PLANNING DIVISION

HUMBOLDT COUNTY PLANNING & BUILDING DEPARTMENT

3015 H STREET | EUREKA, CA 95501

Initial Study and Mitigated Negative Declaration

1.0 INTRODUCTION

1. **Project Title**

   Glendale Cannabis Facility. Conditional Use Permits and Special Permits: APN 516-111-064; Case Nos. CUP16-1096, CUP16-1127, SP16-868, SP16-870, SP16-871, and SP16-872; App Nos. 13312, 13319, 13328, 13339, 13346, and 13360.

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**: Caitlin Castellano (707) 445-7541; fax: (707) 268-3792

4. **Project Location**: The project site is located in Humboldt County in the Fieldbrook area, approximately 1.5 miles north west of Blue Lake, and access to the site is via Glendale Drive off State Highway 299. The project is on the property known as 1691 Glendale Drive. The project site is in Section 13, Township 6 North, Range 1 East, Humboldt Base and Meridian, and the location of the project site is depicted on the "Aerial Map", "Topo Map", and "Zoning Map" in **Appendix A (Figures 1-3).**

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

Applicant	**Owner**	**Agent**
Michael Brosgart Arielle Brosgart 1815 Seventh Street Berkeley, CA 94705	Same as Applicant	Brittney Crosby 1270 Myrtle Ave. #3 Eureka, CA 95501

6. **General Plan Designation**: Commercial Services (CS), Airport Federal Aviation Regulation Area (Transitional); Fieldbrook-Glendale Community Plan Area (CPA); Density: N/A; Slope Stability: Relatively Stable (0).

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

8. **Project Site Vicinity History:** The project site is comprised of Assessor's Parcel Number (APN): 516-111-064, which is approximately 1.77 acres in size. The site is approximately 1.5 miles northwest of Blue Lake and is situated approximately 0.25 mile east of the Exit 4 off-ramp for Highway 299.

   The project site is entirely paved, and no structures exist on the subject property. The project site was previously used by a mill for stacking clean lumber. The Framework Plan (General Plan Prior to 2017) designation that applied to the subject parcel on December 28, 2016, when the application was submitted, was Community Planning Area (CPA). The comprehensive update of the Humboldt County General Plan adopted on October 23, 2017 changed the designation of the subject parcel to Commercial Services (CS). The CS land use designation is intended for heavy commercial uses

and compatible light industrial uses not serving day to day needs. The current land use designation is compatible with the uses proposed in the cannabis application.

9. Description of the Project:

The project applicant is applying for two Conditional Use Permits and four Special Permits for a wholesale nursery, indoor cultivation, processing, volatile manufacturing, non-volatile extraction manufacturing, and distribution, in accordance with Humboldt County Code Section 314-55.4.8.7. The proposed project includes the construction of approximately 28,000 square feet (sf) of new buildings, 22,000 sf of driveway and parking areas, and 26,000 sf of new landscaping, which comprises nearly 100 percent of the project site. The project site development plan is depicted on **Figure 4**, Site Plan, provided in **Appendix A**.

The proposed project components are described in detail below.

Wholesale Nursery

The proposed nursery would be 6,710 sf and divided into the following spaces: seed/clone/mother room, vegetation room, weighing station area, quarantine area, 140 sf of office space, and a wholesale loading and unloading zone. The nursery would be located on the 1st floor in Building A as depicted on the site plan.

Below is a detailed outline of the nursery cultivation process:

1) Receive seeds from distribution facility or in-house;

2) Sprout seeds (approximately 1 to 3 weeks);

3) Transplant seedlings for vegetative growth;

4) Take cuttings for clones;

5) Transplant clones for vegetative growth;

6) Prepare for transport/transfer to distribution center.

Indoor Cultivation and Operations

The proposed indoor cultivation would cover 10,000 sf and would be divided into the following spaces: clone/mother room, vegetation room, bloom room, weighing station area, quarantine area, storage room, in-take room, and 140 sf of office space. The indoor cultivation facility would be located on the 2nd floor of Building A as depicted on the site plan.

Below is a detailed outline of the indoor cultivation process:

1) Receive clones from in-house nursery or licensed nursery cultivator;

2) Clones go to indoor cultivation facility to get planted into 3-5 gallon pots (clones veg for 10 days);

3) Clones are flipped into flowering cycle between 8 and 12 weeks (dependent on strain);

4) All cannabis is flushed using hydro-enzymatic techniques in the last 2 weeks of flowering cycle;

5) Plants are harvested and prepared for transfer to the processing facility.

Processing Operations

The proposed project would include 9,000 sf of processing, which would be divided into three locations. As depicted on the site plan, Processing Center #1 includes 4,400 sf of processing located in Building C and would provide 140 sf of office space to be used to administer each processing division. The remaining 4,600 sf of processing would occur within Processing Centers #2 and #3 in Building A: Processing Center #2 includes 3,000 sf on the 1st floor and Processing Center #3 includes 1,600 sf on the 2nd floor.

Processing Center #1 would receive materials from two sources:

1. Distribution center: Fresh and dried materials would be transferred to processing where the materials (now known as 'in-process materials') would be further processed by means other than extraction or go directly for packaging and labeling. Then, the 'in-process' materials would be transferred back to the distribution facility as finished products.

2. Manufacturing facility: 'In process' materials would transfer out of the volatile or non-volatile manufacturing facilities to processing where the 'in-process' materials would be further processed by means other than extraction or go directly for packaging and labeling. Then, the 'in-process' materials would be transferred back to the distribution facility as finished products.

Processing Center #3 would receive materials from the indoor cultivation facility also located on the 2nd floor of Building A. Once harvested, the "fresh" materials would be inspected and transferred to Processing Center #2 or #3, varying by harvest cycle. Once in processing, "fresh" materials would be dried, bucked down, trimmed, cured, and then packaged for transfer to the distribution facility located in Building C. Drying time varies between 5 to 10 days, and the curing process varies between 5 to 20 days.

Volatile Manufacturing Facility

The volatile manufacturing facility would be 3,120 sf and divided into the following spaces: weighing station area, quarantine area, and 140 sf of office space. The volatile manufacturing facility would be located in Building B as depicted on the site plan.

Fresh and dried materials would be securely transferred from the distribution center to the volatile manufacturing facility where the materials are then identified as 'in-process materials' for inventory as well as the Track and Trace program.

The process for transferring the materials to the volatile manufacturing facility would include inspection of the materials by authorized personnel in the distribution center's secure in-take room. Inspections include but are not limited to: visual inspection, physical inspection, cross reference of materials with electronic shipping manifest, and acception or rejection of materials. If accepted samples are taken and released for transfer, then 'in-process' materials would then be securely transferred from the distribution center in Building C to the volatile manufacturing facility in Building B.

'In-process' materials would then be checked into volatile manufacturing facility and properly stored (if not immediately processed). 'In-process' material extractions would be conducted in a closed-loop system that is commercially manufactured and bears a permanently affixed and visible serial number.

Upon completion of volatile extractions, the 'in-process' material would be either transferred or stored. If further manufacturing is needed, the materials would be transferred to the facility on the 2nd floor of Building C. If no further processing is required, then materials would be transferred to the facility on the 1st floor of Building C for packaging, labeling, and preparation for transfer to distribution center.

Non-Volatile Extraction Manufacturing Facility

The proposed non-volatile extraction manufacturing facility would be 4,400 sf and located in Building C. The facility would be specially built to ensure the safety of the surrounding environment and facility personnel. Access to Building C would be gained through a secured entrance for authorized personnel with a laminated ID badge only.

Fresh and dried materials would be securely transferred from the distribution center to the non-volatile extraction manufacturing facility where the materials would be then identified as 'in-process materials' for inventory as well as the Track and Trace Program.

The process for transferring the materials to the non-volatile extraction manufacturing facility would include inspection of the materials by authorized personnel in the distribution center's secure in-take room. Inspections include but are not limited to: visual inspection, physical inspection, cross reference of materials with electronic shipping manifest, and acception or rejection of materials. If accepted samples are taken and released for transfer, then 'in-process' materials would then be securely transferred from the distribution center to the non-volatile extraction manufacturing facility.

'In-process' materials would then be checked into non-volatile extractions and properly stored (if not immediately processed). In-process material extractions would be conducted using either mechanical or solvent-less extractions or chemical extractions with non-volatile solvents.

Upon completion of non-volatile extractions, the 'in-process' material would be either transferred or stored. If further manufacturing is needed, the materials would be transferred to the facility on the 2nd floor of Building C. If no further processing is required, then materials would be transferred to the facility on the 1st floor of Building C for packaging, labeling, and preparation for transfer to distribution center.

Distribution Center

The proposed distribution center would be 2,226 sf and have designated and secured areas for the in-take of fresh and dried materials, as well as storage for fresh and dried materials and finished products. The distribution center would be located in Building C as depicted on the site plan.

Activities in the distribution center would involve receiving cannabis products through the in-take area. The in-take process would involve cross reference to shipping manifest, inspection, sample for testing, and tagging by authorized personnel. Tagging would be completed in compliance with the Humboldt County Track and Trace Program and monitored through real time radio-frequency identification (RFID) monitoring technology. Tagged fresh and raw materials would then be moved into storage until released for distribution to a licensed processing/manufacturing facility to be converted into a finished product. Finished products would be stored appropriately until released for shipping to a dispensary.

The Glendale Cannabis Facility will adhere to all Local and State Laws and Regulations of the Track and Trace Program in place for each project component, from cultivation to sale.

Water Use and Storage

The projected water use is based on a) personnel usage for restrooms, hand washing sinks, and water fountains, b) sanitary stations for cleaning equipment, utensils, and storage/transfer containers, and c) cannabis activity water use for all proposed project operations. The proposed project would use approximately 42,340 gallons of water per month.

The water for the project site is provided by Fieldbrook-Glendale Community Services District via a 6-inch water main. Water used for indoor cultivation is stored in two 1,000-gallon holding tanks for dechlorinization and secondary reverse osmosis treatment.

An additional 8,400 gallons of water would be needed per month for landscape irrigation; however, the project applicant proposes to reuse clean spent cultivation irrigation water for landscape irrigation. Waste water from organic indoor cultivation would be drained into a 1,000-gallon holding tank and used for landscape irrigation. Waste water collected from floor drains in cleaning areas would be drained into a 1,000-gallon holding tank and sent to the on-site water treatment system before reuse or transfer to the sewer system.

Employees and Schedule of Operations

At peak operation, the estimated maximum number of staff on-site would be 22 employees.

The following table summarizes the square footage and staffing for each of the proposed uses:

Table 1. Summary of Staffing for Proposed Uses

Proposed Use	sf	Employees
Indoor Cultivation	10,000	3
Volatile Manufacturing Facility	3,120	3
Non-volatile Extraction Manufacturing Facility	4,400	4
Distribution Center	2,226	3
Processing Facility	9,000	5
Wholesale Nursery	6,710	4
Total	**35,456**	**22**

Hours of operation are Monday through Saturday, 7:00 am to 7:00 pm.

Access/Parking

The project site is currently accessed directly off Glendale Drive via an existing driveway on the adjacent parcel to the west (APN 516-111-066). In accordance with the Department of Public Works' standards, the project applicant would be required to construct two 24-foot-wide commercial driveways that meet County Urban Driveway No. 1 standards.

The project would provide twenty-one parking spaces along the eastern side of buildings B and C (including two ADA-compliant accessible spaces), six parking spaces along the western side of buildings B and C, and fifteen parking spaces between buildings A and B. Total off-street parking provided would be 42 spaces.

Storm water Management

The project site is flat and completely paved. Approximately 33 percent of the project site would be landscaped with designated composting areas, trees, grass, and storm water capture basins. The roofing of the proposed buildings would include gutters and channels designed to disperse rain run off into the proposed storm water capture basins to slow down and naturally filter runoff.

Watershed and Habitat Protection

There are no naturally-occurring aquatic resources, streamside management areas (SMAs), or sensitive habitat areas on or adjacent to the project site. Hall Creek is approximately 700 feet south of the project site with light industrial and vacant lands between the project site and the SMA for the creek. The property is in the Mill Creek-Mad River Hydrologic Unit (HUC-12) and the Mad River

Planning Watershed. The perimeter of the project site would be fully fenced to discourage wildlife from entering the project site.

On-site Water Treatment Facility

The proposed project includes a supplemental water treatment system for personnel and industry waste water used by cannabis processing and manufacturing activities on site. The proposed facility would be approximately 1,066 sf and would be situated in the southwest corner of Building C. The proposed onsite water treatment system would treat approximately 800 gallons of waste water per hour and is designed to remove hydrocarbons and solids so that water may be reused for landscaping irrigation or transfered to the sewer system. If approval for this facility is not obtained from the Regional Water Board, or applicable regulatory agency, then wastewater will be taken off-site to a licensed disposal facility approved by the Division of Environmental Health.

Hazardous Materials and Waste

The proposed cultivation would utilize a hydroponic soil-less growing medium. The medium would consist primarily of cococoir (coconut husk), perlite, and liquid and top dressed amendments. Top dressed amendments include liquid teas from locally sourced bacteria with kelp, molasses, and teas added. Adding teas to the soil mixture makes the medium naturally act as fertilizer and pesticide.

All pesticides, fertilizers and/or soil amendments would be stored on site separately from Hazardous/Toxic materials, each in a properly constructed and maintained storage room that would protect personnel and the environment.

The proposed project includes volatile extraction operations. Solvents used in extraction would include food grade ethanol, hexane, carbon dioxide, and butane. All chemical extractions using volatile solvents would be conducted in a closed loop extraction system that was commercially manufactured for that purpose.

Odors

Ventilation and control equipment would be installed to control dust, odor, and vapors that would prevent or reduce cross contact or contamination of cannabis produces, cannabis product packaging materials, and cannabis product contact surfaces. Additionally, rubbish disposal would be conveyed, stored, and/or disposed of to minimize the development of odor, deflect attraction of pests, and protect against cross contamination of any cannabis products.

Electrical Service

Electricity on the property is supplied by Pacific Gas and Electric (PGE). The project applicant proposes to install solar panels on all available roof top space for each proposed building. The exact square footage is currently unknown but will be determined when final building plans have been developed. If the renewable energy from the solar panels does not provide enough energy to cover the entirety of the proposed project's energy usage, the project applicant will set up an account with a carbon offset company (like TerraPass) and purchase the remaining amount needed.

10. Surrounding Land Uses and Setting

The project site is in a mixed use area in the community of Glendale in western Humboldt County, approximately 1.5 miles northwest of Blue Lake. Properties to the north and east of the project site are large-lot, single-family residential, and lands south and west of the project site are in commercial/industrial uses. Elevations range from approximately 98 feet above mean sea level (amsl) to approximately 105 feet amsl. The project site's relative slope stability is rated 0 (relatively stable).

The Humboldt County General Plan, adopted October 23, 2017 (2017 General Plan), designates the project area as "Commercial Services" (CS). The CS designation provides for heavy commercial uses and compatible light industrial uses not serving day to day needs. Full range of urbans services required (i.e., good access, public sewer and water, electricity, fire protection, and waste disposal).

The parcel is zoned as "Unclassified" (U), and principal permitted uses of U include one-family dwelling, general agriculture, rooming and boarding of not more than two (2) persons, and manufactured home. All other uses not specified in principal permitted uses may be permitted upon the granting of a Use Permit.

The project site and surrounding areas are not located in any hazardous areas including the 100-year flood zone mapped by the Federal Emergency Management Agency (FEMA) or Alquist-Priolo Fault Zone. No schools, school bus stops, places of worship, public parks, or tribal cultural resources are located within six hundred (600) feet of the project site.

11. Other Public Agencies whose Approval is Required: (e.g., permits, financing approval, or participation agreement.)

The proposed cultiavtion, nursery and processing facility will require a license is required from California Department of Food and Agriculture (CDFA) CalCannabis Cultivation Licensing. The proposed volatile extraction manufacturing facility and non-volatile extraction manufacturing facility will require a license from the California Department of Public Health Manufactured Cannabis Safety Branch (MBC).The proposed distribution center will require a license from the Bureau of Cannabis Control California (Bureau). The applicant will need written verification from California Department of Fish and Wildlife (CDFW) that a lake and Streambed Alteration Agreement is not needed.

Locally, permits from the Humboldt County Building Division are required for all proposed buildings. The project applicant must also obtain an encroachment permit from the Humboldt County Department of Public Works for the construction of a portland cement concrete (PCC) Caltrans Type A2-6 curb and gutter with a curb adjacent a 6-foot-wide sidewalk along Glendale Drive fronting the subject property (approximately 207 feet). Due to the need for curb grade and line for this project, a sidewalk survey will be required by a licensed land surveyor or registered civil engineer for approval by the Department of Public Works prior to the start of any concrete form work. The applicant shall also construct two commercial driveways that meet County Urban Driveway No. 1 standards.

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

3.0 DETERMINATION: (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

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

☐ I find that although the proposed project COULD have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

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

☐ I find that although the proposed project COULD have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

Cliff Johnson Humboldt County Planning & Building Department

Printed name For

4.0 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 as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from 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 sources that have been used and individuals contacted should be cited in the discussion.

8) The explanation of each issue identifies:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significant.

5.0 CHECKLIST, DISCUSSION OF CHECKLIST RESPONSES, PROPOSED MITIGATION

5.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Setting:

Humboldt County is an area of diverse visual character. The project site is in a mixed use area in the community of Glendale in the western portion of the County. The surrounding project area features low density residential, commercial, and light industrial uses. Properties to the north and east of the project site are large-lot, single-family residential uses, and lands south and west of the project site are in commercial/industrial uses.

The proposed project is consistent with the surrounding area. The project site is entirely paved, and no structures exist at the subject property as the site was formerly used by a mill for stacking clean lumber.

The project site is located on Glendale Drive, which is accessed directly from Highway 299. Part 3, Chapter 10.7 of the 2017 General Plan states that, although there are no "officially designated" scenic highways in Humboldt County, State Route 299 from from Arcata to Willow Creek could be eligible for official designation. The 2017 General Plan defines a scenic highway as one that, in addition to its transportation function, provides opportunities for the enjoyment of natural or scenic resources. The 2017 General Plan states that "[s]cenic highways direct views to areas of exceptional beauty, natural resources or landmarks, or historic or cultural interest."[1] The property is not visible from SR 299.

[1] Humboldt County General Plan, page 10-46.

Analysis:

a) Finding: The project will not have a substantial adverse effect on a scenic vista. *No impact.*

Discussion: A scenic vista is defined as a viewpoint that provides expansive views of a highly-valued landscape (such as an area with remarkable scenery or a resource that is indigenous to the area) for the benefit of the general public. There are no features on the project site commonly associated with scenic vistas (peaks, overlooks, ridgelines, etc.). There are no designated scenic vistas in the area. No impact would occur.

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: According to the California Scenic Highway Mapping System[2], there are no designated state scenic highways in the project vicinity. SR 299 is listed as an "Eligible State Scenic Highway," however, the project site does not contain any landmark trees, rock outcroppings, or buildings of historical significance and is not visible from the highway. Therefore, no impact would occur.

c) Finding: The project, located in an urbanized area, would not conflict with applicable zoning and other regulations governing scenic quality. *Less than significant impact.*

Discussion: Sensitive viewer groups typically include residents, recreationists, and motorists. Properties adjacent to the project site feature low density residential and light industrial uses. The proposed project would construct one- and two-story buildings on a property zoned "Unclassified" (U). Principal permitted uses of U include one-family dwelling, general agriculture, rooming and boarding of not more than two (2) persons, and manufactured home. The proposed buildings would be consistent with existing commercial/industrial uses on the properties to the south and west of the project site. The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The project would install 26,000 square feet of landscaping, which would constitute approximately 33 percent of the site. While the proposed project would result in a change in visual character on-site, the proposed land use is consistent with the overall characteristic of the area. Potential impacts would be less than significant, and no mitigation would be necessary.

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: Any new lighting associated with the development of the proposed project would be subject to Humboldt County standard practices regarding night lighting that would be made a condition of approval of the Conditional Use Permit and Special Permit. The proposed project components would comply with design standards outlined in the Humboldt County Code. The exterior of the proposed buildings would not be made of reflective materials that would introduce a new source of glare, and existing County standards would limit light spillover and intensity. Therefore, impacts would be a less than significant impact, and no mitigation is necessary.

Findings:

a) The project will not have a substantial adverse effect on a scenic vista: **No impact.**

b) 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.**

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[2] http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/; accessed December 11, 2018

c) The project, located in an urbanized area, would not conflict with applicable zoning and other regulations governing scenic quality: **Less than significant impact.**

d) 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**.

5.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less Than Significant 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:

As previously mentioned, the project site is designated "Commercial Services" (CS) in the 2017 Humboldt County General Plan and is zoned Unclassified (U). The project site is fully paved and is not used for agriculture.

The Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency has not yet mapped farmland in Humboldt County[3]. According to the Humboldt County Web GIS mapping, the project site does not contain prime agricultural soils.

[3] https://maps.conservation.ca.gov/DLRP/CIFF/; accessed October 10, 2018

As a means of agricultural land preservation, the State Legislature enacted the California Land Conservation Act of 1965 commonly called the "Williamson Act." Under the Act, property owners may enter into contracts with the County to keep their lands in agricultural production for a minimum of 10 years, in exchange for property tax relief. Lands covered by Williamson Act contracts are assessed based on their agricultural value instead of their potential market value under non-agricultural uses and are known as "Agricultural Preserves." According to Humboldt County Web GIS mapping, there is no Williamson Act contract for the project site.

The Z'berg-Warren-Keene-Collier Forest Taxation Reform Action 1979 requires counties to provide for the zoning of land used for growing and harvesting timber as timberland preserve. The project site is not zoned for timber harvest, and there are no commercial timber tree species on the project site.

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: As previously mentioned, Humboldt County is not included in the FMMP and prime agricultural soils have not been identified in the project site. Additionally, the proposed project site is completely paved. Therefore, no impact would occur.

b) Finding: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. *No impact*.

Discussion: The project site is zoned Unclassified (U). According to Humboldt County Web GIS mapping, there is no Williamson Act contract applicable to the project site. The proposed project would not conflict with existing zoning for agricultural use or a Williamson Act Contract. No impact would occur.

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: There is no forest land or timberland on the project site. No impact would occur.

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

Discussion: There is no forest land or timberland on the project site. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. 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 project site is surrounded by industrial/commercial development and low density residential. Therefore, the project would not lead to the conversion of farmland to non-agricultural use or forest land to non-forest use in the surrounding project area. No impact would occur.

Findings:

a) 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.**

b) The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract: **No impact**.

c) 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**.

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

e) 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.**

5.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	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 project site is 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. Average annual rainfall in the area is approximately 50 to 60 inches with the majority falling between October and April. Predominant wind direction is from the northwest during summer months and from the southwest during winter storm events.

Project activities are subject to the authority of the North Coast Unified Air Quality Management District (NCUAQMD) and the California Air Resources Board (CARB). 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 potentially significant air quality impact on the environment, agencies often apply their local air district's thresholds of significance to project impacts 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)[4].

Sensitive receptors near the project site primarily include low density residences; the nearest of which are approximately 10 feet north of the property line and 30 feet east of the property line.

Analysis:

a) Finding: The project will not conflict with or obstruct implementation of the applicable air quality plan. *No impact*.

[4] www.ncuaqmd.org ; accessed December 11, 2018

Discussion: A potentially significant impact to air quality would occur if the project would conflict with or obstruct the implementation of the applicable air quality management or attainment plan. Therefore, it is necessary to assess the project's consistency with these plans.

The California Clean Air Act (CCAA) requires the NCUAQMD to 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. This report includes a description of the planning area (North Coast Unified Air District), an 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: (1) transportation, (2) land use and (3) burning. Control measures for these areas are included in the Attainment Plan. The project design incorporates control measures identified in the PM_{10} Attainment Plan appropriate to this type of project, such as:

1) The project would be located in the Fieldbrook area. By locating the project on a site in an urban/developed area, and combining cultivation, processing, and manufacturing activities on the same property, vehicle miles traveled would be reduced and would result in less associated vehicular exhaust emissions generated when compared with cannabis operations located in the more rural areas of Humboldt County.
2) The site is accessed by paved roads which would result in less fine particulate matter (PM_{10}) generated when compared with traffic on unpaved rural roads.
3) The project involves a commercial cannabis cultivation, processing, manufacturing, and distribution operation. The Humboldt County General Plan designates the project area as "Commercial Services" (CS). The CS designation provides for heavy commercial uses and compatible light industrial uses not serving day to day needs. Particulate emissions from the proposed project would be appropriate for its General Plan Designation.
4) The proposed project's cannabis operation does not include any burning and would not employ wood stoves for heat.

The proposed project would not obstruct implementation of the NCUAQMD Attainment Plan for PM_{10}. No impacts would occur.

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*.

Discussion: By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards in a region. Instead, a project's individual criteria pollutant and precursor emissions contribute to existing cumulatively significant adverse air quality impacts in the region.

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})[5].

The NCUAQMD has advised that, generally, an activity that individually complies with the State and local standards for air quality emissions will not result in a cumulatively considerable

[5] http://www.ncuaqmd.org/index.php?page=northcoast.airbasin ; accessed Deceber 11, 2018

increase in the countywide PM_{10} air quality violation. In general, construction activities that last for less than one year, and use standard quantities and types of construction equipment, are not required to be quantified and are assumed to have a less than significant impact[6]. The project will comply with all NCUAQMD regulations and rules, and the construction would last less than one year. Therefore, 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.

Air quality standards within the NCUAQMD are set for emissions that may include, but are not limited to: visible emissions, particulate matter, and fugitive dust. Pursuant to Air Quality Regulation 1, Chapter IV, Rule 400 – *General Limitations*, a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Visible emissions include emissions that are visible to the naked eye, such as smoke from a fire. The proposed project involves the construction and operation of a commercial cannabis cultivation, processing, manufacturing, and distribution operation. No activities resulting in visible emissions, including intentional fire/burn, would be associated with the project.

Air quality impacts can be divided into two phases for a project: construction and operation.

Mobile sources of emissions include equipment used during short-term construction and vehicle/truck traffic and light-duty equipment from long-term operation. According to NCUAQMD Rule 102, the Air District does not currently require permits for the operation of heavy equipment used for construction (except pavement burners) or agricultural operations[7]. There are no "target" air quality standards/limits in this area; however, heavy equipment is generally subject to off-road equipment emission standards from the California Air Resources Board (CARB) and exceeding those standards may constitute a "nuisance" condition and can be mitigated by proper equipment maintenance.

The project proposes to construct three buildings totaling 28,000 sf, 22,000 sf of driveway and parking areas, and 26,000 sf of new landscaping, which comprises nearly 100 percent of the project site. The proposed project would be constructed in less than a year. Emissions from construction equipment would occur for a limited period and the equipment would be maintained to meet current emissions standards as required by the California Air Resources Board (CARB) and the NCUAQMD. As described in Section 5.16 – *Transportation/Traffic*, vehicle trips generated during operation of the project would include daily round trips for each of the 22 staff, plus round trips by vendors, distributors, and processing deliveries. The operations plan has estimated that, on average, approximately 60 vehicle trips would occur per day. While the 44 trips per day would occur regularly, 22 in/22 out for workers, the remaining 16 vehicle trips would be distributed throughout the facility's operating hours (Monday through Saturday, 7:00 a.m. to 7:00 p.m.).

Stationary sources of emissions from the project would include the heating, ventilation, and air conditioning (HVAC) and filter systems for air conditioning, odor reduction, manufacturing, extraction, and heating. According to NCUAQMD Rule 102, the Air District does not require permits for HVAC systems[8].

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[6] http://www.ncuaqmd.org/index.php?page=aqplanning.ceqa ; accessed May 8, 2018
[7] http://www.ncuaqmd.org/index.php?page=rules.regulations ; accessed December 11, 2018
[8] http://www.ncuaqmd.org/index.php?page=aqplanning.ceqa ; accessed December 11, 2018

The project has the potential to generate particulate matter (dust) during construction activities. All activities at the project site are required to meet NCUAQMD Air Quality standards, including Regulation 1, which prohibits nuisance dust generation and is enforceable by the District (NCUAQMD, 2015). Rule 104 states that:

1. 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

2. Reasonable precautions 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. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.

    c. Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.

    d. 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.

    e. The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.

    f. The paving of roadways and their maintenance in a clean condition.

    g. 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.

The proposed project would comply with NCUAQMD regulations, thus potential impacts would be minimal.

As a condition of project approval, two 24-foot-wide commercial driveways would be constructed to access the project site from Glendale Drive; therefore, vehicles accessing the project site during construction and operation would not generate dust. Plants produced in the proposed cultivation areas would be processed on-site, and extraction and manufacturing would also occur on-site, eliminating the need for transportation of material to off-site facilities.

Carbon monoxide (CO) hot spots are typically associated with idling vehicles at extremely busy intersections (i.e. intersection with an excess of 100,000 vehicle trips per day). There are no projected CO hot spot intersections in Humboldt County or in the general project area which exceed the 100,000 vehicles per day threshold typically associated with CO hot spots. In addition, the North Coast Air Basin is currently in attainment for carbon monoxide (CO). As such, project related vehicular emissions would not create a hot spot nor contribute to an existing one.

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.

c) Finding: The project will 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. Sensitive receptors near the project site primarily include low density residences the nearest of which are approximately 10 feet north of the property line and 30 feet east of the property line.

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. In addition, the proposed project would not create a carbon monoxide (CO) hot spot.

Cultivation operations involving application of dry or wet chemicals such as pesticides would be conducted inside the proposed buildings and therefore not susceptible to wind dispersal to sensitive receptors. Extraction and manufacturing operations would take place inside buildings and would employ commercial equipment designed for cannabis extraction and manufacturing that use closed-loop processes for volatile solvents. Extraction and manufacturing equipment would be installed according to manufacturers' specifications for ventilation and filtration of exhaust. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant, and no mitigation would be necessary.

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

Discussion: During long-term operation of the project, there is potential to impact air quality due to odors that would be generated by the proposed cultivation, processing, extraction, and manufacturing activities. Sensitive receptors near the project site are limited to two residences. Odors during the construction phase would conist primarily of diesel truck fumes; however, these impacts would be temporary and less than significant. During project operation, the project applicant would be required to install odor control filtration systems on the processing, extraction, manufacturing, and cultivation buildings. The proposed project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. Impacts would be less than significant, and no mitigation would be necessary.

Findings:

a) The project will not conflict with or obstruct implementation of the applicable air quality plan: **No impact.**

b) The project will 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.**

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

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

5.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	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 U.S. 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 Wildlife or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Setting:

The project site is fully paved and was previously used by a mill for stacking clean lumber. Properties to the north and east of the project site are large-lot, single-family residential uses, and lands south and west of the project site are in commercial/industrial uses. Elevations range from approximately 98 feet amsl to approximately 105 feet amsl. The project site is flat and has a relative slope stability rating of 0 (relatively stable). The project site does not support any trees, and no structures exist at the subject property. Additionally, there are no streams, wetlands, or natural water bodies on the site.

Regionally Occurring Special Status Species:

The following lists of special-status species known to occur and/or having the potential to occur in the project region were reviewed (**Appendix B**): USFWS list of federally protected species with the potential to be affected by the project; California Native Plant Society (CNPS) list of special-status plants with reported occurrences on the "Arcata North, CA" quad; California Natural Diversity Database (CNDDB)

list of special-status species reported within a one-mile radius. The CNDDB database is maintained by CDFW. The locations of CNDDB records of special-status species relative to the project site are shown on the "CDFW Resource Maps" in **Appendix A, Figure 5**.

Special Status Plants

The USFWS reported three species listed as endangered and having potential to be affected by the project: beach layia (*Layia carnosa*), Menzies' wallflower (*Erysimum menziesii*), and western lily (*Lilium occidentale*). Beach layia and Menzies' wallflower grow on sandy coastal dunes and bluffs; western lily grows in bogs and coastal scrub where soils are heavy and poorly drained. The project site does not contain suitable habitat for any of these species, and there is no potential for them to occur in the site.

The CNPS and CNDDB database queries returned three species with California Rare Plant Rank (CRPR) of 1B (rare, threatened, or endangered in California and elsewhere) or 2B (rare, threatened, or endangered in California but more common elsewhere). Of these three species, two have been previously discussed: beach layia (*Layia carnosa*) and western lily (*Lilium occidentale*). The remaining species, cylindrical trichodon (*Trichodon cylindricus*), is found in broadleafed upland forests, meadows and seeps, and upper montane coniferous forests. None of these habitats are found on the project site, and the potential for this species to occur is minimal.

Special Status Animals

The CNDDB list of special-status species and USFWS list of federally protected species with potential to be affected by the project identified three species of fish; two species of amphibian; and six species of bird. Seven of these species have been reported within one mile of the project site: coastal cutthroat trout (*Oncorhynchus clarkii clarkii*), eulachon (*Thaleichthys pacificus*), foothill yellow-legged frog (*Rana boylii*), northern red-legged frog (*Rana aurora*), great blue heron (*Ardea herodias*), northern spotted owl (*Strix occidentalis caurina*), and bank swallow (*Riparia riparia*).

Foothill yellow-legged frog, northern red-legged frog, eulachon, and coast cutthroat trout occurrences were reported in Hall Creek; bank swallow occurrence was reported near the Mad River, northwest of the project site; an abandoned northern spotted owl activity center was reported north of Glendale; and great blue heron was reported south of State Route 299.

The project site includes no suitable habitat for the special-status fish species reported in the database queries or for foothill yellow-legged frog; these species inhabit rivers and streams. The special-status bird species reported in the database queries include marbled murrelet (*Brachyramphus marmoratus*) and northern spotted owl (*Strix occidentalis caurina*), which inhabit old-growth and similar forests, yellow-billed cuckoo (*Coccyzus americanus*), which inhabits dense riparian scrub and woodland, and western snowy plover (*Charadrius alexandrinus nivosus*), which nests on sandy beaches, coastal playas, and alkali flats. None of these habitats are present in the project site. Bank swallows nest in large colonies on sandy, vertical cut-banks along rivers; great blue heron nest in large colonies in trees 20 to 60 feet above ground, generally near water. There is no suitable habitat for these species in the project site.

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 the California Department of Fish and Game or U.S. Fish and Wildlife Service. *Less than significant impact.*

Discussion: There is low potential for several regionally-occurring special-status plant and animal species to occur in the project site and be affected by the proposed project. Queries of the USFWS, CNDDB, and CNPS databases identified three special-status plant species and eleven

special-status animal species known to occur or have occurred in the project vicinity. However, there is no suitable habitat on the project site, as it is entirely paved and contains no rivers, streams, or trees. Additionally, the perimeter of the project site would be fully fenced to discourage wildlife from entering the project site.

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, and regulations or by the CDFW or USFWS. *Less than significant impact.*

Discussion: The project site includes no sensitive habitats. The proposed project would not result in the removal of riparian habitat, nor would it result in direct or indirect impacts to aquatic habitats. The site is completely paved, and there are no streams, wetlands, or natural water bodies on the site; Hall Creek is approximately 700 feet south of the project site with light industrial and vacant lands between the project site and SMA for the creek.

There are no wells on the property. The water source for the project site is provided by Fieldbrook-Glendale Community Services District via a 6-inch water main. Water used for indoor cultivation is stored in two 1,000-gallon holding tanks for dechlorinization and secondary reverse osmosis treatment. Therefore, potential impacts to sensitive communities would be less than significant.

c) Finding: The project will not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. *No impact*.

Discussion: The site is completely paved, and there are no streams, wetlands, or natural water bodies on the site. Therefore, there are no federally protected wetlands in the project site.

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. *No impact*.

Discussion: The project site is completely paved and fenced; there is no aquatic habitat on the property suitable for passage by fish, and it does not provide areas for wildlife movement. The project site is in a developed, mixed use area in the community of Glendale in western Humboldt County, approximately 1.5 miles northwest of Blue Lake. Properties to the north and east of the project site are large-lot, single-family residential uses, and lands south and west of the project site are in commercial/industrial uses. Except for the properties in the communities of Blue Lake, Glendale and Essex, nearby lands are undeveloped agricultural and timber production zones and provide extensive areas for wildlife movement.

The project site does not currently function as a wildlife movement corridor; 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.

e) Finding: The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *No impact*.

Discussion: In addition to the general biological resources policies in the 2017 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. The SMA extends 50-100 feet to both sides of any stream, depending on the location (inside or outside of an urban area) and the nature of the stream (perennial or seasonal), and may

extend up to 200 feet to include riparian vegetation. There are no streams or trees on the project site.

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 project site is not located within the boundaries of a Habitat Conservation Plan (HCP)(USFWS, 2018). Habitat Conservation Plans 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); and 3) Regli Estates. These HCPs primarily apply to forest lands in the County.

According to the CDFW website, the project site is not located in the boundaries of a Natural Community Conservation Plan. 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 Habitat Conservation Plans.

The project would not conflict with any local policies or ordinances protecting biological resources or conflict with the provisions of an adopted HCP, Natural Community Plan, or other approved plan applicable to the project area.

Findings:

a) 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 the California Department of Fish and Game or U.S. Fish and Wildlife Service: **Less than significant impact.**

b) 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 California Department of Fish and Game or U.S. Fish and Wildlife Service: **Less than significant impact.**

c) The project will not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means: **No impact.**

d) 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: **No impact.**

e) The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance: **No impact.**

f) The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **No Impact.**

5.5 CULTURAL RESOURCES

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Setting:

The project area is within the ethnographic territory of the Bear River, Blue Lake Rancheria, and Wiyot Tribes. As part of the commercial cannabis application review process, representatives of the Bear River Band of the Rohnerville Rancheria and Wiyot Tribe were sent referrals requesting comments on the proposed project on March 1, 2018. A referral was also sent to representatives of the Blue Lake Rancheria on August 21, 2018. A referral requesting comments on the proposed project was sent to the Northwest Information Center (NWIC) on March 1, 2018.

NWIC responded on March 16, 2018, stating that search of records revealed no previous cultural investigations have been conducted at the project site. On February 6, 2019 the Tribal Historic Preservation Officer (THPO) of Blue Lake Rancheria and the THPO of the Wiyot Tribe responded, recommending no further cultural resources investigations due to the extensive ground disturbance from prior industrial development; however, they did request inadvertent discovery protocol be incorporated into the CEQA document. The Bear River Band of the Rohnerville Rancheria has not yet issued a response.

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: Although no historic-age resources were found during the records search or tribal coordination, there is always the possibility that previously unknown historic resources exist below ground surface. There is the potential for subsurface excavation activities to uncover previously unknown subsurface archaeological resources. Implementation of standard cultural resource construction mitigation regarding inadvertent discovery would reduce potential impacts to a level of 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 with mitigation incorporated*.

Discussion: Due to the extensive ground disturbance from prior industrial development, it is unlikely that the site would contain archaeological resources and the THPO of Blue Lake Rancheria and the THPO of the Wiyot Tribe have not expressed concerns. However, there is the potential for subsurface excavation activities to uncover previously unknown subsurface

archaeological resources. Implementation of standard cultural resource construction mitigation regarding inadvertent discoveries would reduce potential impacts to a level of less than significant.

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

As indicated in the responses from NWIC, the Wiyot Tribe and the Blue Lake Rancheria, there are no known human remains on the project site. Implementation of standard cultural resource construction mitigation regarding inadvertent discoveries would reduce potential impacts to a level of less than significant.

Mitigation:

CUL-1 Inadvertent Discoveries of Cultural Resources and Human Remains.

If cultural or Tribal Cultural resources, such as lithic materials or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, as well as the appropriate Tribal Historic Preservation Officer(s), has evaluated the materials and offered recommendation for further action, and in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials which could be encountered include: obsidian and chert debitage or formal tools, grinding implements (e.g., pestles, handstones, bowl mortars, slabs), locally darkened midden, deposits of shell, faunal remains, and human burials. Historic materials which could be encountered include: ceramics/pottery, glass, metals, can and bottle dumps, cut bone, barbed wire fences, building pads, structures, trails/roads, etc.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in State CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

If human remains are discovered during project construction, work would stop 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 remains 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.

Findings:

a) 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.**

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

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

5.6 ENERGY

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

Setting:

In 2003, the California Public Utilities Commission, the California Energy Commission, and the California Power Authority adopted an Energy Action Plan to meet California's electricity and natural gas needs. The plan was revised and updated in 2005 and again in 2008. The primary objectives of the plan are to invest in energy efficiency, renewable resources, and a clean conventional electricity supply. Senate Bill (SB) 100, passed in 2018, sets in place a goal for to produce 50 percent renewable energy by 2026, 60 percent renewable energy by 2030, and 100 percent renewable energy by 2045 within the California electricity grid. As of 2017, renewable energy sources, including biomass, geothermal, hydrologic, solar, and wind, accounted for 29 percent of California's power mix (CEC 2019).

Analysis:

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

Discussion: The proposed project will be constructed according to modern building code standards. The cultivation, processing, manufacturing, and distribution of cannabis products will operate according to industry standards. Modern technology and techniques allow for more efficient concentration of cannabis extracts. Indoor cultivation requires significant electrical inputs, but it is a year-round, controlled method of cultivation, which has qualities and values that are distinct from outdoor and mixed light cultivation methods. Further, the project applicant proposes to install solar panels on all available roof top space for each proposed building. If the renewable energy from the solar panels does not provide enough energy to cover the entirety of the proposed project's energy usage, the project applicant will set up an account with a carbon offset company (like TerraPass) and purchase the remaining amount needed.

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

Discussion: The project applicant proposes to install solar panels on all available roof top space for each proposed building and would purchase carbon offset for any remaining energy needs, consistent with Section 55.4.8.3 of the County's CMMLUO.

Findings:

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

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

5.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special 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 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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly detroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Setting:

Geology

The site and entire Northern California Region are located in a seismically active area. The nearest active fault is the Blue Lake Fault, which is part of the Mad River fault zone and has been zoned under the Alquist-Priolo Earthquake Fault Zoning Act (Hart, 1999). Other regional sources of earthquakes include the Cascadia Subduction Zone, the Northern San Andreas Fault, the Mendocino Fault, and faults in the Gorda Plate. These sources are situated offshore to the west of Humboldt County, and have potential to produce strong ground motions. The project site itself is not within an Alquist-Priolo earthquake fault zone (where the state of California anticipates potential surface rupture).

According to Humboldt County Web GIS data, the southwestern half of the project site is within an area of potential liquefaction; however, the project site has a Seismic Safety Classification of 0 which is "relatively stable", and no historic landslides have occurred in the project site.

Soils

Soils on the project site are mapped as Lepoil-Candymountain complex in 82.6 percent of the site and Timmons and Lepoil soils in 17.4 percent of the site. Both of these classifications are well-drained, fine-loamy mixed soils. Both formed from mixed marine deposits and the capacity of the most limiting layer to transmit water ranges from low to high (NRCS, 2018).

Analysis:

a) i) Finding: The project would not directly or indirectly 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 (refer to Divisions of Mines and Geology Special Publication 42). *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. 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. The project would not expose people or structures to substantial adverse effects from a fault rupture. Impacts would be less than significant, and no mitigation would be necessary.

ii) Finding: The project would not directly or indirectly 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. Because the project site is located within a seismically active area, 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; California Code of Regulations Title 24). 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.

iii) Finding: The project would not directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. *Less than significant 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, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables and buildings with shallow foundations.

Although the project site has a Seismic Safety Classification of relatively stable, the southwestern half of the project site is designated as an area potentially subject to liquefaction. This could threaten the integrity of the structures on the project site, and the people occupying those structures. The impact of seismic-related ground shaking on the project site would be reduced as new construction projects must comply with the California Building Code (CBC) requirements and have soils reports prepared prior to obtaining grading or building permits from the Humboldt County Building Division. With implementation of the proposed recommendations in the soils report and compliance with the CBC, impacts would be less than significant.

iv) Finding: The project would not directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. *No impact.*

Discussion: Landslide susceptibility is a function of various combinations of factors including rainfall, rock and soil types, slop aspect, vegetation, seismic conditions, and human construction. Generally, landslides are expected to occur most often on slopes steeper than 15 percent grade in an area with a history of landslides underlain by certain geologic units. The proposed project would be located in an area that is flat and does not have a history of landslides. There is no risk of loss, injury, or death involving landslides associated with construction and operation of the proposed project.

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

Discussion: The site is flat and completely paved. However, project construction activities include the removal of the existing pavement which has the potential to temporarily increase erosion and sedimentation rates above existing conditions. The project applicant would be required to have a soils report prepared prior to receiving grading and/or building permits from the Humboldt County Building Division and would implement all site improvement recommendations. Additionally, there are no natural surface water features to which sediment might be discharged. Therefore, with implementation of the proposed recommendations in the soils report, project impacts would be less than significant.

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 Web GIS data, the project site has a Seismic Safety Classification of 0 which is relatively stable. However, the southwestern half of the project site is designated as an area potentially subject to liquefaction. The project applicant would be required to have a soils report prepared prior to receiving grading and/or building permits from the Humboldt County Building Division and would implement all site improvement

recommendations. Therefore, with implementation of the recommendations from the soils report, impacts would be less than significant.

d) Finding: The project would not be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial direct or indirect risks to life or property. *No 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.

The soils on the project site have a low shrink-swell potential (NRCS, 2018). Therefore, the 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 waste water disposal systems where sewers are not available for the disposal of waste water. *No impact.*

Discussion: The proposed project would tie into the existing community wastewater system, and no septic tank or alternative wastewater disposal system would be required. No impact would occur.

f) Finding: The project could directly or indirectly destroy a unqiue paleontological resource or site or unique geological feature. *Less than significant impact.*

Discussion: The proposed project area is not located in an area that is considered likely to have paleontological resources present. Fossils of plants, animals, or other organisms of paleontological significance have not been discovered within the project area. In this context, the project would not result in significant impacts to paleontological resources or unique geologic features. Therefore, impacts would be less than significant.

Findings:

a) i) The project would not directly or indirectly expose people or structures to potential substantial adverse effects, including the ris 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. Refer to Divisions of Mines and Geology Special Publication 42: **Less than significant impact.**

a) ii) The project would not directly or indirectly 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.**

a) iii) The project would not directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction: **Less than significant impact.**

a) iv) The project would not directly or indirectly expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides: **No impact.**

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

c) 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.**

d) The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property: **No impact.**

e) The project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water: **No impact**.

f) The project could directly or indirectly destroy a unqiue paleontological resource or site or unique geological feature: **Less than significant impact**.

5.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emission, 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:

As a result of revisions to the State CEQA Guidelines that became effective in March 2010, CEQA lead agencies are obligated to determine whether a project's GHG emissions significantly affect the environment and to impose feasible mitigation to eliminate or substantially lessen any such significant effects (www.ncuaqmd.org). The County of Humboldt completed a draft Climate Action Plan for the General Plan Update in January 2012. The plan contains GHG reduction strategies designed to achieve the goal of limiting greenhouse gas emissions to 1990 emissions levels by 2020. The NCUAQMD and Humboldt County have not adopted any thresholds of significance for measuring the impact of GHG emissions generated by a proposed project.

Analysis:

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

Discussion: Due to the small scale of the proposed project, this section includes a qualitative discussion of potential GHG/climate change impacts with an emphasis on project features which would reduce construction and operational GHG emissions (see discussion under subsection b) below).

Construction

Construction GHG emissions are generated by vehicle engine exhaust from construction equipment, on-road hauling trucks, vendor trips, and worker commuting trips. The proposed project is relatively small, and construction would be short term (less than one year). All construction equipment and commercial trucks are maintained to meet current emissions standards as required by the California Air Resources Board. Based on the size of the project and the short duration of construction activities, impacts associated with GHG emissions generated from construction would be less than significant.

Operation

The NCUAQMD and Humboldt County have not adopted any thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. GHG emissions sources during operation would include vehicle traffic from workers and deliveries and operation of HVAC units for the proposed buildings. As described in Section 5.16 – *Transportation/Traffic*, during long-term operation the project will generate up to 60 vehicle trips

per days. This is equivalent to the vehicle trips expected from 2 to 3 single-family residences[9], which is less than one percent of the 1,253 households reported in Blue Lake by the 2010 U.S. Census (U.S. Census Bureau, 2010). Therefore, operation of the project would generate vehicle trips (and concomitant GHG emissions) equivalent to a less than one percent increase in the residential development of Blue Lake. This would not be a significant increase in GHG emissions from the Blue Lake area.

The proposed nursery and indoor cultivation would feature HVAC and filter systems for air conditioning, odor reduction, and heating. The power used by the HVAC system would be provided by solar panels, any power usage not covered by solar panels would be offset with carbon credits purchased from a carbon offset company. According to NCUAQMD Rule 102, the Air District does not require permits for HVAC systems. The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

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

Discussion: The proposed project was evaluated against the following applicable plans, policies, and regulations:

1) Humboldt County Draft Climate Action Plan

2) Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO)

3) NCUAQMD Particulate Matter Attainment Plan

Humboldt County Draft Climate Action Plan

The County's 2012 Draft Climate Action Plan contains strategies for reducing greenhouse gas emissions. This project, as proposed, mitigated, and conditioned, is consistent with the following GHG reduction strategies listed in the County of Humboldt Climate Action Plan:

a) Foster land use intensity near, along with connectivity to, retail and employment centers and services to reduce vehicle miles traveled and increase the efficiency of delivery services through adoption and implementation of focused growth principles and policies.

The proposed project is near Blue Lake, where most residents commute to employment centers in Arcata and Eureka. Employees of the project living in those communities would travel less distance to work than if they worked in Arcata or Eureka.

b) Conserve natural lands for carbon sequestration.

The use of an existing paved site for the proposed project would not require the removal of any trees or other woody vegetation that would sequester carbon.

c) Reduce length and frequency of vehicle trips.

See response to strategy a), above.

[9] Based on Institute of Transportation Engineers Trip Generation 8th edition (2008) estimate of 9.57 trips per day for residences in an average western U.S. city (http://www.fehrandpeers.com/vmt/)

d) Promote the revitalization of communities in transition due to the decline of resource-based industries.

The project site is zoned as unclassified, but the more expansive region is zoned for timber and agriculture. The proposed project would develop a commercial cannabis cultivation, processing, manufacturing, and distribution operation, which is an agricultural product and would provide economic benefits to the Blue Lake area, similar to timber and traditional agriculture products processing but in a burgeoning industry.

e) Ensure that land use decisions conserve, enhance, and manage water resources on a sustainable basis to assure sufficient clean water for beneficial uses and future generations.

The project site is served by the Fieldbrook Glendale Community Services District, which purchases treated water from Humboldt Bay Municipal Water District (HBMWD) for delivery to its customers. The Fieldbrook Glendale Community Services District is currently using approximately about 56 percent of its contracted water allotment from HBMWD during peak demand (HLAFC, 2015). The proposed project would use approximately 42,340 gallons of water per month, and a total of 508,080 gallons of water per year. An additional 8,400 gallons of water would be needed per month for landscape irrigation; however, the project applicant proposes to reuse clean spent cultivation irrigation water for landscape irrigation. Other enhancements to water resources would be realized through landscape and building design that disperses rain and naturally filters water, which would be an improvement upon the site condition as it is currently completely paved.

Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO)

There are no applicable regulations in the CMMLUO regarding GHG.

NCUAQMD Particulate Matter Attainment Plan

As described under Question a) in Section 5.3 – *Air Quality*, the proposed project incorporates control measures consistent with the goals included in the Attainment Plan. The goals include: (1) transportation, (2) land use and (3) burning. The proposed project would not obstruct implementation of the NCUAQMD Attainment Plan for PM_{10}.

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.

Findings:

a) The project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment: **Less than significant impact**.

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

5.9 HAZARDS AND HAZARDOUS MATERIALS

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

Setting:

The project site is located on land that was part of a much larger parcel that has been used for timber processing by multiple companies for decades. Some of those timber processing activities included using wood preservatives and anti-staining compounds, specifically pentachlorphenol and tetrachlorophenol, which are hazardous materials according to the California Department of Toxic Substances Control (DTSC). These materials were not used on or in the immediate vicinity of the subject parcel. DTSC oversaw the remediation and monitoring of areas of the larger, former parcel that were found to have hazardous material contamination. In 2003, Winzler and Kelley, Consulting Engineers, conducted a Phase 2 Investigation of the broader area. Their investigation did not detect hazardous materials on the subject parcel, nor did their investigation find evidence that suggested hazardous materials were ever used on the subject parcel. The subject parcel does not appear on the Cortese List.

The site is not shown as containing hazardous materials or being involved in any cleanup or monitoring programs on the U.S. Environmental Protection Agency (EPA) EnviroMapper[10], The California Department of Toxic Substances Control EnviroStor mapper[11], or the State Water Resource Control Board Geotracker[12].

The Humboldt County Department of Environmental Health serves as the local Certified Unified Program Agency (CUPA). The CUPA is responsible for collecting and disseminating hazardous materials information. If the facility has a maximum quantity on-site at any one time in excess of 55 gallons, then the facility must complete a Business Plan to the satisfaction of the CUPA. This information can then be made available to emergency first responders or other members of the public.

Schools located nearest to the project site are Blue Lake Elementary School located approximately 1.5 miles southeast of the project site, and Northern Humboldt Union High School located approximately 2.75 miles west of the project site.

The project site is located seven miles southeast of the Arcata Eureka Airport, which is maintained by the County. The project site is not located within the Airport Land Use Compatibility Zone or the Building Height Restriction Area.

According to Humboldt County Web GIS data, the project site is within a Fire Rating Zone of "Low," indicating the area is at low risk from wildland fires. The site is located within the Blue Lake Fire Protection District and State Responsibility Area.

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 would involve construction and operation of a commercial cannabis cultivation, processing, manufacturing, and distribution operation. Hazardous materials associated with the proposed operation include fertilizers, pesticides, and solvents. Hazardous materials associated with construction include fuels, lubricants, and paint. All fertilizers used on the project site would be organic fertilizers comprised of natural products and compost teas. The project proponent anticipates that the only pesticides used would be similarly derived natural products such as neem oil and Grandevo, which are organic substances (plant extract and a bacterium), and would not be used outdoors. Pesticides would be stored in a secure indoor location with spill containment.

Solvents used in extraction would include ethanol, hexane, and butane. The health hazards for ethanol are irritation in case of contact with skin and eyes, or inhalation. Butane gas is non-irritating to skin and eyes but is an asphyxiation hazard if inhaled. Short term exposure to air contaminated with hexane affects the nervous system and can cause dizziness, nausea, headaches, and unconsciousness. Ethanol is a flammable liquids; butane and hexane are flammable gases. Improper handling, storage, or transport of these substances could pose a risk to the environment and to human health.

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[10] https://geopub.epa.gov/myem/efmap/index.html?ve=8,40.879958,-123.984980&pText=95525,%20Blue%20Lake,%20California ; accessed December 6, 2018

[11] https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=1691+Glendale+Drive%2C+Blue+Lake+California%2C+95525; accessed December 6, 2018

[12] https://geotracker.waterboards.ca.gov/map; accessed December 6, 2018

Volatile extraction would be performed in a commercially manufactured closed-loop system approved for use by the local fire code official in accordance with Section 40225 of California Code of Regulations Title 17, Division 1, Chapter 13[13], and approved for use in accordance with Chapter 38 of the California Fire Code[14]. Use of volatile extraction solvents would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous material. The applicant would be required to file a Hazardous Materials Business Plan with the County Division of Environmental Health for the storage of the various materials described above at the site.

The California Office of Emergency Services Accidental Release Prevention Program (CalARP) implements the Federal Risk Management Program, or Federal Accidental Release Prevention Program (FedARP) in California, as well as implementing additional requirements specific to California in accordance with the California Health and Safety Code. The CalARP program applies to a wide variety of facilities that handle, manufacture, use, or store listed chemicals (regulated substances) above threshold quantities. Regulated substances and threshold quantities are listed in the CalARP Administering Agency Guidelines[15]. Of the chemicals that would be used in volatile extraction, only butane is a regulated substance under CalARP, and the threshold quantity for butane is 10,000 pounds. Because the quantity of butane used by the proposed project would never approach the threshold quantity of 10,000 pounds, the proposed project would not be regulated under CalARP.

Hazardous chemicals would be purchased from licensed vendors and transported/shipped to the project site in accordance with all federal, state, and local regulations for the transport of hazardous materials. Chemicals would be received at the project site at loading docks that would be equipped with spill containment kits.

With appropriate storage, handling, and application practices that comply with the requirements of Humboldt County, it is not anticipated that the use of these materials at the facility would not pose a significant hazard. 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: As previously described under item (a), volatile solvents would be stored and used at the site. As described in the Cultivation and Operations Plan, all materials would be properly stored. Use of such materials would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous materials, including the County Medical Marijuana Land Use Ordinance and oversite by the CUPA. These include implementation of spill prevention, control, and countermeasures and the maintenance of appropriate cleanup materials onsite. The project proponent would be required to file a Hazardous Materials Business Plan with the County Division of Environmental Health.

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

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[13] https://www.cdph.ca.gov/Programs/CEH/DFDCS/MCSB/CDPH%20Document%20Library/ReadoptTextFINAL.pdf Accessed July 26, 2018

[14] https://up.codes/viewer/california/ca-fire-code-2016/chapter/38/plant-processing-and-extraction-facilities#38 Accessed July 25, 2018

[15] http://www.caloes.ca.gov/FireRescueSite/Documents/CalARP%20Guidance%20Jan2005.pdf; accessed July 26, 2018

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.

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.

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 project site is not included on a list of hazardous materials sites reporting to the EPA. Because there are no hazardous materials concerns currently at the project site, implementation of the proposed project would not create a significant hazard to the public or the environment. No impact would occur.

e) Finding: The project would not result in a safety hazard or excessive noise for people residing or working in the project area for a project within two miles of a public airstrip. *No impact.*

Discussion: The project site is more than seven miles from the nearest publicly operated airport.

The proposed buildings would comply with Part 77 of the Code of Federal Regulations; Safe, Efficient Use, and Preservation of the Navigable Airspace, which limits the allowable height of all structures within the airport runway approaches. The project does not propose to construct a building greater than 200 feet tall, and therefore will not need to notify the Federal Aviation Authority.

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 project would comply with the requirements of the County Building Code, Blue Lake Fire Protection District, and Cal Fire regarding emergency vehicle access, sprinkler systems, and minimum water supply requirements. The project site is accessed by an existing paved driveway directly from Glendale Drive, and the project applicant would be required to construct two 24-foot-wide commercial driveways as a condition of project approval. As such, the 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. Potential impacts would be less than significant, and no mitigation would be necessary.

g) Finding: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. *Less than significant impact.*

Discussion: According to Humboldt County GIS data, the project site is within a Wildland Fire Rating Zone of "Low," indicating the area is at low risk from wildland fires. The site is located within the response area of the Blue Lake Fire Protection District, and is in the State Responsibility Area. The site is significantly protected from wildfire that approaches from the south by the Mad

River, from the west by Highway 299 and the Lindsay Creek floodplain and from the east by the City of Blue Lake.

Findings:

a) 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**.

b) 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**.

c) 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**.

d) The project would not be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment: **No impact**.

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

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

g) The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires: **Less than significant impact**.

5.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	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 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, 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 off- site?	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff?	☐	☐	☒	☐
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 in the Mill Creek – Mad River Sub-watershed (HUC12), which is part of the Mad River Watershed (Hydrologic Unit 109). The Mad River drains 500 square miles of mixed private and US Forest Service timberland. The mainstem Mad River is listed on the State Water Resource Control Board 303(d) list as impaired for containing excess pollutants (2014 and 2016 California 303(d) List of Water Quality Limited Segments Category 5, Water segments where standards are not met a TMDL is required, but not yet completed). The constituents are sediment, temperature, turbidity, and aluminum. The sources for sediments, temperature, and turbidity include alteration of flows, removal of riparian vegetation, nonpoint sources, resource extraction, and silviculture. The source of aluminum is unknown.

The project site is over 300 feet from the nearest wetland, over 600 feet from the Streamside Management area of Hall Creek, an intermittent stream. The site is separated from these features by

Glendale Drive and a railroad corridor easement. The Mad River is over 2,000 feet away, across Highway 299. The project site is a flat, paved 1.77-acre parcel.

Analysis:

a) Finding: The project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. *Less than significant impact.*

Discussion: Construction activities associated with the project would involve excavation and grading, and other soil disturbing activities that have the potential to expose soil to erosion and may result in the transport of sediments which could adversely affect water quality. The potential for impacts is low, as the site is relatively flat. Construction activities would be conducted in accordance with the County's grading regulations and BMPs, including temporary erosion and runoff control measures, in accordance with the General Plan, would be implemented during construction to minimize the potential for erosion and storm water runoff.

The site is entirely paved-approximately 76,000 square feet. The proposed project design has an estimated 50,000 square feet of impermeable surface and 26,000 square feet of landscaping. This substantial reduction in impermeable surface at the project site would reduce the quantity and intensity of storm water discharge. The site will be connected to a municipal sewer system that drains to the City of Arcata Wastewater Treatment Plant served by the Fieldbrook Glendale Community Services District.

Though the project would not increase impermeable area, it would introduce new materials and activities to the site. These include parking and use of personal and commercial vehicles, metal structures, compost, trash, and spilled materials. The site would be designed to route storm water runoff to detention basins and landscaped areas, allowing for the separation and breakdown of pollutants.

Therefore, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

b) Finding: The project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin. *No impact.*

Discussion: The project would not use a well nor would it interfere with groundwater recharge.

c) Finding: The project will 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:

i) Result in substantial erosion or siltation on- or off-site*. Less than significant impact.*

ii) 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.*

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater runoff drainage systems or provide substantial additional resources of polluted impact*. Less than significant impact.*

iv) Impede or redirect flood flows. *Less than significant impact.*

Discussion: As previously described, the project design would substantially reduce the amount of impermeable surface onsite. This would decrease the intensity and quantity of storm water runoff. While this is an alteration in the drainage pattern of the site, it is an alteration that would improve water quality and lessen impacts to offsite hydrology. Additionally, the site would deliberately route building runoff through detention basins where suspended sediments and other pollutants would settle before the water leaves the site. Impacts to drainage patterns will be less than significant.

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

Discussion: The project is not in an area that is at risk from seiche, tsunami, or floods. The project is not located near a large body of water capable of producing a seiche, is not located near the coast in a tsunami inundation area and there are no 100-year flood hazard areas in the project site. Therefore, the proposed project would not risk release of pollutants due to project inundation from seiche, tsunami, or flood. No impact would occur.

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

Discussion: The project is located within the area covered by the Water Quality Control Plan for the North Coast Region and would not conflict with or obstruct its implementation.

Construction activities would feature standard BMPs, including temporary erosion and runoff control measures that minimize the potential for erosion and storm water runoff. Construction of the sewer line connection would require excavations to depths of approximately 6 to 8 feet, which is unlikely to have an impact upon groundwater.

The project proposes to install a supplemental water treatment system for personnel and industry waste water used by cannabis processing and manufacturing activities on site. Waste water from cultivation irrigation would be drained into holding tanks and used for landscape irrigation. The site would be designed to route storm water runoff to detention basins and landscaped areas, allowing for the separation and breakdown of pollutants. Waste water collected from floor drains in cleaning areas would drain to a holding tank and sent to the onsite supplemental water treatment system before going to sewer or being reused. All other uses, toilets, hand washing sinks, fountains etc. as well as storm water generated from the proposed project would drain to the City of Arcata Wastewater Treatment Plant served by the Fieldbrook Glendale Community Services District.

The project is not located in an area with a sustainable groundwater management plan in place, as the Sustainable Groundwater Management Act only applies to groundwater basins designated as medium or high priority. The project is located in the Mad River Valley Groundwater Basin, which is a low priority basin.

Findings:

a) The project will not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality: **Less than significant impact.**

b) The project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin: **No impact**.

c) The project will 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:

i) Result in substantial erosion or siltation on- or off-site. **Less than significant impact**.

ii) 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**.

iii) Create or contribute runoff water which would exceed the capacity of existing or palnned stormwater runoff drainage systems or provide substantial additional resources of polluted impact. **Less than significant impact**.

iv) Impede or redirect flood flows. **Less than significant impact.**

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

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

5.11 LAND USE AND PLANNING

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Setting:

The Humboldt County General Plan designates the project area as "Commercial Services" (CS). The CS designation provides for heavy commercial uses and compatible light industrial uses not serving day to day needs. Full range of urbans services required (i.e., good access, public sewer and water, electricity, fire protection, and waste disposal).

The project site is zoned as "Unclassified" (U), and principal permitted uses of U include one-family dwelling, general agriculture, rooming and boarding of not more than two (2) persons, and manufactured home. All other uses not specified in principal permitted uses may be permitted upon the granting of a Use Permit.

Analysis:

a) Finding: The project will not physically divide an established community. *No impact.*

Discussion: The proposed project would involve cannabis cultivation, processing, volatile and non-volatile extraction manufacturing, and distribution and would include a wholesale nursery on a completely paved site zoned to allow industrial land uses upon the grant of a Use Permit. The project site is within the community of Glendale and is surrounded by commercial/industrial yards and large-lot, single-family residential. There is no established community on the project site or adjacent areas. The project site is accessed directly from Glendale Drive, and two 24-foot-wide commercial driveways would be constructed to accommodate the proposed project as a condition of project approval. Therefore, the proposed project would not physically divide an established community, and no impact would occur.

b) Finding: The proposed project would not cause 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. *Less than significant impact.*

Discussion: The proposed project would develop a cannabis cultivation, processing, manufacturing, and distribution operation on a property designated CS and zoned U. The proposed land use for the project would be light industrial, which is compatible with the CS land use designation as it allows for heavy commercial and light industrial uses. The proposed project does not fall under the principal permitted uses for lands classified U; however, other uses not specified in the principal permitted uses may be permitted upon the granting of a CUP. As part of the proposed project, the County would issue a CUP to allow for the proposed project operations. Upon County issuance of the CUP, the proposed project would not conflict with any goals, policies, or objectives in the County's General Plan or zoning ordinance

intended to mitigate potential environmental impacts. Potential impacts would be less than significant, and no mitigation would be necessary.

Findings:

a) The project will not physically divide an established community: **No impact**.

b) The project will not cause 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: **Less than significant impact**.

5.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant 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 the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Setting:

Current mineral resource production in the County is primarily limited to sand, gravel, and rock extraction. The State Surface Mining and Reclamation Act of 1975 (SMARA) brought about a State policy for the reclamation of mined lands. According to SMARA Mines Online, there are two SMARA parcels located near the project site (CDC 2018). McAdams Rockpit (Mine ID 91-12-0052) is a rock quarry located approximately 0.28 mile east of the project site along McAdams Ranch Road, and Leta Johnson Bar (Mine ID 91-12-0031) is a streambed or gravel bar skimming and pitting mine which primarily produces sand and gravel products located approximately 0.30 mile south of the project site, west of State Highway 299.

Environmental 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/or residents of the state*. No impact.*

Discussion: According to SMARA Mines Online, the project site is not within or immediately adjacent to any mining operations (CDC 2018). Implementation of the project would not result in the loss of availability of a known mineral resource, and no impact would occur.

b) Finding: The 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 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.

Findings:

a) The project will not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state: **No impact.**

b) The 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.**

5.13 NOISE

Would the project result in:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	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 groundnborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Setting:

The project site is in mixed use area; properties to the north and east of the project site are large-lot, single-family residential uses, and lands south and west of the project site are in commercial/industrial uses. Noise sensitive receptors near the project site include low density residences the nearest of which are 10 feet north of the property line and 30 feet east of the property line.

The predominant existing noise sources in the vicinity of the proposed project site are vehicles on adjacent streets. Potential noise impacts as a result of the proposed project are those resulting from project construction activities. Construction noise would be short-term and temporary.

Analysis:

a) Finding: The project will result in 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. *Less than significant impact with mitigation incorporated.*

Discussion: The proposed project is on a site with nearby industrial and commercial uses. During operation, the project would not generate noise greater than that of vehicle traffic on the streets in the project vicinity.

Potential noise sources associated with the project would include temporary noise during construction of the proposed buildings. The noise standards in the Humboldt County General Plan are based on EPA recommendations. Section 3240 of the 2017 General Plan states*: "The Environmental Protection Agency identifies 45 Ldn indoors and 55 Ldn outdoors as the maximum level below which no effects on public health and welfare occur. Ldn is the Day-Night Noise Level. Ldn is the average sound level in decibels, excluding frequencies beyond the range of the human ear, during a 24-hour period with a 10dB weighting applied to nighttime sound levels. A standard construction wood frame house reduces noise transmission by 15dB. Since interior noise levels for residences are not to exceed 45dB, the maximum acceptable exterior noise level for residences is 60dB without any additional insulation being required. Of*

course, this would vary depending on the land use designation, adjacent uses, distance to noise source, and intervening topography, vegetation, and other buffers." Since Ldn is a daily average, allowable noise levels can increase in relation to shorter periods of time. As stated in Section 3240, "*Fences, landscaping, and noise insulation can be used to mitigate the hazards of excessive noise levels*."

As noted above, the existing County noise standard utilizes an averaging mechanism (dBA Ldn) applicable to activities that generate sound sources averaged over a 24-hour period of time. This type of measurement is commonly used for measuring highway noise or industrial operations. A ten-decibel addition is added to noise levels occurring at nighttime – between 10:00 p.m. and 7:00 a.m. Utilizing a typical standard of 45 dBA Ldn interior noise level allows for a maximum of 60 dBA Ldn for 'normally acceptable' exterior levels.

Construction

Construction activities would result in a temporary increase in noise levels in the area. This noise increase would be short-term and would occur during daytime hours. Noise sensitive receptors near the project site include low density residences the nearest of which are 10 feet north of the property line and 30 feet east of the property line. Mitigation Measure NOI-1 is proposed to reduce potential impacts from construction noise to a level of less than significant. The proposed mitigation would limit construction hours and days and would require standard maintenance of tools and equipment to reduce noise levels. With implementation of the proposed mitigation, potentially significant impacts would be reduced to a level of less than significant.

Operation

Long-term operation of the project is not expected to generate significant noise levels that will exceed the Humboldt County General Plan Noise Element standards. Most of the proposed activities would take place inside buildings which would not increase exterior noise levels. Outdoor operations would be consistent with the sorts of activities that occur on the adjacent commercial and industrial uses to the south and west, such as deliveries, personal vehicle travel, and routine maintenance. Potential noise impacts from typical operational activities would be less than significant. Additionally, the HVAC units would be located in enclosed structures with proper ventilation and located as northwest as possible on the site to reduce the noise level for surrounding neighbors and wildlife. Therefore, nearby sensitive receptors would not experience significant noise from fans or ventilation systems.

Therefore, with the proposed mitigation measure, the proposed project will not result in the 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) Finding: The project will not generate excessive groundborne vibration or groundborne noise levels*. Less than significant impact.*

Discussion: Generally, construction activities within 200 feet and pile driving within 600 feet of a vibration sensitive use would be potentially disruptive to vibration-sensitive operations (Caltrans, 2013). Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations are considered "vibrationsensitive"(Caltrans, 2013). There are no vibration sensitive land uses within 200 feet of the proposed project. Operation of the project would not involve the use of heavy machinery or ground disturbing activities that would result in excessive groundborne vibration

or groundborne noise levels. Therefore, the proposed project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.

c) Finding: The project will 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. *Less than significant.*

Discussion: The project site is outside the 60 CNEL noise contour of Arcata-Eureka Airport. The site is not located in an aiport compatibility zone. There are no private airstrips in the vicinity of the project site. The proposed project would not expose people working in the project area to excessive noise levels. Impacts would be less than significant, and no mitigation would be necessary.

Mitigation:

NOI-1 Construction Related Noise

The following shall be implemented during construction activities:

- The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall only occur between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- All stationary and construction equipment shall be maintained in good working order and fitted with factory approved muffler systems.

Findings:

a) The project will not result in the 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: **Less than significant impact with mitigation incorporated.**

b) The project will not result in the generation excessive groundborne vibration or groundborne noise levels: **Less than significant impact**.

c) The project will 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: **Less than significant impact**.

5.14 POPULATION AND HOUSING

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

Setting:

Humboldt County is a rural county with a large land area and low population density. The 2017 Census reported the County's population to be 136,754, which represents an increase of 10,236 over the population reported in the 2000 Census. Between 2020 and 2030, the population is projected to increase by approximately one percent, from 139,033 to 140,608 (an increase of 1,575 people) (U.S. Census Bureau, 2017). Population data of the Fieldbrook area is not available.

Analysis:

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

Discussion: 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. The project proposes to construct a wholesale nursery, indoor commercial cannabis cultivation, processing facility, volatile manufacturing facility, non-volatile extraction manufacturing facility, and distribution center within a few miles of established communities in Blue Lake and Arcata. Construction workers, employees, and customers of the project would likely be local and not commute long distances to reach the project site. Project operation would require up to 22 full-time workers which would not necessitate new housing or induce substantial population growth, either directly or indirectly. Impacts associated with population growth would be less than significant, and no mitigation would be necessary.

b) Finding: The project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere*. No impact.*

Discussion: The project site does not support any structures. No people currently reside on the project site, and as discussed under subsection a), the proposed project is not expected to result in an influx of people to surrounding communities that would displace current residents. Therefore, the proposed project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere.

c) Finding: The project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere*. No impact.*

Discussion: No people currently reside on the project site, and as discussed under subsection a), the proposed project is not expected to result in an influx of people to surrounding communities

that would displace current residents. The proposed project would not displace a substantial number of existing people, necessitating the construction of replacement housing elsewhere.

Findings:

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

b) The project will not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere: **No impact**.

5.15 PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	**Potentially Significant**	**Potentially Significant Unless Mitigation Incorp.**	**Less Than Significant Impact**	**No Impact**
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Setting:

The project site is within the boundaries of the Blue Lake Fire Protection District and is also in a State Responsibility area.

The Humboldt County Sheriff's Office is responsible for law enforcement in Blue Lake, including the project site. The Humboldt County Sheriff's Office provides a variety of public safety services countywide (court and corrections services) and law enforcement services. 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 has mutual aid agreements with cities and the California Highway Patrol. Mutual aid is an agreement between agencies where the agency of jurisdiction can request manpower or resources from allied agencies or agencies within the surrounding areas.

Schools located nearest to the project site are Blue Lake Elementary School located approximately 1.5 miles southeast of the project site, and Northern Humboldt Union High School located approximately 2.75 miles west of the project site.

There are no existing recreational resources in or near the project site.

Analysis:

a.i) 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: The proposed project would result in construction and operation of 28,000 square feet of commercial cannabis indoor cultivation, processing, volatile manufacturing, non-volatile extraction manufacturing, distribution, and a wholesale nursery. There would be an additional 22,000 square feet converted to parking and driveways and 26,000 square feet used for landscaping. This would potentially increase the likelihood of structure fires. The project site is in an area identified as low risk for wildfire, so the project would not substantially increase the demand for protection of life and property from wildfire. All proposed buildings would comply with fire code requirements including sprinklers, emergency vehicle access, and sufficient

water to meet FFPD requirements for fire flow (1,500 gallons per minute for 120 minutes). Volatile extraction would be conducted using Closed Loop Extraction System equipment housed in a facility approved by the Local Fire Code Official. Other project activities such as cultivation, processing, and manufacturing of cannabis and cannabis products would not be prone to accidental fires. As such, the project would not result in the need for new or physically altered fire protection facilities. Impacts to fire protection services from the proposed project would be less than significant, and no mitigation would be necessary.

a.ii) Finding: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, 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: Cannabis-related operations are commonly associated with greater security-related demands, which may result in an increase in law enforcement services provided by the County Sheriff's Department. The proposed project would include security fencing around the entire project, gated access through identification badges, 24 hour video surveillance, a security alarm system with automatic law enforcement notification, and an inventory tracking system. Implementation of the proposed security measures would minimize impacts to local law enforcement. The proposed project would not result in the need for new or physically altered law enforcement facilities. Potential impacts would be less than significant, and no mitigation would be necessary.

a.iii) Finding: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any public schools. *No impact.*

Discussion: The proposed project does not include a residential housing development and would not directly or indirectly induce population growth in the area; therefore, the project would not result in the need for new or expanded school facilities. No impact on school facilities would occur.

a.iv) 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 public parks. *No impact.*

Discussion: As previously mentioned, the proposed project would not directly or indirectly induce population growth and would not result in the need for new or expanded park facilities. No impact on park facilities would occur.

a.v) 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 other public facilities. *No impact.*

Discussion: As previously mentioned, the proposed project would not directly or indirectly induce population growth and would not result in an increased demand for other public facilities. No impact on demand for public facilities would occur.

Findings:

a.i) 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**.

a.ii) 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.**

a.iii) 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: **No impact**.

a.iv) 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 parks: **No impact**.

a.v) 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 other public facilities: **No impact.**

5.16 RECREATION

	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Setting:

Recreational resources are addressed in the Humboldt County General Plan. There are no existing recreational resources in or near the project site. There is a proposed Class I bicycle route on Highway 299 between Arcata and Blue Lake. Class I routes are completely separated from streets with vehicular traffic and are typically shared with pedestrians (HCAOG 2012).

Analysis:

a) Finding: The project will 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 project would not directly induce population growth or otherwise result in an increased demand on existing recreational facilities. There are no existing recreational facilities in or near the project site, and the project would not provide direct access to or increase the use of recreational facilities in the region. No impacts would occur.

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

Discussion: The proposed project would not induce population growth or otherwise result in an increased demand on existing recreational facilities that would require the construction or expansion of recreational facilities. Further, the proposed project does not include construction of recreational facilities. No impacts would occur.

Findings:

a) The project will 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.**

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

5.17 TRANSPORTATION

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	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) Would the project conflict or be inconsistent with CEQA Guidelines section 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 subject property is accessed from Glendale Drive, which is characterized as a Major Rural Collector and it is approximately 0.2 mile from the onramp/offramp to Highway 299. The Humboldt County Travel Demand Forecasting Model Development Report specifies Major Collectors as generally having a capacity of 750 vehicles per lane per hour. Humboldt County GIS lists Glendale Drive and the Highway 299 ramps as having a functional capacity of 350 vehicles per hour. The Community Infrastructure and Services Technical Report prepared for the County Community Services Development Department by Winzler and Kelley in July 2008, listed Glendale Drive as being in Fair Condition.

According to California Department of Transportation (Cal Trans) traffic census data for 2016[16], the average annual daily traffic on Highway 299 at the intersection with Glendale Drive was 3,900 vehicles, with a peak hourly traffic of 400 vehicles. The peak traffic volume was the same on both sides of Glendale Drive, indicating that it is not a major destination for traffic using Highway 299.

Analysis:

a) Finding: The project will 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 would be accessed from Glendale Drive via a paved driveway. Construction of the project would result in a temporary increase in construction traffic that would be minimal and for a short duration. Construction activities would be contained on-site and would not result in substantial adverse effects or conflicts with the local roadway system.

Vehicle trips generated during operation of the project would include daily round trips for each of the 22 staff, plus round trips by vendors, distributors, and processing deliveries. The operations plan has estimated that, on average, approximately 60 vehicle trips will occur per day. While the 44 trips per day will occur regularly, half during the morning peak and half during the

[16] http://www.dot.ca.gov/trafficops/census/docs/2016_aadt_volumes.pdf; accessed December 8, 2018

afternoon peak transportation periods, the remainder of the trips will be distributed throughout the facilities operating hours.

The 22 trips that occur during the peak hour would constitute approximately 6 percent of the capacity of Glendale Drive. Given that Highway 299, which runs adjacent to Glendale Drive, only carries 400 vehicles during the peak hour, it is unlikely that Glendale Drive is operating close to its operational capacity of 350 vehicles per hour.

The project was referred to Public Works, which requested that the applicant obtain an encroachment permit for the construction of a curb and gutter and two commercial driveways that meet the County Urban Driveway Standard. Additionally, site visibility must be maintained at the commercial driveway approaches in conformance with County Code. These improvements will be a condition of approval for the Use Permit and the applicant would obtain an encroachment permit as required for any work in the County right-of-way before making the improvements.

The Blue Lake Rancheria operates a transit service that uses Glendale Drive. The service connects Arcata and Blue Lake and stops on Glendale Drive at Murphys Market and Linscomb Hill Road. Buses complete inbound and outbound runs each day. The operations associated with this project will not interfere with this transportation service. However, the service could provide a viable commuting alternative for residents of Blue Lake and Arcata. The proposed Annie and Marie Trail will connect Blue Lake to Arcata along the Mad River. The current proposed route parallels Highway 299 and intersects Glendale Drive at the 299 offramp[17]. This plan is still preliminary. If enacted, intersection improvements would be necessary to facilitate trail user's safety when navigating this intersection. The increase in traffic associated with this project will not have a significant effect on the proposed trail. It would, however, benefit from the trail as it would enable employees to easily ride bicycles from Blue lake or Arcata on their regular commutes.

Therefore, the proposed project will not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

b) Finding: The project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision. *No impact.*

Discussion: State CEQA Guidelines Section 15064.3 requires that transportation impacts be analyzed based on vehicle miles traveled (VMT). For a land use project, VMT exceeding an applicable threshold of significance may indicate a significant impact. The Lead Agency is responsible for establishing the thresholds of significance and has until July 1, 2020 to establish those thresholds. At this time the County had not adopted thresholds to determine impacts based on VMT as a result of a project. This threshold is not yet in effect; therefore, the project would have no impact.

c) Finding: The project would not substantially increase hazards due to 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 existing roadways to access the site. The property is accessed from Glendale Drive a paved driveway, which would be improved to County commercial driveway standards in compliance with the County Department of Public Works

[17] http://hcaog.net/documents/annie-mary-rail-trail; accessed December 8, 2018

referral comments, as a condition of approval of the Use Permit. The proposed project does not include construction of any new public roads and would not introduce any incompatible uses on an existing public road. The County has not expressed concern regarding the traffic volume expected to be generated by the project.

Therefore, the proposed project would not substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment). Potential impacts would be less than significant and no mitigation would be necessary.

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

Discussion: As previously mentioned, the project site will be accessed by a County approved driveway that will meet commercial driveway standards. The internal circulation driveway would provide emergency vehicle access to all proposed buildings in accordance with FFPD requirements and will allow emergency vehicles to enter and exit without having to turn around. The proposed project would not result in inadequate emergency access. Potential impacts would be less than significant and no mitigation would be necessary.

Findings:

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

b) The project will not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b): **No impact.**

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

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

5.18 TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) 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)?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1?	☐	☒	☐	☐

Setting:

The tribal cultural resources setting of the project is described in Section 5.5 – *Cultural Resources*.

Analysis:

a) 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: As discussed under subsection a) of Section 5.5 – *Cultural Resources*, due to the extensive ground disturbance from prior industrial development it is unlikely that the site would contain archaeological resources and the THPO of Blue Lake Rancheria and the THPO of the Wiyot Tribe have expressed no concerns. While it is unlikely that the site would contain archaeological resources, there is the potential for subsurface excavation activities to uncover previously unknown subsurface archaeological resources. Implementation of standard cultural resource construction mitigation regarding inadvertent discoveries would reduce potential impacts to a level of less than significant.

b) Finding: The project will not cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1 *Less than significant impact*.

Discussion: The County of Humboldt sent requests for formal consultation to the Bear River Band of the Rohnerville Rancheria, the Blue Lake Rancheria, and the Wiyot Tribe.

Upon receipt of responses from the THPO of Blue Lake Rancheria and the THPO of the Wiyot Tribe on February 6, 2018 recommending no further cultural resources investigations, the County of Humboldt determined that the proposed project will not cause a substantial adverse change in the significance of a known tribal cultural resource. Implementation of standard cultural resource construction mitigation regarding inadvertent discoveries would reduce potential impacts to a level of less than significant.

The proposed project will not cause a substantial adverse change in the significance of a tribal cultural resource.

Mitigation:

See Cultural Resources Section (page 27): CUL-1 Inadvertent Discoveries of Cultural Resources and Human Remains.

Findings:

a) 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.**~~ **Less than significant impact with mitigation incorporated.**

b) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1: ~~**Less than significant impact.**~~ **Less than significant impact with mitigation incorporated.**

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5.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
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 project area is served by the following service providers:

- Water supply – Fieldbrook Glendale Community Services District via a 6-inch water main. Construction of the water supply connection would require excavations to depths of approximately 6 to 8 feet.
- Wastewater treatment and disposal – The project proposes to install a supplemental water treatment system for personnel and industry waste water used by cannabis processing and manufacturing activities on site. Waste water from cultivation irrigation would be drained into a 1,000 gallon holding tanks and used for landscape irrigation, reducing water consumption. Waste water collected from floor drains in cleaning areas would drain to a 1,000 gallon holding tank and sent to the onsite supplemental water treatment system before going to sewer or

being reused. All other uses, toilets, hand washing sinks, fountains etc. would drain to the City of Arcata Wastewater Treatment Plant served by the Fieldbrook Glendale Community Services District. Construction of the sewer line connection would require excavations to depths of approximately 6 to 8 feet.

- Storm water drainage facilities – Storm water generated from the proposed project would be conveyed to the City of Arcata Wastewater Treatment Plant. The proposed project would include the construction of on-site detention basins which would require excavations to depths of approximately 4 to 5 feet.

- Solid waste service – Solid waste generated by the proposed project would be stored in secure containers in a covered area and picked up weekly by Recology Arcata located at 555 Vance Avenue, Samoa, CA. Solid waste from Humboldt County is largely transported to one of three out-of-area landfills for disposal: the Anderson Landfill in Shasta County; Dry Creek Landfill in Medford, Oregon; and Potrero Hills Landfill in Suisun City. Cannabis green waste generated from pruning, trimming, and decay would be broken down and composted on site. Before any disposal of cannabis waste, the waste must be deemed "unusable and unrecognizable" by means of disguise through blending with soil or solid waste.

  Pacific Gas and Electric provides electrical power for the site. Energy use would be off-set in part by solar panel installation on available roof top space for each building and purchase of carbon offsets from a carbon offset company.

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 would include a supplemental water treatment system for personnel and industry waste water used by cannabis processing and manufacturing activities on site. The proposed facility would be approximately 1,066 sf and would be situated in the southwest corner of Building C. The onsite water treatment system would treat approximately 800 gallons of waste water per hour. The system is designed to remove hydrocarbons and solids. Waste water from cultivation irrigation would drain into a 1,000 gallon holding tank and used for landscape irrigation, reducing water consumption. Waste water collected from floor drains in cleaning areas would drain to a 1,000 gallon holding tank and sent to the onsite supplemental water treatment system before going to sewer or being reused for landscaping purposes. All other uses, toilets, hand washing sinks, fountains etc. would drain to the City of Arcata Wastewater Treatment Plant by the Fieldbrook Glendale Community Services District.

The site proposes to install 26,000 sf of landscaping. The landscape design identifies designated composting areas, trees, and grass to be planted and areas that include storm water capture basins. The building's roofing design include gutters and channels built to disperse rain runoff into the planned capture basins that slow down and naturally filter water. City of Arcata Wastewater Treatment Plant provides stormwater drainage facilities to the project area.

The Fieldbrook Glendale Community Services District has capacity for additional wastewater treatment. Wastewater flows in 2014 range between 31,600 gallons per day (gpd) during dry weather and 62,400 gpd during wet weather. The Fieldbrook Glendale Community Services District's existing contract with the City of Arcata allows for up to 71,200 gpd average dry weather flow, and therefore the system has capacity for additional use. The Fieldbrook

Glendale Community Services District is researching additional methods to increase their capacity to treat wastewater in order to accommodate growth projected for the area.

The project would not require or result in the relocation or construction of new expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Impacts would be less than significant, and mitigation would not be necessary.

b) Finding: The project will 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: The project site is served by the Fieldbrook Glendale Community Services District, which purchases treated water from Humboldt Bay Municipal Water District (HBMWD) for delivery to its customers. The Fieldbrook Glendale Community Services District is currently using approximately about 56 percent of its contracted water allotment from HBMWD during peak demand (HLAFC, 2015). The proposed project would use approximately 42,340 gallons of water per month and a total of 508,080 gallons of water per year. An additional 8,400 gallons of water would be needed per month for landscape irrigation; however, the project applicant proposes to reuse clean spent cultivation irrigation water for landscape irrigation.

The proposed project would have sufficient water supplies available to serve the project during normal, dry and multiple dry years. Impacts would be less than significant, and no mitigation would be necessary.

c) Finding: The project will not result in a determination by the wastewater treatment provider which services or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. *Less than significant impact.*

Discussion: Wastewater from the project would drain to the City of Arcata Wastewater Treatment Plant by the Fieldbrook Glendale Community Services District. Wastewater flows in 2014 range between 31,600 gpd during dry weather and 62,400 gpd during wet weather. The Fieldbrook Glendale Community Services District's existing contract with the City of Arcata allows for up to 71,200 gpd average dry weather flow, and therefore the system has capacity for additional use. The Fieldbrook Glendale Community Services District is researching additional methods to increase their capacity to treat wastewater in order to accommodate growth projected for the area.

The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant, and no mitigation would be necessary.

d) Finding: The project will 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. *Less than significant impact. See Discussion for Finding e).*

e) Finding: The project will not violate any federal, state, and local management and reduction statutes 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 2012, the unincorporated area of Humboldt County met or exceeded the waste diversion mandate of 50 percent set by the Integrated Waste Management Act of 1989.

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 be stored in secure containers in a covered area and picked up weekly by Recology Arcata located at 555 Vance Avenue, Samoa, CA. Solid waste from Humboldt County is largely transported to one of three out-of-area landfills for disposal: the Anderson Landfill in Shasta County; Dry Creek Landfill in Medford, Oregon; and Potrero Hills Landfill in Suisun City. The Anderson Landfill is not expected to close until 2036, Dry Creek is expect to remain open until 2099, and Potrero Hills until 2053.

The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. *Less than significant impact.*

The proposed project woudl not violate any federal, state, and local statutes and regulations related to solid waste. *Less than significant impact.*

Findings:

a) The project will notrequire 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**.

b) The project will 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**.

c) The project will not result in a determination by the wastewater treatment provider which services or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments: **Less than significant impact**.

d) The project will 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: **Less than significant impact**.

e) The project will not violate any federal, state, and local management and reduction statutes and regulations related to solid waste: **Less than significant impact**.

5.20 WILDFIRE

If located in or near state reposnsibility areas or lands classified as very high servity zones, would the project:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	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 infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Setting:

Senate Bill (SB) 1241 (2012) requires the legislative body of a city to adopt a comprehensive, long-term general plan that includes a safety element for the protection of the community from unreasonable risks associated with wildland and urban fires. The update of the safety element must address fire risks on land classified as State Responsibility Area (SRA) and very high fire hazard severity zones.

The Humboldt County General Plan section on Fire Hazards outlines policies that address and reduce fire risk in the County. Policies include improving subdivision design and building code conformance, increasing information exchange and education, and encouraging prescribed burning and native plant conservation. The Humboldt County Community Wildfire Protection Plan gives further guidelines on how these policies will be implemented.

The proposed project is located in an SRA and is in a moderate fire hazard severity zone, as is the majority of the community of Glendale. Fire response is provided by Blue Lake Fire Protection District. Generally, structural fire protection is the responsibility of local agencies, such as fire protection districts; wildland fire protection is the responsibility of federal and state agencies.

Analysis:

a) Finding: The project will not substantially impair an adopted emergency response plan or emergency evacuation plan*. Less than significant impact.*

Discussion: The project site is located within the Eureka Plain Wildfire Planning Unit. Evacuees from this area will either travel north or south along Highway 101, or east on Highway 299, based on fire behavior, wind patterns, traffic, and ingress of emergency vehicles (HCFSC 2013). The project site is located in an urban area already served emergency responders and is located within 0.5 miles of a designated evacuation route; therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

b) Finding: The project will not exacerbate wildfire risks, due to slope, prevailing winds, and other factors and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. *Less than significant impact.*

Discussion: The project is situated within an urbanized area and a moderate fire hazard severity zone. The site is flat, and there are no plans to introduce slopes that may increase wildfire risks. The proposed project is a cannabis cultivation, processing, manufacturing, and distribution facility, and project occupants would only be on site during business hours; hours of operation are Monday through Saturday, 7:00 am to 7:00 pm. The relatively low risk of wildfire combined with the limited hours of occupation reduce the risks of wildfire impacts on project occupants to a less than significant level.

c) Finding: The project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment*. Less than significant impact.*

Discussion: The project site is located in a mixed use area in the community of Glendale. The Humboldt County General Plan designates the project area as "Commercial Services" (CS). The CS designation provides for heavy commercial uses and compatible light industrial uses not serving day to day needs. Full range of urbans services required (i.e., good access, public sewer and water, electricity, fire protection, and waste disposal). As the General Plan designation of the project area requires an adequate range of infrastructure, the project would not create additional installation or maintenance requirements for infrastructure.

d) Finding: The project will 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: The project site is flat and entirely paved. The proposed project design converts 26,000 square feet of paved surface into landscaping. This reduction in impermeable surface at the project site would reduce the quantity and intensity of runoff. This change in drainage patterns would decrease the risk of downstream flooding. Generally, landslides are expected to occur most often on slopes steeper than 15 percent grade; the project site will remain flat, thus decreasing the risk of landslides due to post-fire slope instability. The project will not expose people or structures to significant risks.

Findings:

a) The project will not substantially impair an adopted emergency response plan or emergency evacuation plan: **Less than significant impact.**

b) The project will not exacerbate wildfire risks, due to slope, prevailing winds, and other facter, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire: **Less than significant impact**.

c) The project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment: **Less than significant impact.**

d) The project will 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**.

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

Pursuant to CEQA guidelines Section 15065, an EIR shall be required where any of the following conditions occur:	Potentially Significant	Potentially Significant Unless Mitigation Incorp.	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable (the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Setting:

The project has been reviewed in Sections 5.1 through 5.20 for questions a) and c), above and determined to have no potentially significant unmitigated impact. With implementation of proposed mitigation measures CUL-1 and NOI-1, all potentially significant impacts would be reduced to less than significant.

Analysis:

a) Finding: The 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 proposed to reduce those impacts to less than significant levels. Accordingly, with incorporation of the proposed mitigation measures, the proposed project would not substantially degrade the quality of the environment and impacts would be less than significant.

Mitigation:

Mitigation Measures CUL-1 and NOI-1 discussed in this document shall apply (See Chapter 6, Discussion of Mitigation Measures, Monitoring, and Reporting Program).

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

Discussion: An analysis of cumulative impacts considers the potential impacts of the project combined with the incremental effects of other approved, proposed, and reasonably foreseeable similar projects in the vicinity. The area considered for this cumulative analysis (study area) is the developed area bounded on the northwest by Fieldbrook Road, southwest by the Mad River, and southeast and northeast by Hall Creek. Lands within the study area are predominantly commercial/industrial and residential. There are four other proposed multi-function cannabis facilities in the study area. These projects are all in the application process, and some of them are still conceptual in nature. Table 2 summarizes the projects in the study area, which collectively are referred to as the "cumulative projects."

Table 2. Cumulative Projects

APN	Project Type	Size (sf)	Location	Employees[1]	Water Use[2]
Approved					
--	--	--	--	--	--
Pending					
516-151-003, -004	Cultivation Manufacturing and Processing	6,500 N/A	1678 Glendale Drive	4	N/A
516-161-005	Cultivation Distribution Manufacturing Processing	7,700 2,200 3,000 3,250	1400 Glendale Drive	8-12	N/A
516-101-052	Cultivation	10,000	1485 Glendale Drive	75-100	N/A
516-151-019	Cultivation Distribution Processing and Manufacturing	~800,000 5,000 40,000	1610 Glendale Drive		

516-111-064	Cultivation Processing Manufacturing Distribution	16,710 9,000 7,520 2,226	Proposed Project 1691 Glendale Drive	22	681,600
Total				**109-138**	**N/A**

[1]Non-resident
[2]Estimated gallons per month; sourced from municipal connections to the Glendale-Fieldbrook Community Services District

The proposed project would result in no impact to agriculture and forestry resources, mineral resources, or recreation and would therefore not contribute to cumulative impacts to those resources. Consequently, those resources are not discussed further in this section.

Aesthetics

As discussed in Section 5.1 – *Aesthetics*, the cumulative projects are located in an area with relatively low visual quality and no significant scenic resources. While the proposed project would represent a visual change to the project site, the project would be consistent with the surrounding light industrial land uses. Other proposed cannabis facilities would bbe situated in the immediate vicinity of the porposd project on lands of a similar use type. Given that the project site and its neighboring parcels are zoned Unclassified, the proposed project would not contribute to an incremental degradation of the aesthetic character of the study area over what would exist under current zoning. The incremental aesthetic effects of the cumulative projects would not combine to result in a cumulatively significant impact.

The proposed project and the cumulative projects would incorporate minimum lighting and would be required to comply with County lighting standards and ordinances. Therefore, the project's contribution to light and glare would not be considerable, and the cumulative projects would not combine to result in a significant impact.

Air Quality

The cumulative projects would not result in a significant impact to air quality. Two of the projects are in existing buildings. The applications for the other cumulative projects are at varying levels of completion, and the proposed project is the furthest along. The largest project is still conceptual and may be several years from being permitted. Consequently, the projects would have a staggered implementation schedule, and the construction impacts to Air Quality shouldn't be cumulative. The cumulative projects would not result in significant new construction, new traffic volumes, or new sources of air pollution. Potential effects from individual projects would be mitigated to less than significant and the cumulative effects would be less than significant. The proposed project's contribution to air quality resource-related impacts would not be considerable, and the cumulative projects would not combine to result in a significant impact.

Biological Resources

As discussed in Section 5.4 – *Biological Resources*, construction of the proposed project has low potential to impact regionally-occurring special-status plant and animal species to occur in the project site. Tthe proposed project would not affect riparian habitat or wetlands, or other biological resources such as migration corridors, wildlife nursery sites, and habitat conservation plans and so would not contribute to a cumulative impact to those resources.

As such the project would not result in a considerable contribution to cumulative effects on biological resources.

Cultural Resources

As discussed in Section 5.5 – *Cultural Resources*, the project has potential to affect previously undiscovered cultural and paleontological resources that may be revealed during ground disturbance activities associated with construction. The inadvertent discovery protocols required would reduce any such impact to less than significant (Mitigation Measure CUL-1). Because each cultural resource is unique to a physical location, and inadvertent discovery protocols require notification and documentation of any cultural resource inadvertently discovered, no cumulative impact to cultural resources is possible from similar potential project-level impacts on other project sites.

Energy

As discussed in Section 5.6 – *Energy*, the project applicant proposes to install solar panels on all available roof top space for each proposed building. If the renewable energy from the solar panels does not provide enough energy to cover the entirety of the proposed project's energy usage, the project applicant will set up an account with a carbon offset company (like TerraPass) and purchase the remaining amount needed. As such the project would not result in a considerable contribution to cumulative impacts on energy resources.

Geology and Soils

As discussed in Section 5.7 – *Geology and Soils*, the proposed project has potential to expose people using the project site to geologic hazards from ground shaking and liquefaction. Implementation of the site-specific design requirements recommended in the soils report to be prepared as part of the building permit process would reduce impacts to less than significant. The project would create these hazards only for people using the project site, and no component of the project would affect the geologic hazard to any other property. Consequently, the project could not contribute to any cumulative impact to geology and soils.

Greenhouse Gas Emissions

As discussed in Section 5.8 – *Greenhouse Gas Emission*, the proposed project would result in less than significant impacts related to GHG emissions. The cumulative projects would have a combined maximum staffing level of 138 employees. The cumulative projects are consistent with the County's 2012 Draft Climate Action Plan strategies for reducing greenhouse gas emissions. As previously mentioned, the NCUAQMD has not adopted thresholds of significance for greenhouse gas emissions. The project would not result in a considerable contribution to greenhouse gas impacts, and the projects would not combine to result in a cumulatively significant impact.

Hazards and Hazardous Materials

The cumulative projects would not use large amounts of hazardous materials nor would their proximity create a threat by concentrating these materials in one area. The area is designed to facilitate commercial and light industrial uses in the area, and revitalizing former industrial lands would not obstruct emergency services, nor create new hazards. Operation of the proposed commercial medical cannabis facilities under the cumulative projects would involve the use of fuels, fertilizers, pesticides, and other related products. The County has ordinances applicable to cannabis operations that address impacts from the storage and use of hazardous materials. The projects would be required to comply with the regulations. With individual projects conforming to all standards for handling hazardous materials, there would be no additive effect of the cumulative projects. The proposed project would not result in a considerable contribution to

hazards and hazardous materials impacts, and the cumulative projects would not combine to result in a significant impact.

Hydrology and Water Quality

As described in Section 5.10 – *Hydrology and Water Quality*, the proposed project would result in less than significant impacts related to hydrology and water quality. Construction activities for each of the projects would be conducted in accordance with the County's grading regulations and BMPs, including temporary erosion and runoff control measures in accordance with the General Plan, and would be implemented during construction to minimize the potential for erosion and storm water runoff. Individually, the projects would not result in considerable contribution to a reduction in water quality, on- or off-site flooding, or a violation of water quality or discharge requirements, and the projects would not combine to result in a cumulatively significant impact.

The projects would not result in a substantial depletion of ground water and would not be cumulatively considerable. The projects would use municipally sourced water and can only be permitted after the service district has verified that the water is available.

In summary, the project would not result in a considerable contribution to hydrology and water quality impacts, and the projects would not combine to result in a cumulatively significant impact.

Land Use and Planning

As discussed in Section 5.11 – *Land Use and Planning*, the proposed project is consistent with the General Plan land use designation and the zoning for the project site. The proposed project does not include any change to the land use designation or zoning of the project site, and therefore any impacts to land use and planning on the site would be unique to the project site and not affect land use and planning on adjacent properties. Consequently, the proposed project could not contribute to any cumulative impacts to land use and planning.

Noise

As discussed in Section 5.13 - *Noise*, the nearest sensitive receptors to the project site are single family residential units, the nearest of which are 10 feet north of the property line and 30 feet east of the property line. During construction, noise generated at the proposed project site could combine with noise generated by projects in the immediate vicinity and result in cumulatively higher noise levels. Mitigation Measure NOI-1 would be implemented to reduce construction noise impacts to a level of less than significant. During operation, normal operational activities of the proposed project and cumulative project would not combine to result in a cumulative impact. However, the applicant has indicated that the HVAC units would be located in enclosed structures with proper ventilation and located as northwest as possible on the site to reduce the noise level for surrounding neighbors and wildlife. The cumulative projects are separated by sufficient distance that no two likely share any sensitive noise receptors and, therefore, each project's potential noise impacts would be unique to it. Furthermore, other cumulative projects would be required to mitigate noise impacts to less than significant; therefore, the cumulative projects would not have a significant cumulative impact.

Population and Housing

The cumulative projects do not include construction of any housing. The combined maximum staffing requirements for the cumulative projects would be 138 people, who would have immediate access to the urban centers of Arcata, McKinleyville, and Blue Lake. The construction workers and operational workers for the proposed project and cumulative projects are expected

to be drawn from the existing labor pool in the region and would not directly result in population growth.

The cumulative projects are served by existing roads and would not result in the extension of roads or major utilities to lands not currently served. There would be no displacement of housing or population. The proposed project would not contribute to population and housing impacts, and the cumulative projects would not combine to result in a significant impact.

Public Services

The potential demand for Fire Department Services is expected to be very low at the project site. The proposed, and cumulative projects would not combine to result in the need for new or expanded facilities.

The potential demand for Sheriff's Department services at the project site may increase due to the proposed land use. The proposed and cumulative projects would be required to implement Safety Plans in accordance with the CMMLUO, which would avoid the need for additional Sheriff's Department services. Individually, the projects would result in less than significant impacts and would not cumulatively result in the need for new or expanded facilities.

There would be little or no demand for other County services from the proposed project and cumulative projects, and thus would not cumulatively result in the need for new or expanded facilities. The proposed project would not result in a considerable contribution to public services, and the cumulative projects would not combine to result in a significant impact.

Transportation/Traffic

As discussed in Section 5.17 – *Transportation/Traffic*, the proposed project would result in less than significant impacts related to transportation/traffic. Construction traffic would be minimal and temporary. Construction traffic from other cumulative projects would not combine to result in a cumulative transportation/traffic impact.

Operation of the cumulative projects would generate up to 1,000 vehicle trips per day on Highway 299, which would be a 25 percent increase in the traffic volume. All of the cumulative projects are a short distance (less than a half mile) from a highway onramp/offramp on Glendale Drive. Both Glendale Drive and the highway access routes have a functional capacity of 350 vehicles per hour. The cumulative projects would create traffic vlumes that are within the historical and designed limits.

The project would result in no impacts to traffic patterns and adopted policies, plans, and programs. The project would not result in a considerable contribution to transportation/traffic impacts, and the projects would not combine to result in a cumulatively significant impact.

Tribal Cultural Resources

As discussed in Section 5.18 – *Tribal Cultural Resources*, the project has potential to affect previously undiscovered tribal cultural resources that may be revealed during ground disturbance activities associated with construction. The inadvertent discovery protocols required as part of permit approval would reduce any such impact to less than significant. Because each tribal cultural resource is unique to a physical location, and inadvertent discovery protocols require notification and documentation of any tribal cultural resource inadvertently discovered, no cumulative impact to tribal cultural resources is possible from similar potential project-level impacts on neighboring properties.

Utilities and Service Systems

As described in Section 5.19 – *Utilities and Service Systems*, the project-level impacts to utilities and service systems from the proposed project would be less than significant. Wastewater would receive preliminary treatment on-site and stormwater discharge would be less than pre-project levels. The proposed project would not contribute to any cumulative impact, as all effects of the proposed project on wastewater and storm water treatment would be confined to the project site.

Successful permitting of the project requires assurances from the provider of water and sewer services that they have the capacity to serve these additional projects. The proposed project has received such assurances. If the capacity is not available to serve subsequent projects, then the service provider will inform the applicant of that, and the project will not be permitted.

Solid waste in Humboldt County is transported to landfills outside the County; therefore, cumulative effects of the project on solid waste disposal would depend on County-wide growth and development, which is outside the scope of this analysis.

Wildfire

As discussed in Section 5.20 – *Wildfire*, potential project impacts to the risks of wildfire would be less than significant. The project is situated within an urbanized area and a moderate fire hazard severity zone. The site is flat, and there are no plans to introduce slopes that may increase wildfire risks or post-fire slope instability. Therefore, no cumulative impact to the risk of wildfire would occur.

Mitigation:

Mitigation Measures CUL-1 and NOI-1 discussed in this document shall apply (See Chapter 6, Discussion of Mitigation Measures, Monitoring, and Reporting Program).

c) Finding: the project would 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 the instance where the proposed project has the potential to result in direct or indirect adverse effects to human beings, a mitigation measure has been identified to reduce the impact to below a level of significance. With implementation of Mitigation Measure NOI-1 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.

6.0 DISCUSSION OF 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 measures that address and mitigate potentially significant adverse impacts to a level of non-significance follows. A mitigation monitoring and reporting program checklist is attached.

Mitigation:

CUL-1 Inadvertent Discoveries of Cultural Resources and Human Remains.

If cultural resources, such as lithic materials or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

Prehistoric materials which could be encountered include: obsidian and chert debitage or formal tools, grinding implements (e.g., pestles, handstones, bowl mortars, slabs), locally darkened midden, deposits of shell, faunal remains, and human burials. Historic materials which could be encountered include: ceramics/pottery, glass, metals, can and bottle dumps, cut bone, barbed wire fences, building pads, structures, trails/roads, etc.

If human remains are discovered during project construction, work would stop 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 remains 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.

NOI-1 Construction Related Noise

The following shall be implemented during construction activities:

- The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- All stationary and construction equipment shall be maintained in good working order and fitted with factory approved muffler systems.

7.0 EARLIER ANALYSES

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 16063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

1. Humboldt County General Plan (2017)

2. Revised Draft Environmental Impact Report for the General Plan Update (2017)

3. CEQA Mitigated Negative Declaration for the Medical Marijuana Land Use Ordinance – Phase IV – Commercial Cultivation of Cannabis for Medical Use.

4. Humboldt County Zoning Ordinance

These items are available for review at Humboldt County Planning Division.

8.0 REFERENCES

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HUMBOLDT COUNTY PLANNING & BUILDING DEPARTMENT
MITIGATION MONITORING REPORT

For the Michael Brosgart Conditional Use and Special Permits

APN 516-111-064; Case Nos. CUP16-1096, CUP16-1127, SP16-868, SP16-870, SP16-871, and SP16-872; App Nos. 13312, 13319, 13328, 13339, 13346, and 13360

The project applicant is applying for two Conditional Use Permits and four Special Permits for a wholesale nursery, indoor cultivation, processing, volatile manufacturing, non-volatile extraction manufacturing, and distribution, in accordance with Humboldt County Code Section 314-55.4.8.7. The proposed project includes the construction of approximately 28,000 square feet (sf) of new buildings, 22,000 sf of driveway and parking areas, and 26,000 sf of new landscaping, which comprises nearly 100 percent of the project site.

Water Use and Storage

The projected water use is based on a) personnel usage for restrooms, hand washing sinks, and water fountains, b) sanitary stations for cleaning equipment, utensils, and storage/transfer containers, and c) cannabis activity water use for all proposed project operations. The proposed project would use approximately 42,340 gallons of water per month.

The water for the project site is provided by Fieldbrook-Glendale Community Services District via a 6-inch water main. Water used for indoor cultivation is stored in two 1,000-gallon holding tanks for dechlorinization and secondary reverse osmosis treatment.

An additional 8,400 gallons of water would be needed per month for landscape irrigation; however, the project applicant proposes to reuse clean spent cultivation irrigation water for landscape irrigation. Waste water from organic indoor cultivation would be drained into a 1,000-gallon holding tank and used for landscape irrigation. Waste water collected from floor drains in cleaning areas would be drained into a 1,000-gallon holding tank and sent to the on-site water treatment system before reuse or transfer to the sewer system.

Employees and Schedule of Operations

At peak operation, the estimated maximum number of staff on-site would be 22 employees.

The following table summarizes the square footage and staffing for each of the proposed uses:

Table 1. Summary of Staffing for Proposed Uses

Proposed Use	sf	Employees
Indoor Cultivation	10,000	3
Volatile Manufacturing Facility	3,120	3
Non-volatile Extraction Manufacturing Facility	4,400	4
Distribution Center	2,226	3
Processing Facility	9,000	5
Wholesale Nursery	6,710	4
Total	**35,456**	**22**

Hours of operation are Monday through Saturday, 7:00 am to 7:00 pm.

Access/Parking

The project site is currently accessed directly off Glendale Drive via an existing driveway on the adjacent parcel to the west (APN 516-111-066). In accordance with the Department of Public Works' standards, the project applicant would be required to construct two 24-foot-wide commercial driveways that meet County Urban Driveway No. 1 standards.

The project would provide twenty-one parking spaces along the eastern side of buildings B and C (including two ADA-compliant accessible spaces), six parking spaces along the western side of buildings B and C, and fifteen parking spaces between buildings A and B. Total off-street parking provided would be 42 spaces.

Storm water Management

The project site is flat and completely paved. Approximately 33 percent of the project site would be landscaped with designated composting areas, trees, grass, and storm water capture basins. The roofing of the proposed buildings would include gutters and channels designed to disperse rain run off into the proposed storm water capture basins to slow down and naturally filter runoff.

Watershed Protection

There are no naturally-occurring aquatic resources, streamside management areas (SMAs), or sensitive habitat areas on or adjacent to the project site. Hall Creek is approximately 700 feet south of the project site with light industrial and vacant lands between the project site and the SMA for the creek. The property is in the Mill Creek-Mad River Hydrologic Unit (HUC-12) and the Mad River Planning Watershed. The perimeter of the project site would be fully fenced to discourage wildlife from entering the project site.

On-site Water Treatment Facility

The proposed project includes a supplemental water treatment system for personnel and industry waste water used by cannabis processing and manufacturing activities on site. The proposed facility would be approximately 1,066 sf and would be situated in the southwest corner of Building C. The proposed onsite water treatment system would treat approximately 800 gallons of waste water per hour and is designed to remove hydrocarbons and solids. Waste water will be discharged to the Glendale-Fieldbrook Community Services District sewer system.

Hazardous Materials and Waste

The proposed cultivation would utilize a hydroponic soil-less growing medium. The medium would consist primarily of cococoir (coconut husk), perlite, and liquid and top dressed amendments. Top dressed amendments include liquid teas from locally sourced bacteria with kelp, molasses, and teas added. Adding teas to the soil mixture makes the medium naturally act as fertilizer and pesticide.

All pesticides, fertilizers and/or soil amendments would be stored on site separately from Hazardous/Toxic materials, each in a properly constructed and maintained storage room that would protect personnel and the environment.

The proposed project includes volatile extraction operations. Solvents used in extraction would include food grade ethanol, hexane, carbon dioxide, and butane. All chemical extractions using volatile solvents would be conducted in a closed loop extraction system that was commercially manufactured for that purpose.

Odors

Ventilation and control equipment would be installed to control dust, odor, and vapors that would prevent or reduce cross contact or contamination of cannabis produces, cannabis product packaging materials, and cannabis product contact surfaces. Additionally, rubbish disposal would be conveyed, stored, and/or disposed of to minimize the development of odor, deflect attraction of pests, and protect against cross contamination of any cannabis products.

Electrical Service

Electricity on the property is supplied by Pacific Gas and Electric (PGE). The project applicant proposes to install solar panels on all available roof top space for each proposed building. The exact square footage is currently unknown but will be determined when final building plans have been developed. If the renewable energy from the solar panels does not provide enough energy to cover the entirety of the proposed project's energy usage, the project applicant will set up an account with a carbon offset company (like TerraPass) and purchase the remaining amount needed.

Project Location: The project site is located in Humboldt County in the Fieldbrook area, approximately 1.5 miles north west of Blue Lake, and access to the site is via Glendale Drive off State Highway 299. The project is on the property known as 1691 Glendale Drive. The project site is in Section 13, Township 6 North, Range 1 East, Humboldt Base and Meridian.

Application Numbers: 13312, 13319, 13328, 13339, 13346, and 13360
Case Numbers: CUP16-1096, CUP16-1127, SP16-868, SP16-870, SP16-871, and SP16-872

Assessor Parcel Number: 208-071-012

Mitigation measures were incorporated into conditions of project approval for the above-referenced project. The following is a list of these measures and a verification form that the conditions have been met. For conditions that require on-going monitoring, attach the Monitoring Form for Continuing Requirements for subsequent verifications.

Mitigation Measures:

CUL-1 Inadvertent Discoveries of Cultural and Paleontological Resources, and Human Remains

If cultural resources, such as lithic materials or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (January 1999 Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendation for further action.

Prehistoric materials which could be encountered include: obsidian and chert debitage or formal tools, grinding implements (e.g., pestles, handstones, bowl mortars, slabs), locally darkened midden, deposits of shell, faunal remains, and human burials. Historic materials which could be encountered include: ceramics/pottery, glass, metals, can and bottle dumps, cut bone, barbed wire fences, building pads, structures, trails/roads, etc.

In the event that paleontological resources are discovered, work shall be stopped within 20 meters of the discovery and a qualified paleontologist shall be notified. The paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in State CEQA Guidelines Section 15064.5. If fossilized materials are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agency to determine procedures that would be followed before construction is allowed to resume at the location of the find.

If human remains are discovered during project construction, work would stop 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 remains 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	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activities.	Continuous		HCP&BD**		

HCP&BD = Humboldt County Planning and Building Department

NOI-1 Construction Related Noise

The following shall be implemented during construction activities:

- The operation of tools or equipment used in construction, drilling, repair, alteration or demolition shall be limited to between the hours of 8 A.M. and 5 P.M. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- No heavy equipment related construction activities shall be allowed on Sundays or holidays.
- All stationary and construction equipment shall be maintained in good working order, and fitted with factory approved muffler systems.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes | No	Comments / Action Taken
During construction activities.	Ongoing		HCP&BD		

HCP&BD = Humboldt County Planning and Building Department

Appendix A

Figures

Michael Brosgart Project

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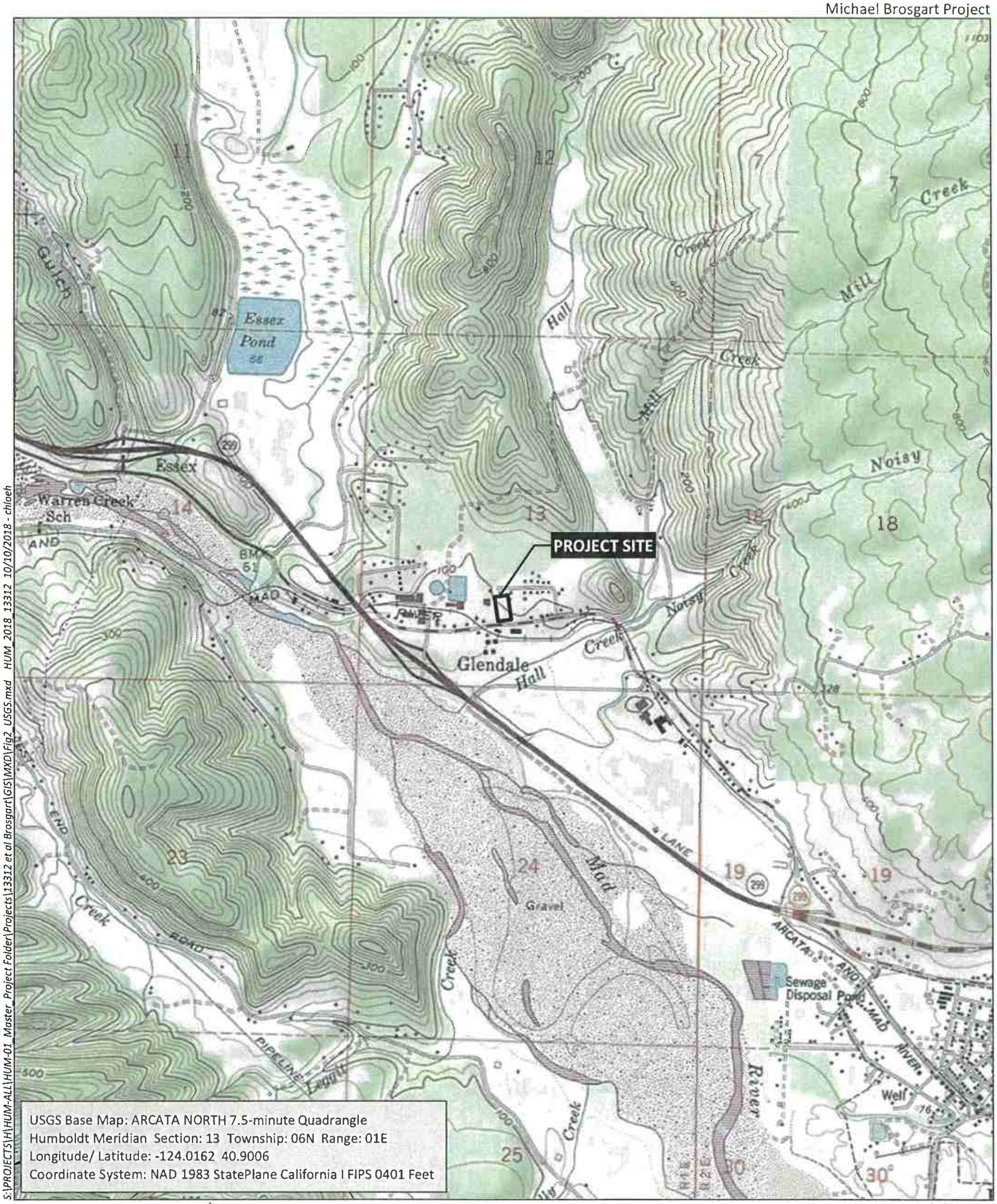
Source: Base Map Layers (NAIP)

HELIX Environmental Planning

Aerial Map

Figure 1

Michael Brosgart Project



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Source: Base Map Layers (USGS, NGS)

0 2,000 Feet

HELIX
Environmental Planning

Topography Map

Figure 2

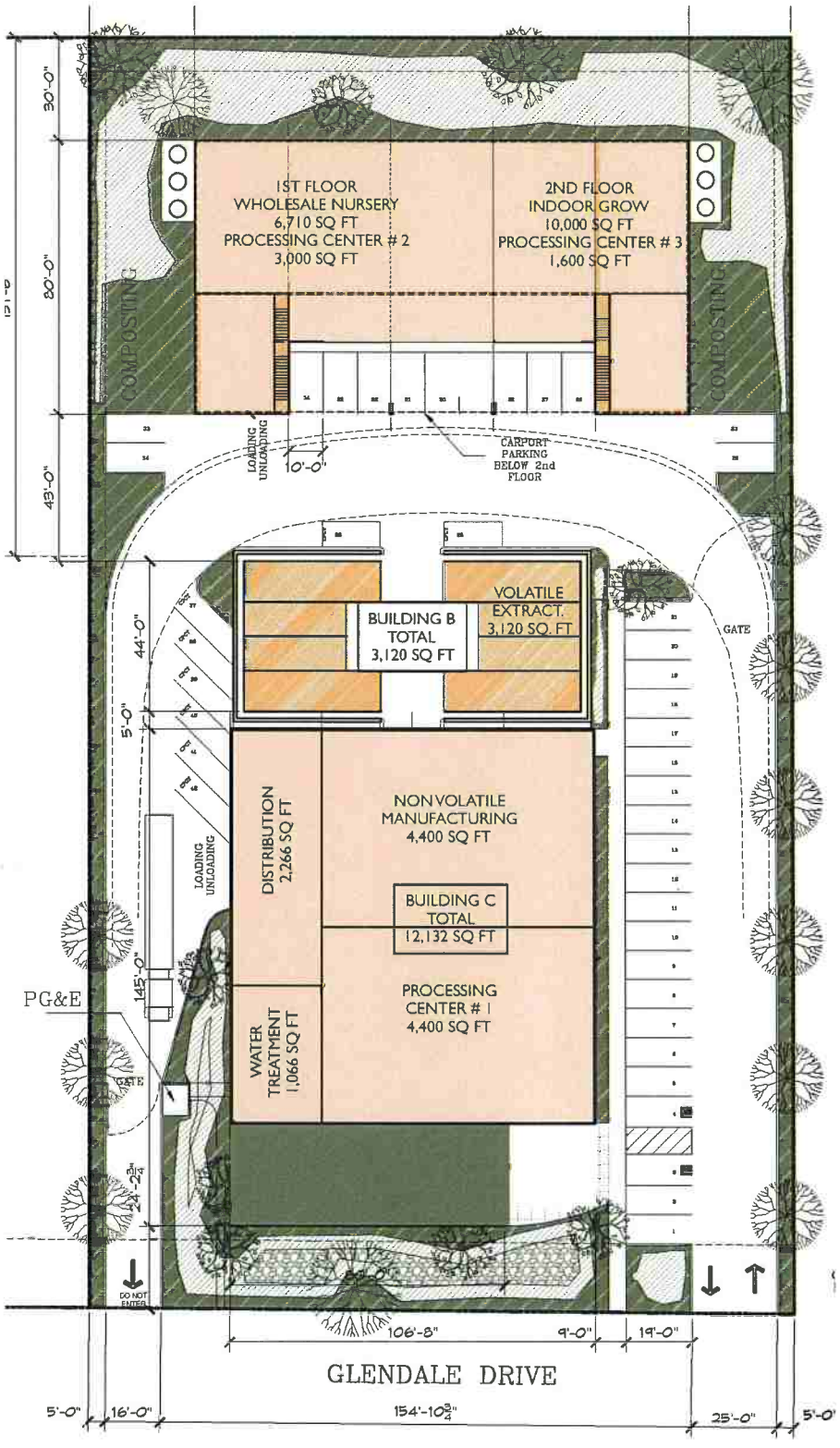
S:\PROJECTS\H\HUM-ALL\HUM-01_Master_Project Folder\Projects\13312 et al Brosgart\GIS\MXD\Fig3_Zoning.mxd HUM_2018_13312 10/10/2018 - chloeh

Source: Zoning Designations (Humboldt County), Base Map Layers (NAIP)

HELIX Environmental Planning

Zoning Map

Figure 3



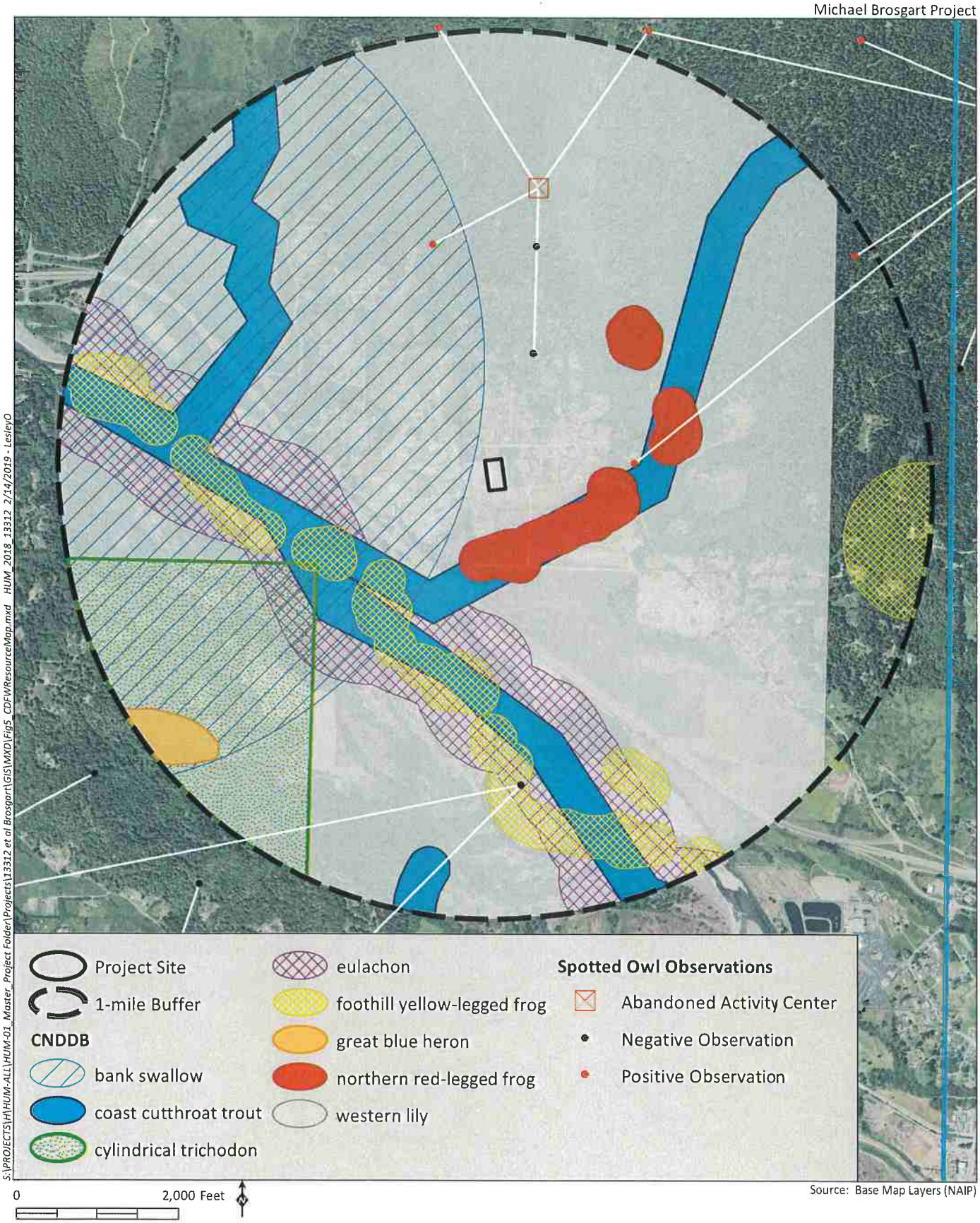
S:\PROJECTS\H\HUM-ALL\HUM-01_Master_Project Folder\Projects\13312 et al Brosgart\GIS\InDesign\Figure 4 Site Plan_Working_V2.indd ABC-01 04/17/17 -!!

Source: Omsberg and Preston

HELIX Environmental Planning

Site Plan

Figure 4



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HELIX Environmental Planning

CDFW Resource Maps

Figure 5

Appendix B

Special-Status Species Database Query Results

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: BIOS selection

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Aplodontia rufa humboldtiana Humboldt mountain beaver	AMAFA01017	None	None	G5TNR	SNR	
Arborimus albipes white-footed vole	AMAFF23010	None	None	G3G4	S2	SSC
Arborimus pomo Sonoma tree vole	AMAFF23030	None	None	G3	S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Ascaphus truei Pacific tailed frog	AAABA01010	None	None	G4	S3S4	SSC
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Carex lyngbyei Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
Castilleja ambigua var. humboldtiensis Humboldt Bay owl's-clover	PDSCR0D402	None	None	G4T2	S2	1B.2
Chloropyron maritimum ssp. palustre Point Reyes salty bird's-beak	PDSCR0J0C3	None	None	G4?T2	S2	1B.2
Coptis laciniata Oregon goldthread	PDRAN0A020	None	None	G4?	S3?	4.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Entosphenus tridentatus Pacific lamprey	AFBAA02100	None	None	G4	S4	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
Fissidens pauperculus minute pocket moss	NBMUS2W0U0	None	None	G3?	S2	1B.2
Lilium occidentale western lily	PMLIL1A0G0	Endangered	Endangered	G1	S1	1B.1
Lycopodium clavatum running-pine	PPLYC01080	None	None	G5	S3	4.1
Mitellastra caulescens leafy-stemmed mitrewort	PDSAX0N020	None	None	G5	S4	4.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Montia howellii Howell's montia	PDPOR05070	None	None	G3G4	S2	2B.2
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus clarkii clarkii coast cutthroat trout	AFCHA0208A	None	None	G4T4	S3	SSC
Oncorhynchus kisutch pop. 2 coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	G4T2Q	S2?	
Oncorhynchus mykiss irideus pop. 16 steelhead - northern California DPS	AFCHA0209Q	Threatened	None	G5T2T3Q	S2S3	
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Pekania pennanti fisher - West Coast DPS	AMAJF01021	None	Threatened	G5T2T3Q	S2S3	SSC
Plethodon elongatus Del Norte salamander	AAAAD12050	None	None	G4	S3	WL
Rana aurora northern red-legged frog	AAABH01021	None	None	G4	S3	SSC
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Rhyacotriton variegatus southern torrent salamander	AAAAJ01020	None	None	G3G4	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
Sidalcea malviflora ssp. patula Siskiyou checkerbloom	PDMAL110F9	None	None	G5T2	S2	1B.2
Thaleichthys pacificus eulachon	AFCHB04010	Threatened	None	G5	S3	
Trichodon cylindricus cylindrical trichodon	NBMUS7N020	None	None	G4	S2	2B.2

Record Count: 37

IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Humboldt County, California

Local office

Arcata Fish And Wildlife Office

(707) 822-7201
(707) 822-8411

1655 Heindon Road
Arcata, CA 95521-4573

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

Marbled Murrelet Brachyramphus marmoratus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/4467

Northern Spotted Owl Strix occidentalis caurina — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1123

Western Snowy Plover Charadrius nivosus nivosus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Yellow-billed Cuckoo Coccyzus americanus — Threatened
There is **proposed** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/3911

Fishes

NAME	STATUS
Tidewater Goby Eucyclogobius newberryi There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Flowering Plants

NAME	STATUS
Beach Layia Layia carnosa No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6728	Endangered
Menzies' Wallflower Erysimum menziesii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2935	Endangered
Western Lily Lilium occidentale No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/998	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE

BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird Selasphorus sasin — Breeds Feb 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9637

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Sep 30
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Great Blue Heron Ardea herodias fannini — Breeds Mar 15 to Aug 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Rufous Hummingbird selasphorus rufus — Breeds Apr 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Western Screech-owl Megascops kennicottii kennicottii — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of

presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

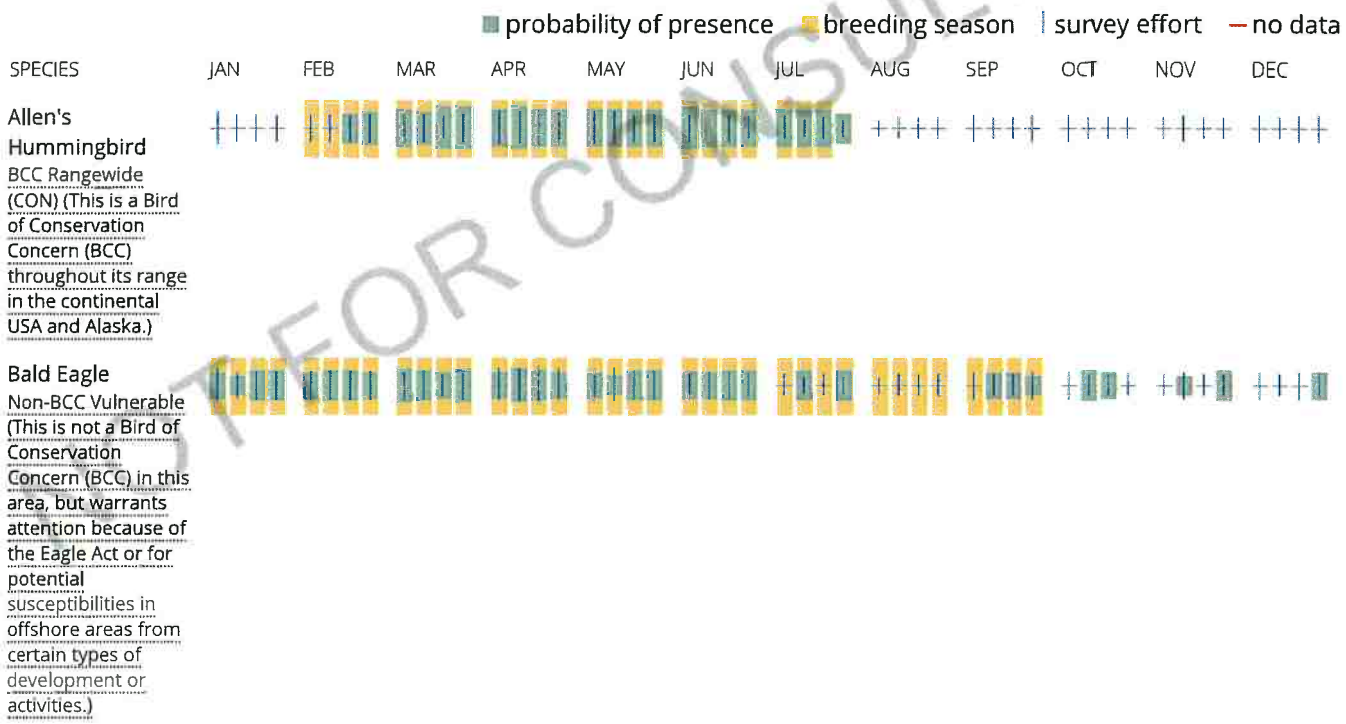
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

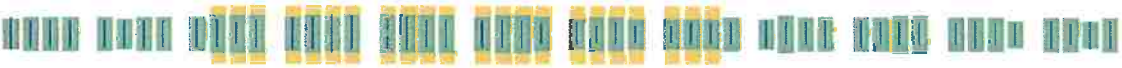
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Great Blue Heron
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



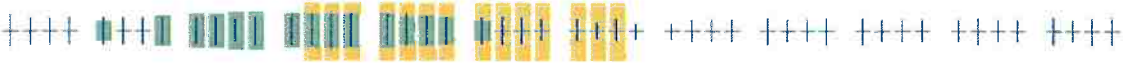
Lesser Yellowlegs
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

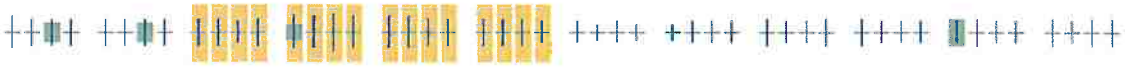
Olive-sided Flycatcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Western Screech-owl
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to

confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Scientific Name	Layia carnosa	Lilium occidentale
Common Name	beach layia	western lily
Family	Asteraceae	Liliaceae
Lifeform	annual herb	perennial bulbiferous herb
CRPR	1B.1	1B.1
GRank	G2	G1
SRank	S2	S1
CESA	CE	CE
FESA	FE	FE
Blooming Period	Mar-Jul	Jun-Jul
Habitat	Coastal dunes, Coastal scrub (sandy)	Bogs and fens, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest (openings)
Micro Habitat		
Elevation Low (m)	0	2
Elevation Low (ft)	0	5
Elevation High (m)	60	185
Elevation High (ft)	195	605
CA Endemic	F	F
States	OR	OR
Counties	HUM, MNT, MRN, SBA, SFO	DNT, HUM
Quads	Tranquillon Mtn. (3412055), Point Arguello (3412056), Surf (3412065), Casmalia (3412075), Monterey (3612158), San Francisco North (3712274), Inverness (3812217), Drakes Bay (3812218), Tomales (3812228), Petrolia (4012433), Fields Landing (4012462), Cannibal Island (4012463), Eureka (4012472), Arcata North (4012481), Tyee City (4012482), Crannell (4112411), Orick (4112431), Requa (4112451)	Fields Landing (4012462), Cannibal Island (4012463), Arcata South (4012471), Eureka (4012472), Arcata North (4012481), Sister Rocks (4112462), Crescent City (4112472)
EO Total	25	16
EO A	2	0
EO B	10	4
EO C	6	5
EO D	0	3
EO X	4	3
EO U	3	1
EO Historical	6	7
EO Recent	19	9

EO Extant	21	13
EO Possibly Extirpated	2	3
EO Extirpated	2	0
	Threatened by coastal development, foot traffic, vehicles, and non-native plants.	Most CA occurrences under DFG management or voluntarily protected by landowners. Threatened by development, herbivory, inappropriate grazing, vegetation succession, and horticultural collecting. State-listed as Endangered in OR. See Erythea 5:103-105 (1897) for original description.
Notes		
Full Scientific Name	Layia carnosa (Nutt.) T. & G.	Lilium occidentale Purdy
Synonyms		
Element Code	PDAST5N010	PMLIL1A0G0
USDA PLANTS Symbol	LACA4	LIOC2
Flora Status		
CBR Reason		
Date Added	1/1/1988	1/1/1974
Date Changed		
Last Update	3/25/2015	3/15/2010