any other kind of flooding event. The Proposed Project site is not located within a dam failure inundation area according to the Humboldt County Web GIS system. Therefore, the Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

e) Finding: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. *Less than significant impact.*

Discussion: Mattole River Valley Groundwater Basin is not subject to a Sustainable Groundwater Management Plan. There are no conditions associated with the Proposed Project that would result in a conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan beyond what is described in the responses to subsections a) – d) above. The project includes compliance with the State Water Resources Control Board (SWRCB) Construction General Permit (CGP) and is enrolled with the State Water Resources Control Board (SWRCB) for coverage under Order No. WQ 2019-0001-DWQ (General Order – WDID 1_12CC428193). Therefore, the Proposed Project would not otherwise substantially degrade water quality or conflict with or obstruct a water quality control plan or sustainable groundwater management plan.

Mitigation Measures

None.

3.2.11. LAND USE AND PLANNING

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with the jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Setting

The Proposed Project is located off of Chambers Road, approximately one mile east of the community of Petrolia in the unincorporated area of Humboldt County. The subject parcel has historically been used for agriculture, livestock, grazing, and residential uses. The property is zoned Agriculture Exclusive (AE) and has a General Plan Land Use Designation of Agricultural Grazing (AG) (Figure 11, Figure 12). Surrounding land uses include agriculture, livestock/grazing, timberland, and rural residential uses. Twelve (12) commercial cannabis projects are located within one mile of the Proposed Project area, per the County's Accela website (2022).

Analysis

a) Finding: The project would not physically divide an established community. *No Impact.*

Discussion: The Proposed Project would not substantially alter existing land uses and all work would be completed within existing Agriculture Exclusive (AE) zoning (Figure 11). No residences or businesses would be demolished as part of the Proposed Project. The Proposed Project would continue to conduct agricultural activities on the project site. No activities are proposed that would physically divide an established community. No impact would occur as a result of the Proposed Project and no mitigation is required.

b) Finding: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. *No Impact.*

Discussion: The Proposed Project site is zoned Agriculture Exclusive (AE). The Proposed Project would not result in changes to existing land use, zoning, or specific plans in Humboldt County. The Proposed Project would not conflict with any goals, policies, or objectives in the Humboldt County General Plan intended to mitigate potential environmental impacts. Land uses and zoning would remain unchanged.

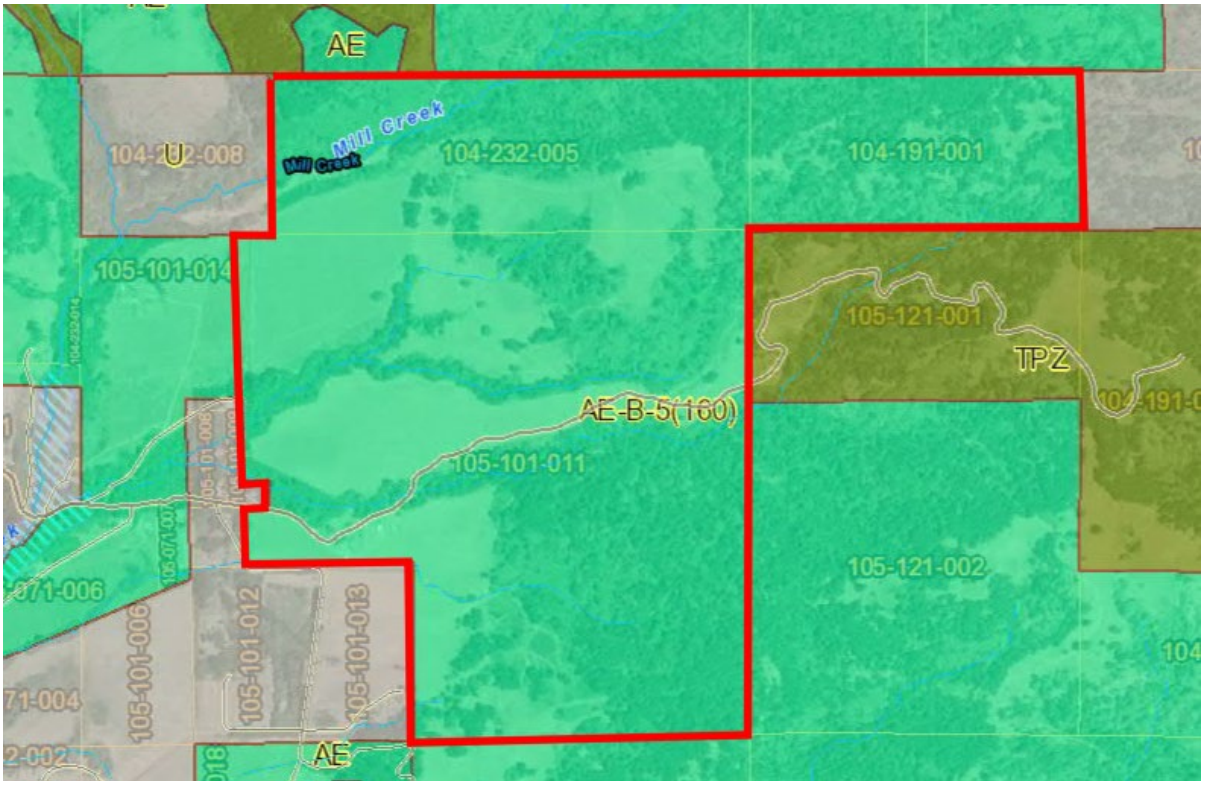


Figure 11: Cisco Farms, Inc. Zoning (Source: Humboldt Web GIS, 2022)

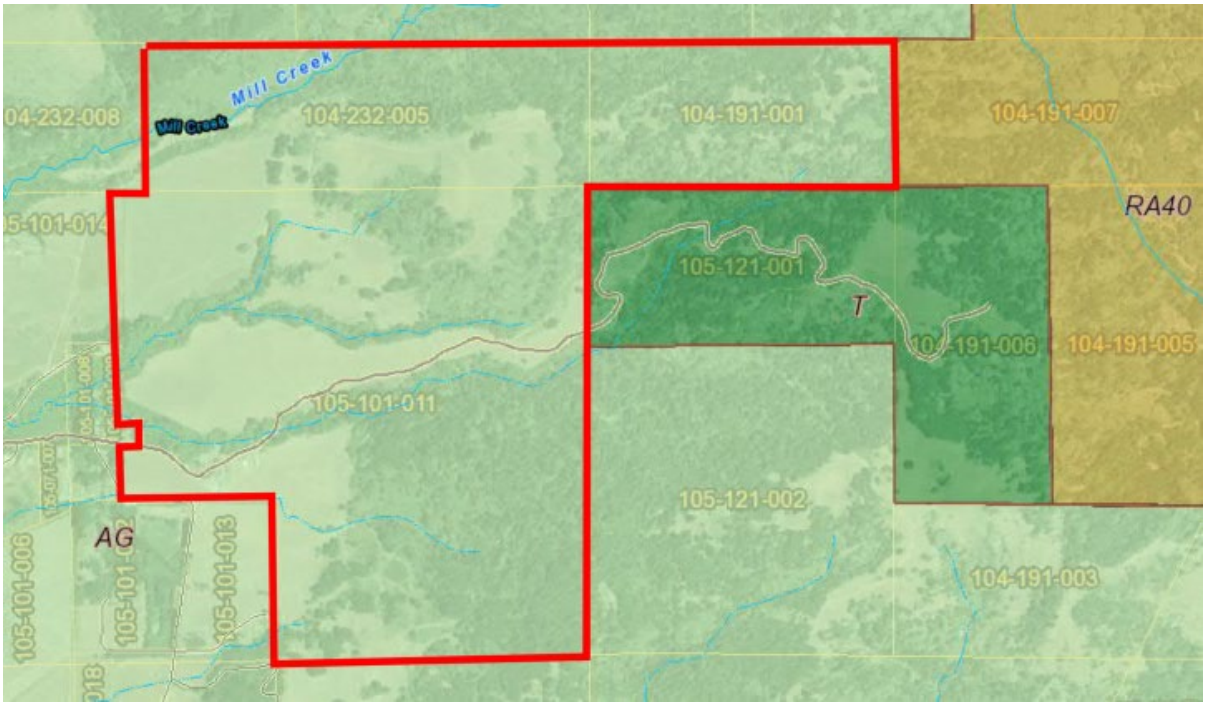


Figure 12: Cisco Farms, Inc. General Plan Land Use Designation (Source: Humboldt County Web GIS, 2022)

The agricultural use associated with the Proposed Project would be consistent with the allowable land uses under the Humboldt County General Plan and Zoning Ordinance. The CCLUO identified AE-zoned parcels as sites where cultivation, processing activities, and nurseries projects of this size and scope would be allowed, subject to the issuance of discretionary permits. In addition, the Proposed Project would otherwise not conflict with any applicable goals, objectives, and policies of the Humboldt County General Plan and Zoning Ordinance. As 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.

The analysis contained in this document addressed the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect including, but not limited to, Humboldt County General Plan and Land Use Ordinance, Humboldt County Draft Climate Action Plan (2012), HCAOG 20-Year Regional Transportation Plan (2017 Update), HCAOG Regional Bicycle Plan Update (2018), and NCUQMD Particulate Matter (PM10) Draft Attainment Plan (1995).

Therefore, based on the analysis conducted in this document, it was determined that the project was not in conflict with any adopted land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur as a result of the Proposed Project. No mitigation is required.

Mitigation Measures

None.

3.2.12. MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 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

According to the Humboldt County General Plan, mineral production within the county is limited to sand, gravel, and rock extraction. Gravel bars and deposits from the large stream and flood plains supply most of the gravel needs of the County. Since costs for these materials are mostly associated with transportation, operations are usually located close to rural and urban development areas and used locally. Production of sand, gravel, and rock are essential for the continued well-being of the County. They are the basis for much of the construction materials for roads, concrete, streambank protection, erosion control, septic systems, and passive solar projects (Humboldt County General Plan, 2017).

No historical mining is known to have occurred on the property. Within the Proposed Project area, there is no land classified as IR (Industrial Resource) which designates areas for resource-related industrial processing including mineral products. Additionally, there is no surrounding land classified under this designation. No parcels under the Surface Mining and Reclamation Act are located within the project vicinity. Land uses surrounding the parcel are comprised of agriculture, livestock/grazing timber, and scattered rural residences. Surrounding zoning designations adjacent to the property are Agriculture Exclusive (AE), Unclassified (U), and Timberland Production Zone (TPZ). Surrounding General Plan Land Use Designations consist of Agricultural General and Timberland (T).

Analysis

a) Finding: The project will 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. *No impact*.

Discussion: The Proposed Project site does not include any lands that are classified as MRZ-2 or any known locally important mineral resources. The Proposed Project is not within or adjacent to any mining operations.

The Proposed Project is a cultivation operation. Implementation of the Proposed Project would not result in the loss of availability of a known mineral resource, and no impact would occur.

b) Finding: The Proposed Project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. *No impact.*

Discussion: There are no known mineral deposits of significance on or near the Proposed Project site. Therefore, implementation of the Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

Mitigation Measures

None.

3.2.13. NOISE

Would the Project result in:	Potentially Significant Impact	Less-than-Significant Impact with 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 groundborne 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 air- port, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Setting

The Proposed Project is located off of Chambers Road near the community of Petrolia. Land uses surrounding the parcel are comprised of agriculture, timber, and rural residences. Noise on the site would increase with the approval of commercial operations onsite. Noise levels during construction activities would increase temporarily from equipment (e.g., backhoe or bulldozer), although minimal grading and site preparation are necessary due to the relatively flat topography of the site. Noise from operational activities would increase at the start of each cultivation season with equipment used for annual site preparation. Ongoing operational activities, including fans, vehicular traffic, delivery truck traffic, employee noise, and backup generators (if used) would also produce noise.

The noise standards in the Humboldt County General Plan are based on the Community Noise Equivalent Level (CNEL), which is a measure that describes average noise exposure over a period of time (Humboldt County General Plan, 2017). Because communities are more sensitive to impacts from nighttime noise, noise descriptors must specifically take this time period into account. Common measures include the CNEL and the Day-Night Average Level (Ldn). Both reflect noise exposure over an average day, with greater weight given to noise occurring during the evening and night. The two descriptors are roughly equivalent but CNEL is used in this Plan for regulating cumulative noise exposure over a 24-hour period.

A standard construction wood frame house reduces noise transmission by 15 dB. Since interior noise levels for residences are not to exceed 45 dB, the maximum exterior noise level for residences is 60 dB without requiring additional insulation. In areas where CNEL noise levels exceed 60 dB, the need for additional noise insulation

would vary depending on the land use designation; adjacent uses; distance-to-noise source; and intervening topography, vegetation, and other buffers. The building code provides standards for meeting noise insulation requirements. (Humboldt County, 2017).

According to Table 13-C (Land Use/Noise Compatibility Standards) in the Humboldt County General Plan, normally acceptable noise levels go up to 91+ dB in an Agriculture land use category. Per Policy N-S1, the Land Use/Noise Compatibility Standards (Table 13-C) shall be used as a guide to ensure compatibility of land uses. Development may occur in areas identified as "normally unacceptable" if mitigation measures can reduce indoor noise levels to "Maximum Interior Noise Levels" and outdoor noise levels to the maximum "Normally Acceptable" value for the given Land Use Category.

The CCLUO includes Performance Standards for Noise at cultivation sites, requiring noise from new cultivation activities to not increase decibels of continuous noise above existing ambient noise levels by three (3) decibels at any property line (CCLUO, 2018). Ambient noise onsite was measured at 30 dBA to 58 dBA (Appendix 1 - Cultivation and Operations Plan).

Analysis

a) Finding: The project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. *Less than significant impact.*

Discussion: The Proposed Project proposes the cultivation and processing of cannabis in a designated agriculture area. Potential noise sources associated with the Proposed Project would include permanent operational noises, which include greenhouses and accessory facilities, employee vehicle traffic, delivery truck traffic, equipment use, and back-up generators during power outages, as well as temporary noises, including noise from construction.

Per Humboldt County General Plan Chapter 13, noise impacts for new development projects should be based on a comparison of the noise compatibility standards provided Table 13-C of the General Plan. The Community Noise Equivalent Level (CNEL) is used as a measure that describes average noise exposure over a period of time. CNEL is used in the General Plan for regulating cumulative noise exposure over a 24-hour period. Clearly acceptable CNEL levels, per Table 13-C of the General Plan, for residential land uses are CNEL of 50 dB. Clearly acceptable noise exposure is defined in the General Plan as "*the noise exposure is such that the activities associated with the land use may be carried out with essentially no interference. (Residential areas: both indoor and outdoor noise environments are pleasant).*" The maximum short-term day (6:00 AM to 10:00 PM) noise standard for AG land uses is 80 dBA. The maximum short-term night (10:00 PM to 6:00 AM) noise standard for AG land uses is 70 dBA (Figure 13).

Activities associated with cultivation in the greenhouses (watering, transplanting, and harvesting) would generally occur during daylight hours. All other activities, such as processing, would typically occur no earlier than 8 AM and extend no later than 8 PM. Noise sources that would be generated by the operation of this project would include fans in the greenhouses, employee vehicle traffic, delivery truck traffic, equipment use, and the back-up generators during power outages. Fans and generators, when running, would be the greatest source of noise. Fans would be selected based on ability to meet or exceed the 60 dB requirement at the nearest property line. Variable speed dials for fans may be utilized to ensure that the required noise thresholds are met. HVAC units and some filter equipment would be installed to minimize odors and dust that may result in some minor noise on the exterior of the buildings. Noise from generator use would be temporary in nature.

SHORT-TERM NOISE STANDARDS (Lmax)		
Zoning Classification	Day (maximum) 6:00 a.m. to 10:00 p.m. dBA	Night (maximum) 10:00 p.m. to 6:00 a.m. dBA
MG, MC, AE, TPZ,TC, AG, FP, FR, MH	80	70
CN, MB, ML, RRA, CG, CR	75	65
C-1, C-2. C-3, RM, R-3, R-4	65	60
RS, R-1, R-2, NR	65	60

Figure 13: Humboldt County General Plan Short-Term Noise Standards for Zoning Classifications (Source: Humboldt County General Plan Noise Element, 2017)

Given the type of use (i.e., cannabis facility) and size of the project, long-term operation of the Proposed Project is not expected to result in a significant temporary or periodic increase in ambient noise levels exceeding the Humboldt County General Plan Noise Element Standards. Many of the Proposed Project activities would take place within the existing and new buildings which would significantly reduce noise levels.

To ensure that the Proposed Project has back-up power in the case of a power outage during long-term operation, generators would be kept onsite. In the event of generator use, to buffer noise levels generated by use of the back-up generators, generators would be housed in one of the accessory buildings. The use of generators would follow all guidelines set up by Humboldt County and the State of California.

Construction activities would result in a temporary increase in noise levels in the area. This noise increase would be short in duration and would occur during daytime hours. It is anticipated that construction would take up to approximately 10 weeks. Activities involved in construction would generate maximum noise levels, as indicated in Table 10, ranging from approximately 80 to 85 dB at a distance of 50 feet (Appendix 1 - Noise Source Assessment & Mitigation Plan, Cultivation and Operations Plan). Due to the size of the parcel (approximately 517 acres), surrounding topography, and distance to neighboring residences (587+ feet), temporary construction noise would likely be reduced beyond the boundaries of the site to acceptable levels.

Table 10. Construction Equipment Noise Levels (Source: Federal Highway Administration Construction Noise Handbook, 2006)

Type of Equipment	Maximum Noise Level (dB at 50 feet)
Dozer	85
Heavy Trucks	85
Backhoe	80
Pneumatic Tools	85

The Proposed Project would be conditioned to comply with the County's noise regulations which would ensure that impacts from the Proposed Project would be less than significant. Since the Proposed Project would be located near existing agricultural uses and in a rural environment and on a parcel of greater than 500 acres, noise levels are anticipated to be less than significant. The Proposed Project would meet all Noise Performance Standards in the CCLUO to not increase noise levels greater than three (3) decibels over ambient. Therefore, the Proposed Project would not expose persons to or result in the generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies.

b) Finding: The Proposed Project will not expose persons to or generate excessive groundborne vibration or groundborne noise levels. *Less than significant impact.*

Discussion: Construction of the Proposed Project facilities would result in a temporary increase in noise levels in the area. Groundborne vibrations or groundborne noise levels would be short in duration and would occur during daytime house. As previously mentioned, the distance to the nearest residence is located approximately 587 feet from the nearest cultivation facility. Given the distance of the nearest sensitive noise receptor and the temporary nature of construction, impacts from construction activities are considered less than significant.

Long-term operation of the Proposed Project facilities would not involve the regular use of heavy machinery or ground disturbing activities that would result in excessive groundborne vibration or groundborne noise levels. An agricultural tiller may be used at the beginning of the cultivation season, consistent with historic agricultural uses on the property and surrounding properties. Therefore, the Proposed Project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels. The project impacts would be less than significant, and no mitigation would be necessary.

c) Finding: The project would not, 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, expose people residing or working in the project area to excessive noise levels. *No impact.*

Discussion: There are no private airstrips in the project area. Therefore, the Proposed Project would not be within the vicinity of a private airstrip, nor result in a safety hazard for people residing or working in the project area and the Proposed Project would not expose people residing or working in the project area to excessive noise levels. The project site is not located within two miles of a public airport or public use airport. The closest airport is the Rohnerville Airport, located over 17 miles from the Proposed Project area. The Proposed Project would not expose workers working or residing on the project site to excessive noise levels from a private airstrip. No impacts would occur, and no mitigation would be necessary.

Mitigation Measures

None.

3.2.14. POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation	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 else- where?	☐	☐	☐	☒

Setting

Humboldt County is a rural county with a large land area and low population density. The 2020 Census reported the county's population to be 136,463, which represents an increase of 1,840 over the population reported in the 2010 census (US Census Bureau, 2022). The Proposed Project is one mile east of the community of Petrolia in the unincorporated area of Humboldt County. Petrolia has an estimated population of approximately 1,000 people (Humboldt County Website, 2022).

Analysis

a) Finding: The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). *Less than significant impact.*

Discussion: The Proposed Project would provide employment for approximately twelve (12) full-time employees during the cultivation season from March to November and up to 22 additional employees/contract laborers during peak seasonal events, such as harvesting and planting, for a total of 34 employees. The Proposed Project includes farmworker housing for eight (8) full-time employees.

Growth inducing impacts are generally caused by projects that have a direct or indirect effect on economic growth, population growth, or when the project taxes community service facilities which require upgrades beyond the existing remaining capacity. Providing housing for eight (8) employees, approximately 0.4% of Petrolia's estimated population, is not likely to substantially increase population growth in the area. Therefore, the Proposed Project would not induce substantial population growth in the area either directly or indirectly. Impacts would be less than significant in this regard and no mitigation measures would be required.

b) Finding: The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. *No Impact.*

Discussion: The Proposed Project would not displace people or existing housing. The existing residence on the Proposed Project site is proposed to remain and would provide housing for a site caretaker. Therefore, the Proposed Project would not displace a substantial number of existing housing, necessitating the construction of

replacement housing elsewhere. No impacts would occur in this regard and no mitigation measures would be required.

Mitigation Measures

None.

3.2.15. PUBLIC SERVICES

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

Setting

Fire protection within Humboldt County is provided by local districts and cities (often considered special districts). Areas outside of these special districts and cities are typically served by volunteer fire companies. In addition, much of the County is serviced by the California Department of Forestry and Fire Protection (CalFire) and for the project site is provided by the Humboldt-Del Norte Fire Unit, located in Fortuna, California servicing 3.1 million acres between the Oregon border and Mendocino County (CalFire, 2007). The subject parcel is in a State Responsibility Area (SRA), and has areas of Very High, High, and Moderate Fire Hazard Severity ratings, though the entire Proposed Project area is located within a Moderate area (Humboldt Web GIS, 2022). Fire protection services for wildland fires are provided by CalFire. CalFire has responsibility for enforcement of Fire Safe Standards as required by Public Resources Code (PRC) 4290 and 4291. Also, CalFire is the primary command and control dispatch for most local agency fire districts and departments.

The Proposed Project is mostly located within the fire response jurisdiction of the Petrolia Fire Protection District, who would be the likely response team if a fire were to occur onsite. APN 104-232-005 is currently located in the Petrolia Fire Protection "Proposed Annexation Area" and would also be served by the Petrolia Volunteer Fire Department if there was an emergency (Humboldt County Web GIS, 2022). The Petrolia Fire Station is the nearest station to the project site, located approximately 2.4 road miles southwest of the project site (drive time of approximately 10-15 minutes).

The Humboldt County Sheriff's Office is responsible for law enforcement in the unincorporated areas of the County including for the Proposed Project site. The Humboldt County Sheriff's Office provides a variety of public safety services countywide (court and corrections services) and law enforcement services for the unincorporated areas of the County. The California Highway Patrol is responsible for enforcing traffic laws on roadways within the unincorporated areas and on state highways throughout the County. The Sheriff's Office Operations Bureau is made up of seven units under the command of the Undersheriff. The most visible of these units is the Patrol Unit. Sheriff's Deputies assigned to the Patrol Unit are responsible for responding to emergency calls for service, criminal investigations, and crime prevention through neighborhood and beat patrols. According to the Humboldt County General Plan Update Draft EIR, in the more rural areas of the County, like the project area, maximum response times may reach 50 minutes because of longer travel distances, varied topography, available resources, and the location of the Sheriff Deputy on patrol in relation to the incident (Humboldt County, 2017).

The nearest school to the project site is Mattole Unified School District, approximately 1 aerial mile west of the project.

The nearest park is located on the Mattole Unified School District campus, approximately 1 aerial mile west of the project. The nearest mapped Public Lands are located 1.14 miles southwest of the project.

Police and law enforcement services for the project site are provided by the Humboldt County Sheriff's Department. The closest station is located in Fortuna, approximately 37 driving miles from the project and an approximately hour and fifteen-minute drive (Google Maps, 2022).

Analysis

a) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for fire protection. *Less than significant impact.*

Discussion: During peak operations, the Proposed Project would provide employment for approximately twelve (12) full-time persons and up to 22 contract laborers during peak seasonal events. This would not significantly increase the population in the unincorporated area near Petrolia area as all employees already live and work in Humboldt County, and most would live in the Petrolia area.

The Proposed Project would be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and set-back distances for maintaining defensible space. The improvement plans for the Proposed Project would be reviewed to verify compliance with the County's Fire Safe Ordinance.

Due to the nature of the proposed cannabis uses and required compliance with fire code requirements, it is not anticipated that the project would result in a significant increase in the number of calls-for-service to which the Petrolia Volunteer Fire District responds. As such, the project would not result in the need for new or physically altered fire protection facilities. Therefore, impacts to fire protection services from the Proposed Project are considered less than significant.

b) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services for police protection. *Less than significant impact.*

Discussion: Due to the nature of the Proposed Project, there is the potential for security to be an issue and place a greater demand on law enforcement services provided by the County Sheriff's Department. All commercial cannabis facilities would be accessed from a driveway off of Chambers Road, behind a locked gate, and would be securely locked while not staffed or in use. Security lighting would be installed across the property, and a fence would be constructed to surround the Proposed Project area. Implementation of the security plan measures would minimize impacts on local law enforcement. As such, the Proposed Project would not result in the need for new or physically altered law enforcement facilities. Therefore, impacts to law enforcement services from the Proposed Project are considered less than significant.

c)- e) Finding: The project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services schools, parks, or other public facilities including public health services and library services. *Less than significant impact.*

Discussion: The Proposed Project would not substantially increase the population in the Petrolia area and would thus not create a demand for new schools, housing, parks, libraries, or public health services. Impacts would be less than significant.

Mitigation Measures

None.

3.2.16. RECREATION

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Setting

See Section 3.2.15 Public Services for a discussion of parks and recreational resources in the region.

Analysis

a) Finding: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. *No impact*.

Discussion: The Proposed Project would not include new residences or features that would attract new residents or increase demand on parks and recreational trail systems. The Proposed Project would not directly induce population growth or otherwise result in an increased demand on existing recreational facilities. The Proposed Project would not provide direct access to or increase the use of recreational facilities in the region. No impact would occur in this regard and no mitigation measures would be required.

b) Finding: The project would not include recreational facilities or require the expansion of recreational facilities which might have an adverse effect on the environment. *No impact.*

Discussion: The Proposed Project would not include construction of recreational facilities. The Proposed Project would not directly induce population growth or otherwise result in an increased demand on existing recreational facilities that would require the construction or expansion of recreational facilities. No impact would occur in this regard and no mitigation measures would be required.

Mitigation Measures

None.

3.2.17. TRANSPORTATION

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Setting

The Proposed Project site is approximately 517 acres in size and is located off of Chambers Road in a rural area of Humboldt County, approximately 1 mile east of the community of Petrolia. The site is located approximately 30 driving miles from Ferndale, 47 driving miles from Garberville, and 50 driving miles from Eureka. The parcel is utilized for residential and agricultural/livestock purposes.

To reach the site from Ferndale, turn right on Bluff St./Ocean Ave at the south end of town and turn left onto Wildcat Road toward Petrolia. Continue for approximately 30 miles. Once in Petrolia, follow the main road (Front Street) through town and take a right onto Mattole Road. In 0.2 miles, take a left onto Chambers Road. The project driveway is located approximately 1.1 miles from the intersection with Mattole Road (Appendix 1 - Cultivation and Operations Plan, 2021).

A Road Evaluation was conducted for the project by Our Evolution Engineering (2021 – Appendix 2). Access to the site is from Chambers Road, a paved, county-maintained road developed to the Category 4 Standard from the intersection of Mattole Road to the edge of the Property Boundary (Appendix 1 - Cultivation and Operations Plan, 2021; Appendix 2 - Road Evaluation, 2021). Chambers Road is used to access private residences along the road. Traffic data about Chambers Road was not readily available at the time of publication of this study.

Daily trips generated by the Proposed Project were estimated based on information on employee count, delivery truck trips, etc. from the Cultivation and Operations Plan (Appendix 1):

> Construction: During construction, it is estimated that 5-15 personnel would be needed for construction activities. During this period, it is expected that construction personnel would make two (2) trips per day to the site, resulting in 10-30 trips per day. In addition, three (3) round trips per day from dump trucks or materials delivery trucks (based on 3 deliveries per day) are expected for a total of 8 to 13 round trips per

day during the construction period. Larger equipment would be mobilized once at the beginning of the project, and out at the end of the project.

Operation: At full build-out, the Proposed Project would result in an average of 8 daily trips by full-time employees and 44 trips by seasonal contract laborers during peak seasonal events and 0-2 daily truck trips. Thus, at peak season during full build out, the maximum daily vehicle trips would be approximately 54. The 54 trips per day corresponds to peak seasonal events, which is anticipated to be less than 3 months out of the year (Appendix 1 – Cultivation and Operations Plan).

The Humboldt County Association of Governments (HCAOG) designates bicycle transportation routes in the County. No designated routes are located on Chambers Road, Mattole Road, or near the project. The nearest designated bike route is Wildwood Avenue, located over 17 miles from the Proposed Project (HCAOG, 2022).

The Redwood Transit System provides public transportation services across Humboldt County. The community of Petrolia has no public transit system, and no public transit is available within 20 miles of the Proposed Project (Humboldt Transit Authority Website, 2022).

According to the Humboldt County General Plan Circulation Element, most facilities dedicated to pedestrians are located in urban areas of Humboldt County. There are no existing or proposed pedestrian facilities within the surrounding area of the project site (Humboldt County General Plan, 2017).

Analysis

a) Finding: The project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. *Less than significant impact.*

Discussion: The project site would be accessed by Chambers Road, off of Mattole Road in the community of Petrolia. Construction traffic for the Proposed Project would result in a short-term increase in construction-related vehicle trips on US 101. Construction would result in vehicle trips by construction personnel and haul-truck trips for delivery and disposal of construction materials. Due to their short-term nature and consistency with other agricultural and cannabis projects in the area, construction activities would not result in substantial impacts to Chambers Road or Mattole Road.

Vehicle/truck traffic generated by long-term operation of the Proposed Project is estimated to generate up to 54 vehicle/truck trips per day during peak operations. These numbers take into consideration cannabis material and supplies being imported to the site and cannabis material being exported from the site. The Road Evaluation conducted by OurEvolution Engineering (Appendix 2), certifies that Chambers Road to the property boundary is developed to Category 4 road standards. No improvements were recommended in the Road Evaluation. Category 4 and Category 4 equivalent roads have been designated as roads that can support new agricultural cannabis projects (CCLUO, 2018). The applicant would maintain the intersection of Chambers Road and Mattole Road as required by the Humboldt County Department of Public Works.

There are no pedestrian, bicycle, or transit facilities located within 0.25 miles of the project site, which is consistent with the rural location and acceptable for the type of Proposed Project. Therefore, the Proposed Project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Impacts would be less than significant and no mitigation would be required.

b) Finding: The project would not conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b). *Less than significant impact.*

Discussion: There is no public transportation available near the Proposed Project, so the majority of employees would need to commute to the site. Four (4) modular farmworker housing units would offset some employee trips that would otherwise be coming from offsite. According to the 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA from the Governor's Office of Planning and Research, "projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact", barring inconsistency with a Sustainable Communities Strategy or general plan (OPR, 2018). Maximum daily trips during full operation would be 54, including employee and delivery traffic. Additionally, the Proposed Project would also serve as a Community Support Facility for the surrounding Petrolia and Honeydew areas, supporting nearby farms who could now utilize the processing and nursery services proposed in this project rather than traveling to a larger metropolis area (e.g., Eureka or Garberville), subsequently reducing vehicle trips. Therefore, it is not expected for the Proposed Project to have a potentially significant level of vehicle miles traveled (VMT) and impacts related to CEQA Guidelines section 15064.3 subdivision (b) would be less than significant.

c) Finding: The project would not substantially increase hazards due to a geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). *Less than significant impact.*

Discussion: The Proposed Project would use Chambers Road off of Mattole Road to access the project site. The Road Evaluation prepared by OurEvolution Engineering (Appendix 2) certifies that Chambers Road meets Category 4 standards. No hazardous geometric designs, such as sharp curves, were identified in the Road Evaluation.

In addition, the project site is currently used for agricultural purposes and would continue to be used for such purposes under a different agricultural commodity. Surrounding lands are used mainly for agricultural, residential, and timber purposes in the project area.

Therefore, the Proposed Project would not result in hazards due to incompatible uses and would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment). A less than significant impact would occur and no mitigation measures would be necessary.

d) Finding: The project would not result in inadequate emergency access. *Less than significant impact.*

Discussion: The Proposed Project would use Chambers Road off of Mattole Road to access the project site. The Road Evaluation concluded that Chambers Road was developed to Category 4 standards and would therefore be adequate to serve the project (Appendix 2 - OurEvolution Engineering, 2021).The project design incorporates hammerhead turnarounds for emergency vehicles (Appendix 1 – Site Maps). As an operating standard, the applicant would be required to provide local emergency services with the gate code.

The Proposed Project would be required to comply with the Humboldt County Fire Safe Ordinance 1952, which the California Board of Forestry and Fire Protection has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and buildings, minimum water supply requirements, and set- back distances for maintaining defensible space (CALFIRE, 2017). The improvement plans for the Proposed Project would be reviewed to verify compliance with the County's Fire Safe Ordinance which would ensure that adequate access for emergency vehicles is provided. Therefore, the Proposed Project would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation measures would be required.

Mitigation Measures

None.

3.2.18. TRIBAL CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☒	☐	☐
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Setting

The project site (APNs 105-101-011, 104-232-005, 104-191-001) is an approximately 517-acre parcel located off Chambers Road approximately 1.40 air miles east of Petrolia. The subject parcel is currently developed for domestic and agricultural purposes. Existing onsite structures include a residence and four (4) agricultural barns. The property has historically been used for agricultural purposes. The parcel is surrounded by agricultural land, timberland, rural residential homes, and other cannabis farms and agricultural activities. The project site was traditionally occupied by the Mattole (or Bettol) Tribe, also known as the "Kuneste" (William Rich and Associates, 2021).

As detailed in Section 3.2.5, a Cultural Resources Investigation Report was prepared for the property by William Rich, M.A., of William Rich and Associates in May 2021 (Appendix 2). The Cultural Resources Investigation Report included an examination of archaeological site records and survey reports in the area as identified by the Northwest Information Center (NWIC). No previous surveys in the vicinity have included the Proposed Project area. Four other surveys have included small areas within APNs 104-232-005 and 105-101-011 (S-039935, S-041906, S-041907, and S-043365), none of which found resources within the subject parcels

or within ¼ mile. One resource, Langdon's Old Mill Berm (P-12-003796) is located ¼ mile west of the subject parcels.

The Proposed Project area was investigated for the presence of archaeological deposits, historic features, or other cultural resources. The report concluded that no historical resources, as defined in CEQA, Article 4, Section 15064.5 (a), were identified within the Proposed Project area or within a 600-foot buffer from the Proposed Project area (William Rich and Associates, 2021).

Analysis

a i-ii) Finding: The project will not cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code §5020.1(k). *Less than significant impact*.

Discussion: See analysis in Section 3.2.5, Cultural Resources. The Cultural Resources Investigation Report identified no historical resources as defined by Section 15064.5 within the Proposed Project area or property, nor were there any previous records of historical resources located on the subject property.

As required by AB 52, the County of Humboldt sent requests for formal consultation to the Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, Big Lagoon Rancheria, Cher-Ae Heights Indian Community of the Trinidad Rancheria, Hoopa Valley Tribe, Karuk Tribe, Round Valley Reservation/ Covelo Indian Community, Tsnungwe Council, Wiyot Tribe, and Yurok Tribe. With the incorporation of proposed Mitigation Measure CUL-1, the impact would be less than significant.

Mitigation Measures

See Mitigation Measure CUL-1 in Section 3.2.5 – Cultural Resources.

3.2.19. UTILITIES AND SERVICE SYSTEMS

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

Setting

The Proposed Project is for five (5) acres of commercial cannabis cultivation, 67,760 sq. ft. of commercial nursery, 3,000 sq. ft. of commercial processing activities, and ancillary activities. Four (4) modular farmworker residential structures totaling 1,280 sq. ft. are proposed as part of this project. Existing onsite development includes a ±1,900-sq. ft. residence and associated septic system, four (4) agricultural barns, fuel storage structures associated with agricultural activities, gravel and natural-surfaced roads, three (3) 500-gallon fuel tanks, a domestic spring diversion with associated water storage (2 x 3,600-gallon HDPE water tank and 3 x 1,000-gallon concrete water tanks), and two (2) livestock groundwater wells with associated well houses and water storage (1 x 5,000-gallon HDPE storage tank).

Portable toilets and handwashing facilities will be provided onsite and serviced by the provider until the proposed processing facility/residential housing units are constructed and the associated onsite wastewater treatment system is installed. The septic system would include an appropriately sized leach field and septic designed by a professional engineer. A preliminary Onsite Wastewater Treatment System Design has been prepared by OurEvolution Engineering, Inc. (Appendix 2, October 2021). The proposed leach field and septic tank would be located outside of riparian setbacks. The restroom within the proposed facility would be designed to meet Americans with Disabilities Act (ADA) standards of accessibility and would include a flushable toilet and a sink with cold and hot running water. The site is not connected to a municipal storm drainage system.

The Proposed Project would use photovoltaic panels and existing and proposed electrical service from Pacific Gas & Electric (PG&E) to power the facilities. The proposed solar system would have a capacity of 323 kW, estimated to produce 565,896 kWh annually (Appendix 1 – Sheet C2 of Site Maps), enough to up to 88% of total project demand. Existing electrical service includes a 200-amp residential service, and a 600-amp PG&E upgrade is also proposed (exact load calculations to be designed by an electrical engineer). Use of any on-site generators would be limited to backup and outage events and would follow all guidelines set by Humboldt County and the State of California.

Water for the Proposed Project would be provided by a proposed 2.65-million-gallon rainwater catchment pond and 38 5,000-gallon water storage tanks plumbed to catchment surfaces. The proposed onsite well would be utilized for employee use only (e.g., drinking water and residential use), estimated at approximately 111,709 gallons annually (Appendix 2 - Cultivation and Operations Plan). Drinking water may also be imported as needed.

Waste generated from the Proposed Project would either be composted onsite or properly disposed of. Refuse containers are proposed to be located near the cannabis facilities in wildlife-proof enclosed bins. The applicant estimates that approximately 8,000 lbs. of plant material solid waste, 280 lbs. of agricultural refuse waste, 150 lbs. of non-recyclable/compostable household refuse, and 350 lbs. of household recyclables would be generated annually. Plant material would be chipped and composted onsite, as feasible. Refuse and recycling would be taken to the Petrolia Humboldt Waste Management Authority site once every two weeks or as needed.

Analysis

a) Finding: The project would 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. *Less than significant impact.*

Discussion: The Proposed Project site is located within an unincorporated area of Humboldt County which does not have a public wastewater treatment system. Properties in this area function off of private systems. The existing residence on the project parcel has an onsite wastewater treatment system, including a septic tank and leach field. No changes, including relocation, are proposed to occur to the existing septic system.

The Proposed Project includes construction of a 3,000 sq. ft. commercial facility to serve as an employee break room and processing area. This building would include an ADA-compliant restroom and associated onsite wastewater treatment system, including a working flushable toilet, sink with hot and cold running water, shower, and an engineered septic tank and leach fields. The location for the leach fields has been vetted by Our Evolution Engineering (Appendix 2 - Septic Feasibility Study, 2021). The final septic system design would be reviewed for compliance with the requirements of the NCRWQCB and the Humboldt County Division of Environmental Health (DEH). Therefore, the Proposed Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

The Proposed Project leach field and septic tank would be located outside the wetland and riparian setbacks (Appendix 1 – Site Maps). These impacts are considered to be part of the project's construction phase and are evaluated throughout this document. Therefore, the Proposed Project would not result in significant environmental effects due to the construction of new wastewater treatment facilities or the expansion of existing facilities.

At full buildout of the Proposed Project, the site would use well water for domestic needs and rainwater catchment in a 2.65-million-gallon capacity rainwater catchment pond and plastic tanks for the irrigation of cannabis. An existing onsite well serves the onsite residence and a proposed new well would serve the proposed four (4) modular farmworker housing units.

The Proposed Project would increase the amount of impermeable surface within the project site by approximately 178,360 sq. ft. (approximately 4 acres), through construction of greenhouses, drying buildings, the processing building, and the modular farmworker housing units. The three (3) acres of full-sun outdoor cultivation was not included in this calculation due to retained permeability. The project site is located within the Lower Mattole River Watershed HUC-12 watershed, which has a contributing acreage of 38,550 acres. The approximately 4 acres of impermeable surface created by the project represents 0.7% of the total parcel size (517 acres) and approximately 0.01% of the Lower Mattole River Watershed drainage area. Rainwater from some of the proposed impervious surface areas would be plumbed to the 2.65-million-gallon rainwater catchment pond and tanks and stored for irrigation use. Any surface or stormwater runoff from the site is addressed in Section 3.2.10 (Hydrology & Water Quality) under subsections a) through c). Irrigation of plants would consist of hand watering and drip irrigation and conservation and containment measures to prevent excess water use. Thus, impacts would be less than significant and no mitigation would be required.

b) Finding: The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. *Less than significant impact.*

Discussion: Water for irrigation for the proposed commercial cannabis activities, including cultivation and nursery activities, would be provided by rainwater catchment and associated storage. Projected total water demand for proposed commercial cannabis cultivation is 2,154,095 gallons (Appendix 1 - Cultivation and Operations Plan, 2021). Rain would be collected in the 2.65-million-gallon capacity pond and 38 5,000-gallon plastic tanks plumbed to catchment surfaces.

The Cultivation and Operations Plan (Appendix 1) provides a detailed breakdown of rainwater catchment and use during average and drought years, accounting for evaporation. The total irrigation demand plus pond evaporation is approximately 2,832,024 gallons (Table 4). The total rainwater collection potential, including surface area of the pond, greenhouses, dry buildings, and the proposed processing and nursery buildings, during an average rainfall year of 73.93 inches is approximately 8,301,376 gallons (Table 3), nearly triple the expected demand. During dry years, the total collection potential varies from 3,058,697 gallons to 3,974,959 gallons, depending on the dataset used to estimate the lowest rainfall on record (Table 3). Using either available dataset, annual rainfall capture would be sufficient to meet the proposed demand, even during the minimum precipitation year on record of 27.24 inches and accounting for pond evaporation.

Therefore, it is expected that even during dry years, sufficient water would be available to support the Proposed Project. Additionally, the applicant would utilize water management strategies to conserve onsite use of water and fertilizers. Therefore, the Proposed Project would have sufficient water supplies available during normal, dry and multiple dry years.

c) Finding: The project would not result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. *No impact.*

Discussion: The project site is located in an unincorporated area of Humboldt County near the community of Petrolia, which does not have a municipal septic system. The proposed onsite wastewater treatment system would be designed by a qualified engineer and would be approved by the Humboldt County Division of Environmental Health (DEH). Therefore, the Proposed Project would not 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-e) Finding: The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and the project would comply with federal, state, and local management and reduction statuses and regulations related to solid waste. *Less than significant impact.*

Discussion: The California Integrated Waste Management Act of 1989 (Public Resources Code Division 30), enacted through Assembly Bill (AB) 939 and modified by subsequent legislation, required all California cities and counties to implement programs to divert waste from landfills (Public Resources Code Section 41780). Compliance with AB 939 is determined by the Department of Resources, Recycling, and Recovery (Cal Recycle), formerly known as the California Integrated Waste Management Board (CIWMB). Each county is required to prepare and submit an Integrated Waste Management Plan for expected solid waste generation within the county to the CIWMB. In 2010, the State legislature passed AB 341 (Chesbro) which set a statewide recycling goal of 75% by 2020 which is anticipated to be achieved through source reduction, recycling, and continued diversion of materials such as organic wastes. According to the Humboldt County General Plan Update Revised Draft EIR, the 2017 waste diversion rate for the unincorporated area of the county was 74% (Humboldt County General Plan, 2017).

The Proposed Project would comply with all federal, state, and local statutes related to solid waste, including AB 939. This would include compliance with the Humboldt Waste Management Authority's recycling, hazardous waste, and composting programs in the county to comply with AB 939. Solid waste generated by the Proposed Project would include the following: 1) plant material, nutrient supplement and soil containers, etc. generated from the cultivation, nursery, and breeding activities; 2) plant material generated from the processing activities; and 3) typical office and domestic solid waste generated by the employees.

Trash and recycling containers would be located near the cultivation facilities in a safe and enclosed location to prevent animal intrusion. Garbage and recycling would be hauled offsite two times per month or as needed to nearest waste management authority. Items that can be recycled would be separated and recycled. Stalks would be chipped for ground cover and composted. Spent potting soil would be stored in a contained area with environmental measures in place and would be covered during winter months and then amended in pots before further use.

The Humboldt County General Plan Waste Management Section of the Conservation and Open Space Element (2017) includes waste diversion goals. According to the General Plan, in 2012 the County as a whole disposed of 84,145 tons of solid waste in landfills, with approximately 43% or 36,182 tons emanating from the unincorporated areas of Humboldt County. The General Plan encourages implementation of waste reduction programs, including recycling.

The 280 lbs. of proposed refuse generated by the agricultural operation and the 150 lbs. of non-recyclable residential waste total 430 lbs. of waste added to the landfill annually. The majority of green waste would be composted. The estimated 430 lbs. of waste is approximately 25% of the average household annual waste of

approximately 2,200 (CalRecycle, 2021), and less than 0.00006% generated by unincorporated areas of the County in 2012 (Humboldt County General Plan, 2017). Green waste is proposed to be composted onsite, however, even if all of the green waste and the generated refuse (totaling 8,430 lbs.) were treated as waste, total project waste would comprise less than 0.001% of waste from unincorporated areas of the County.

According to the Humboldt County General Plan Update Revised Draft EIR, Eel River Disposal manages the transport of self-hauled and non-HWMA member waste, as well as waste received at the Redway Transfer Station. Solid waste is transported for disposal to the Anderson Landfill for disposal by Eel River Disposal, and Alves Inc. also hauls residual waste from its operation to Anderson, California. This landfill is not expected to close until 2036 (Humboldt County, 2021). The Proposed Project would dispose of less waste than an average single-family residence and comprises a miniscule percentage of waste generated by the County. Additionally, the Proposed Project intends to divert waste from landfills where possible by reusing usable products and recycling. Therefore, the Proposed Project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, would not produce waste in excess of state or local standards or impair attainment of solid waste goals, and would not violate any federal, state, or local statuses and regulations related to solid waste. Impacts would be less than significant, and no mitigation measures would be necessary.

Mitigation Measures

None.

3.2.20. WILDFIRE

If location near state responsibility areas or lands classified as very high hazard severity zones, would the Project:	Potentially Significant Impact	Less-than-Significant Impact with 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 the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infra-structure (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:

Fire protection in Humboldt County is provided by local districts, cities, and CALFIRE. The project site is within the Petrolia Fire Protection District and the Petrolia Fire Protection District "Proposed Annexation Area" response area. The site is not located within a Firewise Community. CALFIRE identifies fire hazard severity zones in State Responsibility Areas (SRAs) throughout California.

The Proposed Project site is located near the community of Petrolia, in rural Humboldt. The site is within an SRA and has a Moderate Fire Hazard Severity rating (Humboldt Web GIS 2020). The Proposed Project is mostly located within the fire response jurisdiction of the Petrolia Fire Protection District, who would be the likely response team if a fire were to occur onsite. APN 104-232-005 is currently located in the Petrolia Fire Protection "Proposed Annexation Area".

The Petrolia Fire Protection District technically covers approximately 11 square miles, including the majority of the Proposed Project Site, though the Petrolia Volunteer Fire Department also serves the approximately 91-square mile area outside of the district (Humboldt Local Agency Formation Commission, 2017).

The Petrolia Fire Station is the nearest station and emergency response location to the project site, located approximately 2.4 road miles southwest of the project site (drive time of approximately 10-15 minutes). Two historical records of fires are located on the property: the Apple Fire in 1973, which burned approximately 735 acres, and the Conklin Fire in 1972, which burned approximately 572 acres (Humboldt Web GIS, 2022). Both historic fires were located in the eastern, forested area of the property, and neither overlapped with the Proposed Project area.

The County of Humboldt Office of Emergency Services coordinates emergency response in Humboldt County through the Humboldt Operational Area. The Humboldt Operational Area is composed of the County of Humboldt, serving as the lead agency, and all political subdivisions (cities and Special Districts) within the county.

Analysis

a-d) Finding: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan; would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; would not require the installation or maintenance of associated infrastructure (e.g., roads, fuel breaks, emergency water sources) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; and would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. *Less than significant impact.*

Discussion: According to Humboldt County Web GIS mapping, the project site is located in a moderate fire hazard severity zone within the SRA, not within a high or very high fire hazard severity zone.

The risk of causing a wildfire would not be significant during construction and operation because the project activities would comply with state and local requirements. Equipment shall be "fire-safe", i.e. operating under a fire safety plan and equipped with spark arrestors. The access road shall be maintained in a state such that it is free of vegetation during times of activity. The proposed PG&E upgrade would include approximately 500 ft. of trenched underground electrical line, however it would be trenched underground and would not increase the risk of fire onsite.

Fueling of vehicles/equipment during construction activities would occur off-site or be transported and dispensed from pick-up trucks equipped for such a purpose. During long-term operation of the project, fuel would be stored on-site for equipment use in containers designed for fuel storage that includes secondary containment.

As required by fire code, all of the existing and proposed buildings, except the greenhouse structures and the drying barn, would be developed with fire suppression systems. In addition, SRA improvements include a designated SRA tank, management of trees and vegetation around existing structures to maintain the required 100-foot defensible space and all structures on the property meet the 30-foot SRA setback requirement from property lines.

The Proposed Project would be required to comply with the Humboldt County Fire Safe Ordinance (County Code Section 31111 et seq), which CalFire has accepted as functionally equivalent to PRC 4290. The County Fire Safe Ordinance provides specific standards for roads providing ingress and egress, signing of streets and

buildings, minimum water supply requirements, and setback distances for maintaining defensible space. The project site is accessed by Chambers Road, which is developed to Category 4 standards (Road Evaluation, 2021 – Appendix 2). Improvement plans for the Proposed Project would be subject to approval by the Humboldt County Building Department to verify compliance with the County's Fire Safe Ordinance which would ensure that adequate access for emergency response and evacuation is provided. Therefore, a less than significant impact would occur and no mitigation would be required.

Mitigation Measures

None.

3.2.21. MANDATORY FINDINGS OF SIGNIFICANCE

Would the Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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) 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) Have environmental effects that 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 it; during both temporary construction and long-term operation. Based on the project description and its location, the Proposed Project would not result in any significant impacts with the incorporated operating restrictions, mitigation measures, as well as those standards and requirements of other regulating resource agencies.

Analysis

a) Finding: The Proposed Project will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. *Less than significant impact with mitigation incorporated.*

Discussion: 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. Accordingly, with incorporation of the mitigation measures imposed throughout this document, the Proposed Project would not substantially degrade the quality of the environment and impacts would be less than significant.

b) Finding: The Proposed Project will not have impacts that are individually limited, but cumulatively considerable. ("Cumulatively considerable" means that the incremental effects of a Proposed 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). (CEQA Guidelines §§ 15064(h)(1), 15355.) *Less than significant impact with mitigation incorporated.*

Discussion: This mitigated negative declaration documents the project's design features and clear, specific mitigation measures that eliminate the project's potential, project-specific impacts on the environment or mitigates its potential impacts to a less-than-significant level. A "lead agency may determine in an initial study that a project's contribution to a significant cumulative impact would be rendered less than cumulatively considerable and thus is not significant." (CEQA Guidelines, § 15064(h)(2).)

When making this determination, the lead agency may conclude that the effects of a project under review would not be cumulatively considerable where "there is no evidence of any individual potentially significant effect." *(Sierra Club v. West Side Irrigation District* (2005) 128 Cal.App.4th 690, 701-702 (*Sierra Club*), citing *Leonoff v. Monterey County Board of Supervisors* (1990) 222 Cal.App.3d 1337, 1358 (*Leonoff*). Importantly, the "mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the Proposed Project's incremental effects are cumulatively considerable." (CEQA Guidelines § 15064(h)(4).)

A lead agency's analysis of cumulative impacts in a mitigated negative declaration is not the same as the analysis required in an EIR. In the mitigated negative declaration context, the lead agency's obligation is to determine whether the incremental effects of the project under review are "considerable". (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 42 Cal.App.4th 608, 624-635 (*San Joaquin Raptor*).) A lead agency's investigation of this question, further, does not require "some sort of grand statistical analysis" or other detailed inquiry of the type that could be appropriate in an EIR. (*San Joaquin Raptor*, p. 625.) A lead agency, as noted, can correctly conclude that the impacts of a project under review are not cumulatively considerable when there is no substantial evidence that any incremental impacts of the project are potentially significant. (*San Joaquin Raptor*, p. 624, citing *Leonoff*, at p. 1358.)

As discussed throughout this document, implementation of the Proposed Project has the potential to result in impacts to the environment that are individually limited, however, mitigation has been incorporated to reduce any potentially significant impacts that are individually limited to a less than significant level.

According to the Humboldt County Planning Department Accela database, twelve (12) active commercial cannabis operations are located within 1 mile of the Proposed Project Area (Figure 4, pg. 24). The Proposed Project Area is located in the Cape Mendocino Planning Watershed, which under Resolution 18-43 by the Humboldt County Board of Supervisors is limited to 650 total permits and 223 total acres of commercial cannabis cultivation (Humboldt County Board of Supervisors, 2018). See Figure 14 for a recent map presented at the June 16, 2022 Planning Commission Meeting that shows pending, approved, and enforcement commercial cannabis projects located near the Proposed Project in the Cape Mendocino Planning Watershed.

As of June 2nd, 2022, total approved permits in the Cape Mendocino Planning Watershed were approximately 218 permits and total approved acres were approximately 78 acres (Humboldt County Planning Department Staff Report, June 2022). With approval of the Cisco Farms, Inc. Cannabis Project, and allowing time for additional approvals, total approved permits in the Cape Mendocino Watershed would likely range from 219 – 235 individual permits, well below the 650 total specified under Resolution 18-43. Total cultivation acreage, with approval of this Project, would likely range from 83 to 95 acres, less than half of the 223-acre cap considered and adopted by the Board of Supervisors (2018).

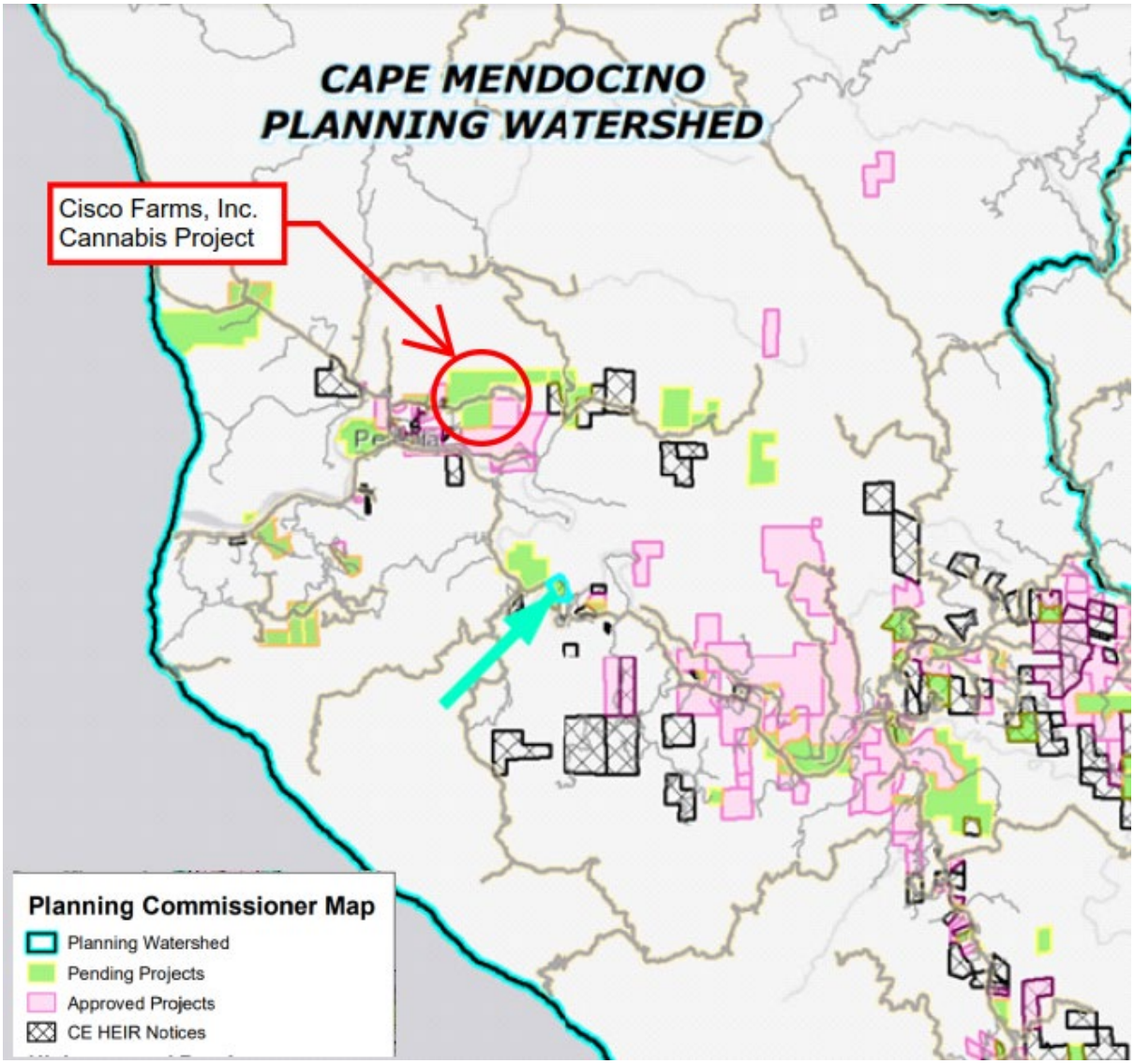


Figure 14: Cape Mendocino Planning Watershed Planning Commissioner Map of Approved, Pending, and Enforcement Commercial Cannabis Projects (Humboldt County Staff Report, June 2022)
(*Note: Image taken from a separate project's Staff Report; disregard the blue arrow)*

The Proposed Project would occur in a contiguous area in the northwest of the parcel, on the annual/perennial grassland, out of any riparian setbacks or riparian habitat. Approximately seven (7) acres would be disturbed. As previously mentioned, the Proposed Project Area could provide habitat for sensitive species, including the North American porcupine, American badger, Cooper's Hawk, Golden Eagle, and Western bumble Bee (See Section 3.24, discussion on Biological Resources). Within the 517-acre subject parcel, over 145 acres of similar grassland habitat would remain undeveloped and undisturbed by the Proposed project. Within a one-mile radius, excluding existing and proposed cannabis projects, there is over 500 acres of similar grassland habitat, per Google Earth Imagery. Therefore, the disturbed area associated with the Proposed Project represents approximately 1.4% of the available habitat in a 1-mile radius. Under the court's holding in *Sierra Club*, the absence of any individual potentially significant effect is a strong indicator that a project would not have

considerable cumulative effects (*Sierra Club*, pp. 701-702.) Therefore, impacts to mammal, bird, and invertebrate species would be considered not cumulatively significant.

This document includes specific, effective mitigation measures that reduce the Proposed Project's potential environmental impacts to a less-than-significant level. With regard to biological resources impacts in particular, the Proposed Project's impacts were analyzed through a site-specific biological study, botanical study, wetlands delineation, and database searches. This document incorporates mitigation measures that require preconstruction surveys and noise and light performance standards, among other measures and Proposed Project design features. These measures reduce the Proposed Project's individual impacts to a less-than-significant level.

With regard to other resource categories, the Proposed Project would not have any impacts that are considered cumulatively considerable. Aesthetically, the Proposed Project would not be visible from any designated scenic vistas and would conform to International Dark Sky Standards. The Proposed Project aligns with the Humboldt County Zoning and General Plan land use designations and would follow all requirements in the County's Commercial Cannabis Land Use Ordinance, and would therefore have a less than significant impact on Land Use and Agricultural/Forestry resources. The Project is located within the North Coast Air Basin, which is currently in non-attainment for PM10, and would follow all requirements surrounding fugitive dust prevention. The Proposed Project would operate entirely off of renewable energy, would not utilize generators as a primary power source, and would not significantly contribute to increased levels of PM10 or other pollutants, including Greenhouse Gas Emissions. The Proposed Project would not require an excessive amount of grading and would not significantly to geologic instability in the Mattole Valley area. All proposed buildings would be constructed in conformance with the most recent California Building Code. No hazardous waste would be generated onsite, and the Project would follow all regulations surrounding hazardous materials. No mineral resources would be extracted, and significant noise levels would not be generated from the Proposed Project. Groundwater and rainwater would both be utilized at less than significant levels. For analysis on impacts to additional resource categories, see discussion in sections 3.2.1-3.2.20, above.

Current practices surrounding the Proposed Project include ranching, agriculture, residential, and commercial cannabis cultivation. The Proposed Project is allowed by the Humboldt County Zoning Code. The Project would not increase the number of permits or acres of cultivation in the Cape Mendocino Watershed above established limits (per Resolution 18-43). The Proposed Project is consistent with the character of the surrounding neighborhood and would individually or cumulatively significantly contribute to any impact, with mitigation measures incorporated.

The Proposed Project, further, is consistent with the Commercial Cannabis Land Use Ordinance (CCLUO), that Humboldt County adopted in connection with the adoption of the Final Environmental Impact Report for cannabis cultivation in the unincorporated areas of Humboldt County. The FEIR expressly analyzed environmental impacts of commercial cannabis cultivation operations as permitted under the CCLUO. In other words, the County has already analyzed the cumulative impacts of commercial cannabis activities within the project area and determined that projects that are consistent with the CCLUO and the FEIR would not result in significant impacts.

The Proposed Project's consistency with the CCLUO and the County FEIR, and its incorporation of required mitigation measures and conditions of approval, provide another basis for the County to determine that the Proposed Project would not result in cumulatively considerable impacts. In all instances where the project has the potential to contribute to cumulatively considerable impacts to the environment (including the resource categories biological resources and cultural resources) mitigation measures have been imposed to reduce the potential effects to less than significant levels. As such, with incorporation of the mitigation measures imposed

throughout this document, the Proposed Project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant with mitigation.

c) Finding: The Proposed Project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. *Less than significant impact with mitigation incorporated.*

Discussion: The Proposed Project's potential 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, Energy, Geology and Soils, and Biological Cultural Resources, mitigation measures have been applied to reduce the impact to below a level of significance. With required implementation of mitigation measures identified in this document, construction and operation of the Proposed Project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings.

Mitigation Measures

Implement Mitigation Measures AQ-1, BIO-1, BIO-2, CUL-1, EN-1, and GEO-1.

3.2.22. MITIGATION MEASURES, MONITORING, AND REPORTING PROGRAM

The Department found that the project could result in potentially significant adverse impacts unless mitigation measures are required. A list of mitigation that addresses and mitigates potentially significant adverse impacts to a level of non-significance follows.

Mitigation measures were incorporated into conditions of project approval for the project. The following is a list of these measures and a verification form to ensure measures shall be met.

Mitigation Measures

AQ-1. During construction and operation, the following dust control measures shall be implemented:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered two times per day in areas of active construction.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All vehicle speeds on unpaved roads shall be limited to 15 mph, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
- All construction and operation equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications.

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments
During construction activity and project operations (ongoing)	Applicant	Humboldt County Planning and Building Department in consultation with North Coast Air Resources Control Board	Inspection Report		

BIO-1. Preconstruction surveys for American badgers (*Taxidea taxus)* shall be conducted prior to any ground disturbance or construction in the Proposed Project area. Surveys shall be conducted by a qualified biologist no more than one week prior to ground disturbance. If active badger dens are determined to be present, badger relocation to other onsite suitable habitat shall occur in coordination with CDFW.

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments

No more than one week prior to ground disturbing activities	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist will prepare report		

BIO-2. For all construction-related activities that take place within the nesting season, accepted as February 1 through August 31, a preconstruction nesting-bird survey for migratory birds, including Cooper's hawk (*Accipiter cooperii)* and Golden eagle (*Accipitridae chrysaetos),* shall be conducted by a qualified biologist no more than two weeks prior to construction within the Proposed Project area and a buffer zone determined by the qualified biologist, depending on the species nesting. The timing of surveys shall be determined in coordination with the CDFW. If active nests are found, a no-disturbance buffer zone shall be established, the size of which the biologist shall determine based on nest location and species. Within this buffer zone, no construction shall take place until the young have fledged or until the biologist determines that the nest is no longer active.

Implementation Time Frame	**Party Responsible for Implementation**	**Party Responsible for Verification**	**Form of Verification**	**Date of Verification**	**Verified/ Comments**
No more than two weeks prior to ground disturbing activities, if occurring between February 1st and August 31st	Qualified Biologist	Humboldt County Planning and Building Department in consultation with the California Department of Fish and Wildlife	Qualified Biologist will prepare report		

CUL-1. If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 50-foot buffer of the discovery location, per the Cultural Resources Investigation Report. Work near the archaeological find(s) shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

If human remains are discovered during project construction, work would be stopped at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected to overlie adjacent to human remains (Public Resources Code, Section 7050.5). The Humboldt County coroner would be contacted to determine if the cause of death must be investigated. If the coroner determines that the re- mains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner would contact the NAHC. The descendants or most likely descendants of the deceased would be contacted, and work would not resume until they have made a recommendation to the landowner or the

person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments
During construction activity and project operations	Applicant and, if necessary, a qualified professional archaeologist	Humboldt County Planning and Building Department in consultation Tribal governments, if necessary	If needed, the qualified professional archaeologist will prepare a Compliance Report.		

EN-1. Power supply shall be developed to support the scale of the Proposed Project during phased build out. Mixed-light cultivation shall not occur until required power sourced from a renewable source is brought to the site (e.g., installation of solar power or completion of a PG&E upgrade). Prior to the onset of power, proposed cultivation shall be outdoor cultivation cultivated using light-deprivation techniques in greenhouses. At no point in time shall onsite activities exceed existing site power capacity.

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments
During construction activity and project operations	Applicant	Humboldt County Planning and Building Department in consultation	Inspection report		

GEO-1. If paleontological resources are encountered during implementation of the Project, ground disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist shall be retained by the developer to make an evaluation of the find. If a significant paleontological resource(s) is discovered on the property, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.

Implementation Time Frame	Party Responsible for Implementation	Party Responsible for Verification	Form of Verification	Date of Verification	Verified/ Comments

During construction activity and project operations	Applicant and, if necessary, a qualified paleontologist	Humboldt County Planning and Building Department in consultation Tribal governments, if necessary	If needed, the qualified paleontologist will prepare a Compliance Report		

4.List of Preparers

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Project Description (December 2021)
Letter to Humboldt County: "Agricultural activities and relation to the Williamson Act" (December 18, 2021)

OurEvolution Engineering
Site Map (November 2021)
Road Evaluation (March 2021)
Septic Feasibility Study (August 2021)
Onsite Wastewater Treatment System Design (October 2021)

NorthPoint Consulting Group, Inc.
CalEEMod Analysis (April 2022)

Naiad Biological Consulting
Botanical Report of Special Status Native Plant Populations and Natural Communities (September 2021)
Biological Reconnaissance and Project Feasibility Assessment Report (September 2021)
Invasive Species Control Plan (September 2021)
Golden Eagle Survey Report – in conjunction with Erin Phillips (February 2022)

William Rich and Associates
Cultural Resources Investigation Report (May 2021)

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Appendix 1

Site Map (OurEvolution, November 2021)
Cultivation and Operations Plan (Cenci Consulting, December 2021)
Project Description (Cenci Consulting, December 2021)

Appendix 2

1. Botanical Report of Special Status Native Plant Populations and Natural Communities (Naiad Biological Consulting, September 2021)
2. Biological Reconnaissance and Project Feasibility Assessment Report (Naiad Biological Consulting, September 2021)
3. Invasive Species Control Plan (Naiad Biological Consulting, September 2021)
4. Golden Eagle Survey Report (Erin Phillips in conjunction with Naiad Biological Consulting, February 2022)
5. Road Evaluation (OurEvolution Engineering, March 2021)
6. Cultural Resources Investigation Report for Commercial Cannabis Cultivation at APN 104-232-005 and APN 105-101-011 in Petrolia, Humboldt County, California (William Rich and Associates, May 2021) – *listed as reference only, on file with Humboldt County Planning and Building Department*
7. Septic Feasibility Study (OurEvolution Engineering, August 2021)
8. Onsite Wastewater Treatment System Design (OurEvolution Engineering, October 2021)
9. Web Soil Survey Type Map (Natural Resources Conservation District, February 2021)

10. Letter to Humboldt County: "Agricultural activities and relation to Williamson Act" (Cenci Consulting, December 2021)

11. CalEEMod Analysis for Cisco Farms, Inc. Cannabis Project (NorthPoint Consulting, April 2022)

12. Notice of Applicability for Waste Discharge Requirements, Water Quality Order WQ 2019-0001-DWQ for WDID 1_12CC428193 (State Water Resources Control Board, May 2022)

13. Executed Streambed Alteration Agreement No. EPIMS-HUM-18009-R1C (California Department of Fish and Wildlife, June 2022)