

Appendix BRA

Biological Resources Assessment



Wood Ranch Cannabis Cultivation Project

Biological Resources Assessment

prepared for

Central Balance Company, LLC
P.O. Box 2344
Redway, California 95560

prepared by

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4825 J Street, Suite 200
Sacramento, California 95819

March 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Executive Summary

This document provides the findings of a Biological Resources Assessment prepared by Rincon Consultants, Inc. for the proposed Wood Ranch Cannabis Cultivation Project (project) in Humboldt County, California. The report documents existing conditions at the project site and provides an assessment of potential impacts to sensitive biological resources based upon proposed project plans. The project proposes development of 100,000 square feet of new cannabis cultivation and propagation greenhouses and a 12,500-square foot dry barn in the northern portion of the project site.

The Biological Study Area (BSA) examined for this analysis includes an approximately 218,733 square foot area on the north side of the property.

One natural vegetation community was documented within the project site, annual grassland. However, this community is heavily disturbed by previous use as a motocross track.

No special status plants are expected to occur in the BSA; however, four special status wildlife have some potential to occur: northern spotted owl (*Strix occidentalis caurina*) federally and state threatened, western pond turtle (*Emys marmorata*) state species of special concern (SSC), northern red-legged frog (*Rana aurora*) SSC, Cooper's hawk (*Accipiter cooperii*) SSC. Nesting birds protected by California Fish and Game Code also have the potential to occur within the BSA during the nesting season. These species have a low potential to occur in the BSA, however with implementation of avoidance measures, no impacts to special status or protected wildlife are expected.

No sensitive natural communities or jurisdictional areas were observed in the BSA; however, an ephemeral drainage was observed over 100 feet south of the BSA. With implementation of spill prevention measures, no impacts to jurisdictional areas are expected.

1 Introduction

Central Balance Company, LLC retained Rincon Consultants, Inc. (Rincon) to conduct a Biological Resources Assessment (BRA) for the Wood Ranch Cannabis Cultivation Project (project) north of Garberville, Humboldt County, California. This BRA includes the results of a literature review and field reconnaissance survey and evaluates the potential for impacts to biological resources in accordance with the requirements of the California Environmental Quality Act (CEQA). The Humboldt County Planning Department is the lead agency under CEQA.

1.1 Project Location

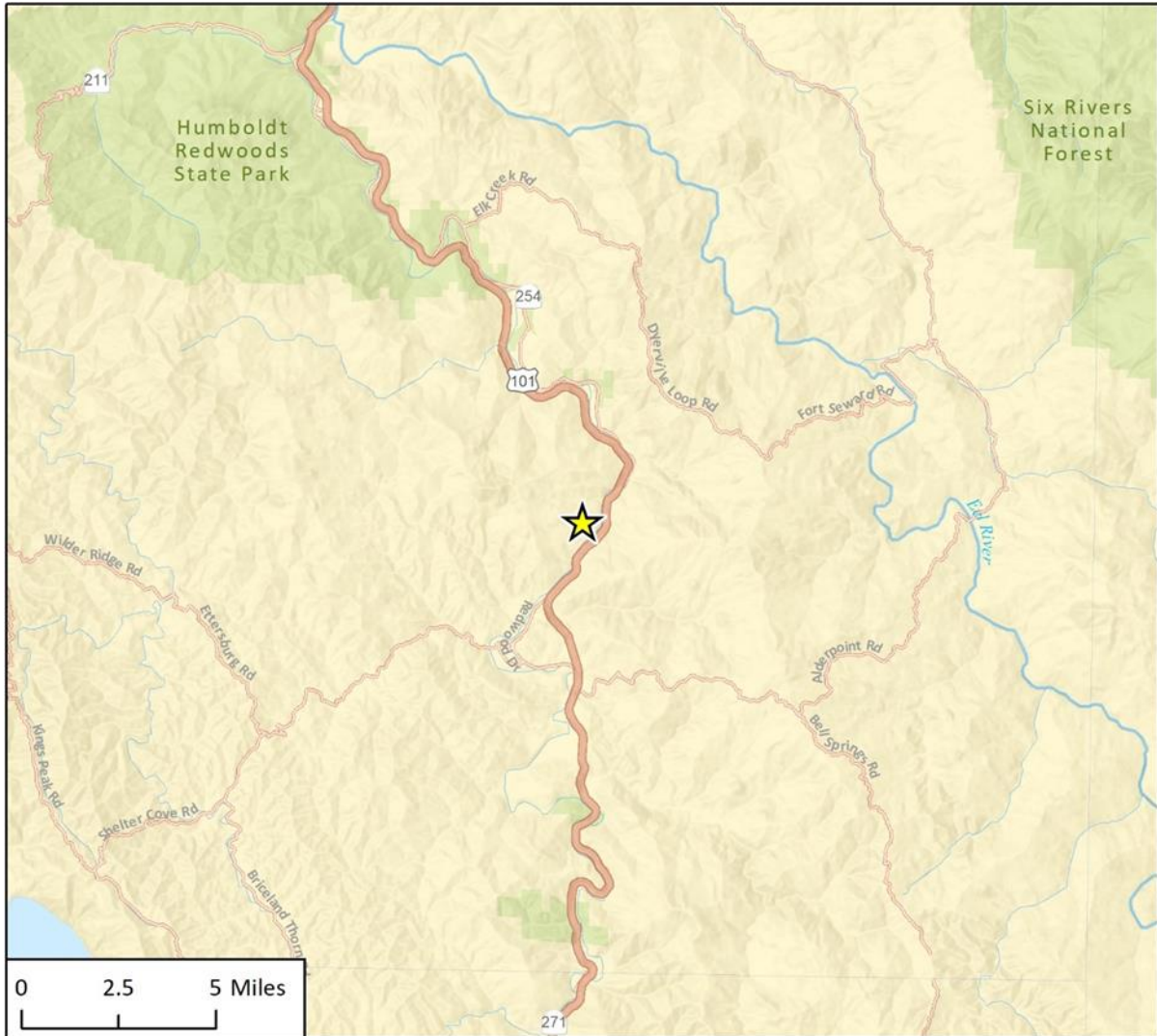
The project site consists of 2.58 acres of an approximately 361-acre parcel at 2-10 Wood Ranch Road (Assessor's Parcel Number 214-142-012) in unincorporated southern Humboldt County, California, approximately 2.9 miles north of the community of Redway (Figure 1). The property lies in Sections 25, 26, 35, and 36 of Township 3 South, Range 3 East and Sections 30 and 31 of Township 3 South, Range 4 East, as shown on the Miranda, California 7.5-minute United States Geographic Survey (USGS) topographic quadrangle (40.173680°, -123.792710°). The eastern parcel boundary follows the South Fork Eel River and is adjacent to Highway 101. Regional access to the project site is provided by Highway 101 from the Redwood Drive ramps (Highway 101 exit 642). Local access to the site is from Wood Ranch Road.

The project site is currently undeveloped, however it was previously developed and used as a motocross track as recently as 2015. The greater parcel also contains four ponds near the site, several heavily wooded areas, and steep slopes from west to east down to the South Fork of the Eel River.

1.2 Project Description

The project would develop approximately 2.58 acres, including 100,000 square feet of new cannabis cultivation and propagation greenhouses in a 124,280-square foot area in the northern part of the project parcel, an expansion of the existing 28,800 square feet of cannabis cultivation and propagation uses on the project site, totaling 128,800 square feet of cannabis uses. The project would also develop a 12,500-square foot dry barn in the same area. The project would not demolish or modify existing facilities. The project includes forty 2,500-square foot greenhouses. The Biological Study Area (BSA) evaluated in this analysis is defined as the approximately 218,733 square foot project footprint, including the cannabis cultivation area, storage containers and a water tank (Figure 2).

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2020.

★ Project Location



Fig 1 Regional Location

Figure 2 Biological Study Area



Imagery provided by Microsoft Bing and its licensors © 2021.

Fig 2 BSA

2 Methodology

2.1 Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special status plant and animal species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by Federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, Humboldt County).

2.1.1 Definition of Special Status Species

For the purposes of this report, special status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA); species that are under review may be included if there is a reasonable expectation of listing within the life of the project
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected, Species of Special Concern, or Watch List by the California Department of Fish and Wildlife (CDFW)
- Species designated as sensitive by the U.S. Forest Service or Bureau of Land Management, if the project would affect lands administered by these agencies
- Species designated as locally important by the Local Agency and/or otherwise protected through ordinance or local policy.

2.1.2 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes (Appendix A):

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- Humboldt County Zoning Ordinance
- Humboldt County General Plan (2017)

2.1.3 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

- a) *Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and 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.*

2.2 Literature Review

Prior to field surveys, Rincon conducted a literature review to characterize the nature and extent of biological resources on and adjacent to the site. The literature review included an evaluation of current and historical aerial photographs of the site (Google Earth 2021), regional and site-specific topographic maps, climatic data, and other available background information. Several studies were conducted by another consultant during project development to inform design for avoidance of aquatic habitats and sensitive biological resources. These studies are herein referenced for the impacts analysis and include: 1) a Feasibility Assessment (Naiad 2021a); and 2) a spring Botanical Survey (Naiad 2021b).

Queries of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation system (IPaC; UFWS 2021a), CDFW California Natural Diversity Database (CNDDDB 2021a), and California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (2021) were conducted to obtain comprehensive information regarding State and federally listed species, as well as other special status species, considered to have potential to occur within the *Miranda, California* USGS 7.5-minute topographic quadrangles and the surrounding eight quadrangles (*Weott, Myers Flat, Blocksburg, Ettersburg, Fort Seward, Briceland, Garberville, and Harris*). The results of database-queries and lists of special status species were reviewed by Rincon's regional biological experts for accuracy and completeness. The final list of special status biological resources to be evaluated is the result of documented occurrences within the 9-quad search area and species known to occur in the region based on the biologists' expert opinions. The results of the species potential-to-occur assessment were compiled into a table presented as Appendix E.

The following resources were reviewed for additional information on existing conditions relating to biological resources in the vicinity of the proposed project:

- Aerial photographs of the maintenance sites and vicinity
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (2021)
- USFWS Critical Habitat Portal (2021b)
- CDFW CNDDDB map of State and federally listed species that have been previously documented within a 5-mile (8-kilometer) radius of the project sites (2021a)
- CNDDDB Biogeographic Information and Observation System (BIOS) (2021b)
- CDFW Special Animals List (2021a)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (2021b)
- A Feasibility Assessment prepared for the proposed project to identify potentially sensitive areas for avoidance (Naiad 2021a)
- Protocol-level Botanical Survey Memorandum, Initial Findings for the Early Season Protocol-Level Botanical Survey APN 214-142-012 (Naiad 2021b)

2.3 Field Reconnaissance Survey

The reconnaissance-level field survey was conducted by Rincon Senior Biologist Samantha Kehr on February 12, 2021. The survey was conducted between 0900 and 1130, conditions onsite were overcast, 55° Fahrenheit (F) to 60°F. The survey consisted of pedestrian transects throughout the BSA to document and field-verify vegetation communities and site conditions, and map the boundaries of vegetation communities and other land-cover types, documented the approximate limits of jurisdictional waters (waters of the state and waters of the U.S., including basins, drainages, vernal pools, ponds, lakes, and creeks as applicable), mapped occurrences of incidental observation of special status species (including state and federal listed species), and developed a list of observed plants and wildlife. Definitive surveys to confirm the presence or absence of special status species were not performed and are not included with this analysis. Definitive surveys for special status plant and wildlife species generally require specific survey protocols, extensive field survey time, and are conducted only at specific time periods of the year.

3 Existing Conditions

3.1 Physical Characteristics

Elevations within the BSA range from approximately 760 to 840 feet (232 to 256 meters) above mean sea level (msl). The climate in this region is generally mild with an annual minimum average temperature of 37°F, a maximum average temperature of 67°F, and an average annual precipitation of 86 inches (WRCC 2020). The topography of the BSA is gently sloping along a ridgetop. The majority of the site has been previously disturbed by grading and use as a motocross track.

3.1.1 Watershed and Drainages

The BSA is located approximately 0.42 miles west of the South Fork Eel River at the southern end of the Eel River watershed (HUC 12-180101060403). The South Fork of the Eel River covers nearly 689 square miles (CDFW 2016). The South Fork Eel River is a 105-mile-long tributary to the Eel River. The South Fork Eel River begins on the west side of the California Coast Range in the Mendocino National Forest and flows northwest where it meets with the Eel River watershed and empties into the Pacific Ocean, approximately 13 miles south of Eureka, California. No drainages occur within the BSA, an ephemeral drainage was observed outside the BSA approximately 120 feet to the south, and four freshwater ponds are located near the BSA (ranging between 215,000 and 1,466,000 gallons in size). Two of the freshwater ponds are located approximately 0.2 miles west of the BSA. The other two ponds are over 0.4 miles away.

3.1.2 Soils

The USDA-NRCS has mapped one soil units within the BSA: Coyoterock-Yorknorth complex, 15 to 50 percent slopes (USDA-NRCS 2010). Coyoterock-Yorknorth complex is comprised of Coyoterock (45 percent), Yorknorth (40 percent), and minor components (15 percent). This soil complex is moderately well drained and occurs on mountain slopes. Coyoterock is derived from colluvium derived from sandstone and/or mudstone and/or residuum weathered from schist. Yorknorth is derived from colluvium derived from sandstone and/or residuum weathered from schist and/or earthflow deposits derived from mudstone.

3.2 Vegetation and Other Land Cover

Vegetation communities were defined based on their dominant perennials and those annuals that could be identified during the winter. Only one vegetation community was identified in the BSA, Annual Grassland. See Appendix C for a full list of species observed within the project site during the reconnaissance survey. The vegetation community characterization for this analysis were based on the classification systems presented in *A Manual of California Vegetation, Second Edition* ([MCV2] Sawyer et al. 2009) but have been modified slightly to most accurately reflect the existing site conditions. The *Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986) has been superseded by the MCV2 but is included for reference. Plant species nomenclature and taxonomy used for this BRA follows the treatments within the second edition of *The Jepson Manual* (Baldwin et al. 2012).

Non-native Annual Grassland

The BSA is entirely comprised of non-native annual grassland. The dominant species observed in this community are a mixture of native and non-native annual grasses such as blue wildrye (*Elymus glaucus*), velvet grass (*Holcus lanatus*), and wild oats (*Avena* sp.), with scattered coyote brush (*Baccharis pilularis*) shrubs and curly dock (*Rumex crispus*). This community is not described by Sawyer et al. (2009) and is likely present as a result of previous disturbance from development of the motocross track.

3.3 General Wildlife

The BSA and its surroundings provide habitat for wildlife species that commonly occur in Humboldt County habitats as well as the Eel River riparian corridor. Avian species observed/detected on or adjacent to the site include American crow (*Corvus brachyrhynchos*), scrub jay (*Aphelocoma californica*), chestnut-backed chickadee (*Poecile rufescens*), red-shouldered hawk (*Buteo lineatus*), California quail (*Callipepla californica*), and turkey (*Meleagris gallopavo*). Terrestrial species observed/detected include Columbian black-tailed deer (*Odocoileus hemionus columbianus*).

4 Sensitive Biological Resources

Local, state, and federal agencies regulate special status species and other sensitive biological resources and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. This section discusses sensitive biological resources observed on the project site and evaluates the potential for the project site to support additional sensitive biological resources. Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, species occurrence records from other sites in the vicinity of the survey area, previous reports for the project site, and the results of surveys of the project site. The potential for each special status species to occur in the study area was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 5 years).

4.1 Special Status Species

Based on the database and literature review and reconnaissance survey, 14 special-status plant species, 20 special-status wildlife species, and one special-status plant community were identified by the CNDDDB and CNPS Online Inventory of Rare and Endangered Plants of California (within the *Miranda, California* USGS 7.5-minute quad and the eight surrounding quadrangles), as well as the USFWS IPaC as known to occur in the vicinity of the project site (Appendix D).

4.1.1 Special Status Plant Species

Based on the database and literature review, 14 special-status plant species were documented within the *Miranda, California* USGS 7.5-minute topographic quadrangle and the eight surrounding quadrangles. Four species have known occurrences within the immediate vicinity (five miles) of the project site, of which one is listed as state endangered; Humboldt County milk-vetch (*Astragalus agnicidus*). The remaining three species within five miles are not federally or state listed but are classified as CRPR 1.B1 and 2 (Appendix D).

Of the 14 plant species documented within the *Miranda*, quadrangle and the eight surrounding quadrangles, 12 could be excluded from potentially occur on the project site due to the absence of natural vegetation communities, species-specific habitat requirements, lack of suitable soils and hydrology, and historical disturbance experienced on the project site (see Appendix D for a species-by-species evaluation). Two special status plants have a low potential to occur within the BSA; Humboldt County milk-vetch (*Astragalus agnicidus*), state endangered; and Howell's montia (*Montia howellii*), California Rare Plant Rank (CRPR) 2B.2. However, seasonally timed botanical surveys were negative for these species; therefore, neither are expected to occur within the BSA (Naiad 2021b).

4.1.2 Special Status Animal Species

Rincon evaluated 20 special-status wildlife species for their potential to occur in the project site, or in adjacent habitats (Appendix D). Six species have known occurrences within immediate vicinity (five miles) of the project site. Northern spotted owl (*Strix occidentalis caurina*) is a federally and state listed species and has a low potential to occur during nocturnal foraging; however, no nesting habitat is present, and no impacts are expected. Additionally, three non-listed special status species have a low potential to occur on the project site based on the presence of potentially suitable habitat: western pond turtle (state species of special concern [SSC]; *Emys marmorata*), northern red-legged frog (SSC; *Rana aurora*), and Cooper's hawk (SSC; *Accipiter cooperii*).

The remaining 14 species evaluated are not expected to occur on the project site or immediate vicinity based on the absence of suitable habitat and/or because the species' range does not overlap the project site.

4.1.3 Other Protected Species

Nesting Birds

Non-game migratory birds protected under the California Fish and Game Code (CFG) Section 3503 such as native avian species common to riparian, grasslands, landscaping, developed and ruderal areas have the potential to breed and forage throughout the BSA. Species of birds common to the area that typically occur in the region, such as red-tailed hawk (*Buteo jamaicensis*), California scrub jay, Anna's hummingbird (*Calypte anna*), house finch (*Haemorrhous mexicanus*), American crow, Brewer's blackbird (*Euphagus cyanocephalus*), may nest in the BSA. Nesting by a variety of common birds protected by CFG Section 3503 could occur in virtually any location throughout the BSA containing native or non-native vegetation.

4.2 Sensitive Plant Communities and Critical Habitats

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDDB. Sensitive natural communities included in the CNDDDB are classified according to *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). The methodology for determining sensitivity continues to be revised and is now based on *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Communities considered sensitive by CDFW are published in the California Sensitive Natural Communities List (CDFW 2018). Vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked statewide (S) as 1 through 3 generally considered sensitive. Therefore,

vegetation types on site were also compared with the California Sensitive Natural Communities List (CDFW 2019).

One sensitive natural community is known to occur within the 9-quadrangle search area; Upland Douglas Fir Forest, however this community was not observed within the BSA. Given the disturbed nature of the vegetation community within the BSA it would not be considered sensitive by CDFW. The annual grassland found within the BSA is also not considered sensitive.

Critical habitat for marbled murrelet occurs within five miles of the BSA, approximately 2.6 miles to the south near the community of Redway; however, suitable old growth habitat is not present onsite or in the immediate vicinity.

4.3 Jurisdictional Waters and Wetlands

No jurisdictional waters or wetlands were observed within the BSA. An ephemeral drainage was documented outside the BSA to the south of the project site and would be avoided by the project.

4.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Other corridors may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

Habitats within a habitat linkage do not necessarily need to be identical to those habitats being linked. Rather, the linkage needs only to contain sufficient cover and forage to allow temporary utilization by species moving between core habitat areas. Habitat linkages are typically contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Some species may require specific physical resources (such as rock outcroppings, vernal pools, or oak trees) within the habitat link for the linkage to serve as an effective movement corridor, while other more mobile or aerial species may only require discontinuous patches of suitable habitat to permit effective dispersal and/or migration. Wildlife movement corridors may occur at either large or small scales.

The BSA consists of an open field. No Essential Connectivity Areas or Natural Landscape Blocks are mapped within the BSA on the Biogeographic Information and Observation System (Spencer et al. 2010), and there are no habitat linkages or natural features that would facilitate wildlife movement. The BSA is also surrounded by low density residential areas, and therefore does not represent a significant corridor for wildlife movement.

4.5 Resources Protected by Local Policies and Ordinances

Under Humboldt County Zoning Code of Regulations Outside the Coastal Zone, "W" Combining Zone Designations (314-38) Streamside Management Areas and Wetlands Ordinance (61.1) includes "Streamside management areas" (SMAs) (Policy BR-S5). The ponds on the property, ephemeral

drainage observed adjacent to the BSA as well as several others mapped within the parcel for the feasibility study require 100-foot SMA buffers (Naiad 2021a). The BSA is situated outside of the SMA buffers; therefore, no resources protected by local policies or ordinances are present.

4.6 Habitat Conservation Plans

The BSA is not within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5 Impact Analysis and Mitigation Measures

This section presents the findings of an analysis of potential impacts and effects to biological resources that may occur from implementation of the proposed project. Where potential impacts are identified, recommended mitigation measures to reduce those impacts to less than significant are proposed.

5.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- 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 Wildlife or U.S. Fish and Wildlife Service.*

5.1.1 Special Status Plants

No special status plants are expected to occur in the BSA, therefore there would be no impacts.

5.1.2 Special Status Wildlife

Four special status wildlife species have potential to occur within the BSA based upon known ranges, habitat preferences, species occurrence records in the vicinity of the BSA, and presence of suitable habitat: northern spotted owl, western pond turtle, northern red-legged frog, and Cooper's hawk. All of these species have a low potential to occur within the impact footprint of the proposed development due to the surrounding habitats.

Northern spotted owl are nocturnal and would only occur in the vicinity of the BSA at night during foraging or dispersal, and would therefore not be affected by day time construction or activities. Additionally, the new greenhouses would require seasonal nighttime lighting and two new generators are proposed. Because northern spotted owl is a listed species, any impacts would be considered significant. With implementation of Mitigation Measure (MM) BIO-1 and BIO-2, impacts to northern spotted owl would be less than significant.

Western pond turtle and northern red-legged frog may also occur briefly during upland movement and may take temporary refuge in shrubs and vegetation. If individuals are present during construction, they may be injured or killed by equipment. Coopers hawk may nest in the surrounding woodlands. If construction work occurs during the nesting season, noise disturbance and human presence may cause nest abandonment. Nesting birds protected under CFGC may also occur throughout the BSA and in adjacent areas, and construction activities could result in destruction or abandonment of nests. Because the potential for individuals occurring in the work area is low, impacts to western pond turtle, northern red-legged frog, and Coopers hawk would be less than significant. The potential for nesting birds protected by the MBTA is high however and would be considered significant. With implementation of MM BIO 1 and BIO 2 impacts to nesting birds would be less than significant.

BIO-1 Prior to initiation of construction activities (including staging and mobilization) all personnel associated with project construction should attend a Worker Environmental Awareness

Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special status resources that may occur in the construction area. The specifics of this program should include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information should also be prepared for distribution to all contractors, their employees, and other personnel involved with construction. All employees should sign a form provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form should be submitted to the County by the contractor to document compliance.

- BIO-2 For construction activities occurring during the nesting season (generally February 1 to August 31), surveys for nesting birds covered by the MBTA and CFGC should be conducted by a qualified biologist no more than 14 days prior to initiation of construction activities for the river park trail, including construction staging and vegetation removal. The surveys should include the entire disturbance areas plus a 200-foot buffer around any disturbance areas. If active nests are located, all construction work should be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer should be a minimum of 50 feet for non-raptor bird species and at least 150 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The biologist should have full discretion for establishing a suitable buffer. The buffer area(s) should be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist should confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer.

5.2 Sensitive Plant Communities

The proposed project would have a significant effect on biological resources if it would:

- b) *Have a substantial adverse impact 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.*

No riparian habitat or sensitive plant communities occur within the BSA; therefore; no impacts to riparian habitat or other sensitive natural communities are expected.

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- 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.*

No potentially jurisdictional areas occur within the BSA; however, an ephemeral drainage was observed to the south of the BSA. Significant impacts could occur if spills or runoff from the construction site were allowed to enter the drainage. Implementation of MM BIO 3 would reduce potential impacts to jurisdictional areas to less than significant.

BIO-3 All refueling and maintenance of equipment and vehicles should occur a minimum of 250 feet from ephemeral drainages and ponds, and in a location from which a spill would not drain directly toward these habitats (e.g., on a slope that drains away from the water), or in a containment structure. Prior to the onset of work, a plan should be developed for prompt and effective response to any accidental spills. All workers should be informed of the importance of preventing spills and of the appropriate measures to take in the event of a spill. Should any debris or equipment from the work area fall into the wetland, riparian habitat, and the concrete drainage, it should be removed immediately.

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

No corridors for wildlife movement occur within the BSA, therefore no impacts to wildlife movement are expected.

5.5 Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

Under Humboldt County Zoning Code Streamside Management Areas and Wetlands Ordinance (61.1) setbacks are required for development adjacent to aquatic resources, up to 100 feet from the top of bank or edge of riparian. The BSA is over 100 feet from aquatic resources on the parcel, therefore no conflict with the County Zoning Code is expected.

5.6 Adopted or Approved Plans

The proposed project would have a significant effect on biological resources if it would:

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

The BSA does not occur within a Habitat Conservation Plan or Natural Conservation Community Plan, therefore no conflicts are expected.

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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8 List of Preparers

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Appendix A

Regulatory Setting

Regulatory Setting

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or animal species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g. U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e., California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- North Coast Regional Water Quality Control Board (waters of the State);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; Species of Special Concern; nesting birds); and
- Humboldt County.

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters (typically a navigable water). The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Board (RWQCB) have jurisdiction over “waters of the State,” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-

DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The RWQCB administers actions under this general order for isolated waters not subject to federal jurisdiction and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

United States Fish and Wildlife Service

The USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC § 153 et seq.). Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in “take” of any federally threatened or endangered species are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. “Take” under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is restricted to direct mortality of a listed species and the law does not prohibit indirect harm by way of habitat modification. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated.

The CDFW also enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibits take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided.

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act. CDFW administers these requirements.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species in special consideration when decisions are made concerning the development of natural lands. The CDFW also has authority to

administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 *et seq.* of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over activities that divert, obstruct, or alter the channel, bed, or bank of any river, stream or lake.

Local Jurisdiction

Humboldt County Zoning Code

Regulations Outside the Coastal Zone, "W" Combining Zone Designations (314-38)

61.1 Streamside Management Areas and Wetlands Ordinance:

61.1.7.6 "Streamside management areas" (SMAs) [Policy BR-S5. Streamside management areas defined of the 2017 General Plan] shall be as defined in the Humboldt County General Plan Section 10.3, Biological Resources, of Chapter 10, Conservation and Open Space Elements of the Humboldt County General Plan and includes a natural resource area along both sides of streams containing the channel and adjacent land. SMAs do not include watercourses consisting entirely of a manmade drainage ditch, or other manmade drainage device, construction, or system. Streamside management areas (SMA) are identified and modified as follows:

- 61.1.7.6.1 Areas specifically mapped as SMA and Wetland (WR) Combining Zones, subject to verification and adjustment pursuant to site-specific biological reporting and review procedures.
- 61.1.7.6.2 For areas along streams not specifically mapped as SMA and Wetland (WR) Combining Zones, the outer boundaries of the SMA shall be defined as:
 - 61.1.7.6.2.1 One hundred (100) feet, measured as the horizontal distance from the top of bank or edge of riparian drip-line whichever is greater on either side of perennial streams.
 - 61.1.7.6.2.2 Fifty (50) feet, measured as the horizontal distance from the top of bank or edge of riparian drip-line whichever is greater.

61.1.7.6.3 The streamside management area may be reduced or eliminated where the County determines, based on specific factual findings, that:

- 61.1.7.6.3.1 The mapping of the SMA is not accurate, there are no in-channel wetland characteristics or off-channel riparian vegetation, or the reduction will not significantly affect the biological resources of the SMA on the property.
- 61.1.7.6.3.2 For projects subject to ministerial review, reductions may be allowed without a special permit in consultation with California Department of Fish and Wildlife.

61.1.7.6.4 “Other wet areas,” i.e., natural ponds, springs, vernal pools, marshes and wet meadows. The existence of possible other wet areas shall be identified by the responsible department using normal soils investigation criteria. These criteria indicate the presence of any of the following: standing water, evidencing a natural pond or poor drainage conditions, wetland soils, or hydrophytic vegetation (e.g., swamp grass).

61.1.7.6.5 “Wetlands” – as defined in the U.S. Army Corps of Engineers Wetland Delineation Manual in the identification and classification of wetlands which considers wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

61.1.7.6.6 Development standards for wetlands shall be consistent with the standards for streamside management areas, as applicable except that the widths of the SMA for wetlands are as follows:

- Seasonal wetlands = fifty (50) feet
- Perennial wetlands = one hundred fifty (150) feet;

and the setback begins at the edge of the delineated wetland. Buffers may be reduced based on site-specific information and consultation with the California Department of Fish and Wildlife. No buffer shall be required for manmade wetlands except wetlands created for mitigation purposes.

61.1.10.1 Mitigation measures for development within streamside management areas shall, at a minimum, include:

- 61.1.10.1.1 Retaining snags unless felling is required by CAL-OSHA, or by California Department of Forestry forest and fire protection regulations, or for public health and safety reasons, approved by the Planning and Building Director. Felled snags shall be left on the ground if consistent with fire protection regulations and the required treatment of slash or fuels.
- 61.1.10.1.2 Retain live trees with visible evidence of current or historical use as nesting sites by hawks, owls, eagles, osprey, herons, kites or egrets.
- 61.1.10.1.3 Replanting of disturbed areas with riparian vegetation (including such species as alders, cottonwoods, willows, sitka spruce, etc.) shall be required unless natural regeneration does not occur within two (2) years of the completion of the development project. The mitigation and monitoring report adopted as a part of project approval shall include an alternative regeneration plan in case natural regeneration is not successful.
- 61.1.10.1.4 Revegetation along channelized streams and other wet areas shall be required where the habitat has been converted to other uses. For development allowed within streamside management or other wet areas where the riparian habitat has been converted to other uses, the project shall be conditioned to require the development of new riparian or wetland habitat of an area equal to the area in which the development is to occur, or the area of an existing or proposed easement or right-of-way, whichever is larger.

61.1.10.1.5 Erosion Control Measures. As found within the Building Regulations, Section 331-14, Grading, Excavating, Erosion, and Sedimentation Control, and the following:

- 61.1.10.1.5.1 During construction, land clearing and vegetation removal will be minimized, following the provisions of the Water Resources Element and the standards listed here;
- 61.1.10.1.5.2 Construction sites with at least one hundred (100) square feet of exposed soil will be planted or seeded as appropriate per mitigations as recommended in writing by the lead agency with native or noninvasive vegetation and mulched with natural or chemical stabilizers to aid in erosion control and ensure revegetation;
- 61.1.10.1.5.3 Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction.
- 61.1.10.1.6 Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, nonerodible channels, diversion dikes, interceptor ditches, slope drains, or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge, where discharge is to natural ground or channels.
- 61.1.10.1.7 Runoff shall be controlled to prevent erosion by on-site or off-site methods. On-site methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. On-site methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by on-site retention or where retention will provide no benefits for groundwater recharge or erosion control. Off-site methods include detention or dispersal of runoff over nonerodible vegetated surfaces where it would not contribute to downstream erosion or flooding.
- 61.1.10.1.8 Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the streamside management area to comply with California Department of Fish and Wildlife and the North Coast Regional Water Quality Control Board requirements.
- 61.1.10.1.9 Winter operations (generally October 15th through April 15th) shall employ the following special considerations:
 - (1) Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds, such as barley or rye grass, and mulched with protective coverings such as natural or chemical stabilizations; and
 - (2) Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basins to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.

According to 61.1.4.1 these regulations do not apply to routine maintenance activities associated with existing public or private facilities, defined as “activities to support, keep and continue in an existing state or condition without decline.” Routine activities include the replacement of culverts and related structures when conducted pursuant to a Department of Fish and Wildlife Lake or Streambed Alteration Agreement (LSAA).

61.1.13 Biological Report Required. An application proposing development activities within a SMA or Other Wet Area shall include a site-specific biological report prepared consistent with these regulations.

The written report prepared by a qualified biologist shall be referred to CDFG for review and comment. If no reply is received from CDFG within ten (10) working days of the date of the referral, it shall be assumed that the report satisfies CDFG requirements.

61.1.14 Incorporation of Recommendations as Conditions. The recommendations contained within the written report shall be incorporated into any development permit as conditions of approval by the Responsible Department.

61.1.17 Biological Report. Where a Biological Report is required by these regulations, the report shall be prepared by a qualified professional educated, trained, and experienced in the subject matter, and the report shall contain the following:

- Section I Summary of Findings and Conclusions
- Section II Introduction, Background, and Project Understanding
- Section III Methods
- Field Observation and Studies
- Trustee and Other Agency Consultation
- Document and Report Review
- Cumulative Biological and Watershed Effects
- Section IV Results and Discussion
- Existing Site Conditions
 - Terrestrial
 - Hydrologic and Aquatic
 - Sensitive Species or Habitats
- Offsite Conditions
 - Terrestrial
 - Hydrologic and Aquatic
 - Sensitive Species or Habitats
- Development Effects
 - Direct
 - Indirect
 - Cumulative
- Recommended Mitigation and Monitoring Measures
- Section V References
- Plant Species Observed
- Other Species Observed directly or indirectly (e.g., nests, scats, tracks, etc.)

- Sensitive Species or Habitats in the Project Vicinity (listing)

Humboldt County General Plan

The 2017 Humboldt County General Plan for Areas Outside the Coastal Zone contains goals and policies to protect biological resources within the Conservation and Open Space Elements.

Applicable goals and policies include but are not limited to:

BR-P1. Compatible Land Uses. Area containing sensitive habitats shall be planned and zoned for uses compatible with the long-term sustainability of the habitat. Discretionary land uses and building activity in proximity to sensitive habitats shall be conditioned or otherwise permitted to prevent significant degradation of sensitive habitat, to the extent feasible consistent with California Department of Fish and Wildlife guidelines or recovery strategies.

BR-P2. Critical Habitat. Discretionary projects which use federal permits or federal funds on private lands that have the potential to impact critical habitat shall be conditioned to avoid significant habitat modification or destruction consistent with federally adopted Habitat Recovery Plans or interim recovery strategies.

BR-P4. Development within Stream Channels. Development within stream channels shall be permitted when there is no lesser environmentally damaging feasible alternative, and where the best feasible mitigation measures have been provided to minimize adverse environmental effects. Development shall be limited to essential, non-disruptive projects as listed in Standard BR-S6 - Development within Stream Channels

BR-P5. Streamside Management Areas. To protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and interference with surface water flows, the County shall maintain Streamside Management Areas, along streams including intermittent streams that exhibit in-channel wetland characteristics and off-channel riparian vegetation.

BR-P6. Development within Streamside Management Areas. Development within Streamside Management Areas shall only be permitted where mitigation measures (Standards BR-S8 - Required Mitigation Measures, BR-S9 - Erosion Control, and BR-S10 - Development Standards for Wetlands) have been provided to minimize any adverse environmental effects and shall be limited to uses as described in Standard BR-S7 - Development within Streamside Management Areas.

BR-P7. Wetland Identification. The presence of wetlands in the vicinity of a proposed project shall be determined during the review process for discretionary projects and for ministerial building and grading permit applications, when the proposed building development activity involves new construction or expansion of existing structures or grading activities. Wetland delineation by a qualified professional shall be required when wetland characterization and limits cannot be easily inventoried and identified by site inspection.

BR-P8. Wetlands Banking. The County supports the development of a wetlands banking system that minimizes potential conversion of prime agriculture lands to wetlands.

BR-P11. Biological Resource Maps. Biological resource maps shall be consulted during the ministerial and discretionary permit review process in order to identify habitat concerns and to guide mitigation for discretionary projects that will reduce biological resource impacts to below levels of significance, consistent with CEQA.

BR-P12. Agency Review. The County shall request the California Department of Fish and Wildlife, as well as other appropriate trustee agencies and organizations, to review plans for development

within Sensitive Habitat, including Streamside Management Areas. The County shall request NOAA Fisheries or U.S. Fish and Wildlife Service to review plans for development within critical habitat if the project includes federal permits or federal funding. Recommended mitigation measures to reduce impacts below levels of significance shall be considered during project approval, consistent with CEQA.

BR-P13. Landmark Trees. Establish a program to identify and protect landmark trees, including trees that exhibit notable characteristics in terms of their size, age, rarity, shape or location.)

Appendix B

Site Photographs



Photograph 1. The west side of the BSA, facing east.



Photograph 2. The east side of the BSA, facing west.



Photograph 3. The west end of the BSA, facing north.



Photograph 4. The ephemera drainage south of the BSA, facing northeast.

Appendix C

Floral and Faunal Compendium

Plant Species Observed Within the Study Area on February 12, 2021

Scientific Name	Common Name	Status	Native or Introduced
Plants			
Shrubs			
<i>Baccharis pilularis</i>	coyote brush		Native
Herbs			
<i>Plantago lanceolata</i>	ribwort plantain	CAL-IPC: Limited*	Non-native
<i>Rumex crispus</i>	curly dock	CAL-IPC: Limited*	Non-native
Grasses			
<i>Elymus glaucus</i>	blue wildrye		Native
<i>Avena</i> sp.	wild oats	CAL-IPC: Moderate*	Non-native
<i>Holcus lanatus</i>	velvet grass	CAL-IPC: Moderate*	Non-native

*Calflora; <https://www.calflora.org/>

Animal Species Observed Within the Study Area on February 12, 2021

Scientific Name	Common Name	Status	Native or Introduced
Birds			
<i>Buteo lineatus</i>	red shouldered hawk		Native
<i>Meleagris gallopavo</i>	turkey		Non-native
<i>Callipepla californica</i>	California quail		Native
<i>Corvus brachyrhynchos</i>	American crow		Native
<i>Aphelocoma californica</i>	scrub jay		Native
<i>Poecile rufescens</i>	chestnut-backed chickadee		Native
Mammals			
<i>Procyon lotor</i>	raccoon		Native
<i>Odocoileus hemionus columbianus</i>	Columbian black-tailed deer		Native

Appendix D

Special Status Species Evaluation Tables

Special Status Plant Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Astragalus agnicidus</i> Humboldt County milk- vetch	None/SE G2/S2 1B.1	Broad-leafed upland forest, North Coast coniferous forest. openings, disturbed areas, sometimes roadsides. 120 - 800 m. perennial herb. Blooms Apr-Sep	Not Expected	There is 1 known CNDDDB occurrence within 5 miles and disturbed areas are present, however this species was not detected during seasonally timed surveys (Naiad 2021b).
<i>Carex arcta</i> northern clustered sedge	None/None G5/S1 2B.2	Bogs and fens, North Coast coniferous forest (mesic). 60 - 1400 m. perennial herb. Blooms Jun-Sep	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable habitat is not present.
<i>Erythronium oregonum</i> giant fawn lily	None/None G4G5/S2 2B.2	Cismontane woodland, Meadows and seeps. sometimes serpentine, rocky, openings. 100 - 1150 m. perennial bulbiferous herb. Blooms Mar-Jun (Jul)	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable habitat is not present.
<i>Erythronium revolutum</i> coast fawn lily	None/None G4G5/S3 2B.2	Bogs and fens, Broad-leafed upland forest, North Coast coniferous forest. Mesic, streambanks. 0 - 1600 m. perennial bulbiferous herb. Blooms Mar-Jul (Aug)	Not Expected	There is 1 known CNDDDB occurrence within 5 miles however suitable habitat is not present.
<i>Gilia capitata</i> ssp. <i>pacifica</i> Pacific gilia	None/None G5T3/S2 1B.2	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland. 5 - 1665 m. annual herb. Blooms Apr-Aug	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable coastal bluff scrub habitat is not present.
<i>Howellia aquatilis</i> water howellia	FT/None G3/S2 2B.2	Marshes and swamps (freshwater). 1085 - 1290 m. annual herb (aquatic). Blooms Jun	Not Expected	There are no known CNDDDB occurrences within 5 miles and the site is out of the species habitat range.
<i>Kopsiopsis hookeri</i> small groundcone	None/None G4?/S1S2 2B.3	North Coast coniferous forest. 90 - 885 m. perennial rhizomatous herb (parasitic). Blooms Apr-Aug	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable forest habitat is not present.

Central Balance Company, LLC
Wood Ranch Cannabis Cultivation Project

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Montia howellii</i> Howell's montia	None/None G3G4/S2 2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools. vernal mesic, sometimes roadsides. 0 - 835 m. annual herb. Blooms (Jan-Feb) Mar-May	Not Expected	There are 5 known CNDDDB occurrences within 5 miles and disturbed areas are present, however this species was not detected during seasonally timed surveys (Naiad 2021b).
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	None/None G4T2/S2 1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools. Mesic. 5 - 1740 m. annual herb. Blooms Apr-Jul	Not Expected	Grasslands are present however there are no known CNDDDB occurrences within 5 miles and the site is largely disturbed.
<i>Packera bolanderi</i> var. <i>bolanderi</i> seacoast ragwort	None/None G4T4/S2S3 2B.2	Coastal scrub, North Coast coniferous forest. Sometimes roadsides. 30 - 650 m. perennial rhizomatous herb. Blooms (Jan-Apr) May-Jul (Aug)	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable coastal scrub habitat is not present.
<i>Piperia candida</i> white-flowered rein orchid	None/None G3/S3 1B.2	Broad-leafed upland forest, Lower montane coniferous forest, North Coast coniferous forest. sometimes serpentinite. 30 - 1310 m. perennial herb. Blooms (Mar)May-Sep	Not Expected	There are 5 known CNDDDB occurrences within 5 miles however suitable forest habitat is not present.
<i>Sidalcea malviflora</i> ssp. <i>patula</i> Siskiyou checkerbloom	None/None G5T2/S2 1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest. often roadcuts. 15 - 1230 m. perennial rhizomatous herb. Blooms (Apr)May-Aug	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable habitat is not present.
<i>Tracyina rostrata</i> beaked tracyina	None/None G2/S2 1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland. 90 - 1270 m. annual herb. Blooms May-Jun	Not Expected	Grasslands are present however there are no known CNDDDB occurrences within 5 miles and the site is largely disturbed.
<i>Viburnum ellipticum</i> oval-leaved viburnum	None/None G4G5/S3? 2B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest. 215 - 1400 m. perennial deciduous shrub. Blooms May-Jun	Not Expected	There are no known CNDDDB occurrences within 5 miles and suitable forest habitat is not present.

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
Regional Vicinity refers to within a 9-quad search radius of site.				
FE = Federally Endangered FT = Federally Threatened FC = Federal Candidate Species				
SE = State Endangered ST = State Threatened SC = State Candidate SR = State Rare				
CRPR (CNPS California Rare Plant Rank):				
1A=Presumed Extinct in California				
1B=Rare, Threatened, or Endangered in California and elsewhere				
2A=Plants presumed extirpated in California, but more common elsewhere				
2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere				
CRPR Threat Code Extension:				
.1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)				
.2=Fairly endangered in California (20-80% occurrences threatened)				
.3=Not very endangered in California (<20% of occurrences threatened)				

Special Status Animal Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Fish				
<i>Oncorhynchus kisutch</i> pop. 2 coho salmon - southern Oregon / northern California ESU	FT/ ST G4T2Q/S2?	Federal listing refers to populations between Cape Blanco, Oregon and Punta Gorda, Humboldt County, California. State listing refers to populations between the Oregon border and Punta Gorda, California.	Not Expected	There are no known occurrences within 5 miles and suitable aquatic habitat is not present.
<i>Oncorhynchus mykiss irideus</i> pop. 36 summer-run steelhead trout	None/SCE G5T4Q/S2 SSC	No. Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS & No. Calif DPS. Cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer.	Not Expected	There are no known occurrences within 5 miles and suitable aquatic habitat is not present.
Reptiles				
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Low Potential	There is 1 known CNDDDB occurrence within 5 miles from the Eel River and suitable upland habitat is present. There is a low potential this species could occur incidentally during upland movement.

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Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Amphibians				
<i>Rana aurora</i> northern red- legged frog	None/None G4/S3 SSC	Humid forests, woodlands, grasslands, and streambanks in northwestern California, usually near dense riparian cover. Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	Low Potential	There are no known occurrences within 5 miles however there are known occurrences from the Eel River watershed, the closest of which is approximately 7.6 miles north of the BSA and suitable upland habitat is present in the BSA. There is a low potential this species could occur incidentally during upland movement.
<i>Rana boylei</i> foothill yellow- legged frog	None/None G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Not Expected	There are 8 known CNDDDB occurrences within 5 miles, including a 2018 occurrence 1 mile northeast of the site, however suitable perennial streams are not present.
<i>Rhyacotriton</i> <i>variegatus</i> southern torrent salamander	None/None G3G4/S2S3 SSC	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest. Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rocks within trickling water.	Not Expected	There are no known occurrences within 5 miles and suitable forest and shaded wetland habitats are not present.
<i>Taricha rivularis</i> red-bellied newt	None/None G4/S2 SSC	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Isolated population of uncertain origin in Santa Clara County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	Not Expected	There are no known occurrences within 5 miles and the BSA is at the edge of this species range.

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Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Birds				
<i>Strix occidentalis caurina</i> northern spotted owl	FT/ ST G3T3/S2S3	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.	Low Potential	There are approximately eight activity centers, or central home ranges, within 5 miles of the BSA, however most occurrences are on the other side of Bear Buttes (2851 feet) and the ridge below and suitable old growth habitat is not present. There is a low potential this species could occur incidentally during nocturnal foraging.
<i>Accipiter cooperii</i> Cooper's hawk	None/None G5/S4 SWL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Low Potential	There is 1 known CNDDDB occurrence within 5 miles and suitable foraging habitat is present. This species could occur incidentally in the BSA while foraging.
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 SFP SWL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected	There are 2 known CNDDDB occurrences within 5 miles however suitable nesting habitat is not present.
<i>Brachyramphus marmoratus</i> marbled murrelet	FT/ SE G3G4/S1	Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	Not Expected	The closest occurrence is approximately 8.6 miles to the north, just south of Humboldt Redwoods State Park, and suitable old growth habitat is not present.
<i>Empidonax traillii brewsteri</i> little willow flycatcher	None/ SE G5T3T4/S1S2	Mountain meadows and riparian habitats in the Sierra Nevada and Cascades. Nests near the edges of vegetation clumps and near streams.	Not Expected	There are no known occurrences within 5 miles and the BSA is out of this species known range.
<i>Falco peregrinus anatum</i> American peregrine falcon	Delisted/Delisted G4T4/S3S4 SFP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected	There are no known occurrences within 5 miles and suitable cliff breeding habitat is not present.
<i>Pandion haliaetus</i> osprey	None/None G5/S4 SWL	Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Not Expected	There is 1 known occurrence within 5 miles however suitable nest trees not present.

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Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Mammals				
<i>Antrozous pallidus</i> pallid bat	None/None G5/S3 SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not Expected	There are no known occurrences within 5 miles and suitable roosting habitat is not present.
<i>Arborimus pomo</i> Sonoma tree vole	None/None G3/S3 SSC	North coast fog belt from Oregon border to Sonoma County. In Douglas-fir, redwood & montane hardwood-conifer forests. Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock or spruce.	Not Expected	There are no known occurrences within 5 miles and suitable habitat is not present.
<i>Lasiurus blossevillii</i> western red bat	None/None G5/S3 SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Not Expected	There are no known occurrences within 5 miles and suitable roosting and foraging habitat is not present.
<i>Martes caurina humboldtensis</i> Humboldt marten	None/SE G5T1/S1 SSC	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County. Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	Not expected	There are no known occurrences within 5 miles, and this species is sensitive to human disturbance and is not likely to occur in areas with development.
<i>Myotis evotis</i> long-eared myotis	None/None G5/S3	Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Not Expected	There is one historical occurrence from 1920 and suitable roosting habitat is not present.

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Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Pekania pennanti</i> fisher - West Coast DPS	None/ST G5T2T3Q/S2S3 SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Not Expected	There is one historical occurrence from 1973 and this species is sensitive to human disturbance and is not likely to occur in areas with development.

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SE = State Endangered ST = State Threatened SCT = State Candidate Endangered

SCT = State Candidate Threatened SD=State Delisted SS=State Sensitive

SSC = CDFW Species of Special Concern SFP = State Fully Protected SWL=State Watch List