Biological Resources Assessment

Green Tree Farms Assessor's Parcel Number 210-221-001 Dinsmore, California

Prepared for:

Troy Kuhlman

April 2021 017162.300

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Reference: 017162.300

April 26, 2021

Troy Kuhlman Humboldt Green Tree Farms, LLC 1632 Broadway PMB 316 Eureka, CA 95501

Subject: Biological Resources Assessment

Dear Troy Kuhlman:

Enclosed is the Biological Resources Assessment for your project site at Assessor's parcel number (APN) 210-221-001, near the unincorporated community of Dinsmore, Humboldt County, California. This is an update to the preliminary assessment dated May 2019 and includes two seasonally-appropriate floristic surveys and the wildlife habitat assessment.

Feel free to contact me with any questions or concerns at 707-822-5785 or email me at gobrien@shn-engr.com.

Respectfully submitted,

SHN

Metchen O'Bren

Gretchen O'Brien Senior Wildlife Biologist

GAO:cet

Enclosure: Biological Resources Assessment



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Prepared for: Troy Kuhlman

Prepared by:



1062 G St., Suite I Arcata, CA 95521-5800 707-822-5785

April 2021

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Abbreviations and Acronyms

Units of	Measure	G1/S1	critically imperiled species
ft	feet		heritage rank
		G2/S2	imperiled species heritage rank
Addition	al Terms	G3/S3	vulnerable species heritage rank
APN	Assessor's Parcel Number	G4/S4	apparently secure species heritage rank
BIOS	Biogeographical Information and	G5/S5	secure species heritage rank
	Observation System	IPaC	Information for Planning and
BRA	biological resources assessment		Conservation
С	candidate species status	MBTA	Migratory Bird Treaty Act
CCR	California Code of Regulations	NCCP	Natural Community Conservation
CDFW	California Department of Fish and		Planning
	Wildlife	NEPA	National Environmental Policy Act
CEQA	California Environmental Quality	NMFS	National Marine Fisheries Service
	Act	NPPA	Native Plant Protection Act
CESA	California Endangered Species Act	NT	nearly threatened
CFGC	California Fish and Game Code	PT	proposed threatened species
CFR	Code of Federal Regulations		status
CMMLUO	Commercial Medical Marijuana	RWQCB	Regional Water Quality Control
	Land Use Ordinance		Board
CNDDB	California Natural Diversity	S	State
	Database	SAA	Streambed Alteration Agreement
CNPS	California Native Plant Society	SMA	Streamside Management Area
CNRA	California National Resources	SMAO	Streamside Management Area
	Agency	0	Ordinance
CRPR	California Rare Plant Rank	SSC	species of special concern
CT	candidate threatened species	SWRCB	State Water Resources Control
	status	0111102	Board
CWA	Clean Water Act	Т	threatened species status
D	delisted species status	US	United States
DPS	Northern California distinct	USACE	Army Corps of Engineers
	population segment/species	USC	United States Code
	status	USEW/S	United States Fish and Wildlife
E	endangered species status	031113	Service
EPA	U.S. Environmental Protection	USGS	United States Geological Survey
	Agency	VeaCAMP	Vegetation Classification and
ESU	evolutionarily significant	vegeriin	Mapping Program
	unit/species status	VII	vulnerable
FESA	Federal Endangered Species Act	WDR	Waste Discharge Requirement
FP	fully protected species status	WI	watch list species status
G	Global		Materi ist species status



1.0 Introduction

SHN has conducted site investigations including literature reviews and database query to determine biological resources potentially present in your project location near Dinsmore, California (Figure 1). This Biological Resources Assessment (BRA) will serve as a tool to identify potential sensitive biological resources that may occur onsite and help with identifying environmental constraints in relation to project activities.

1.1 **Project Location**

The project is located on the United States Geological Survey (USGS) Larabee Valley 7.5-minute Quadrangle, Township 1 North, Range 5 East, Section 8, Humboldt Meridian (Figure 1). The project is located on a 40-acre parcel (Assessor's parcel number [APN] 210-221-001) with a central location latitude and longitude of 40.485487° and -123.639802°, respectively. For the purpose of this BRA, the study area focused on projectrelated areas of potential disturbance (Figure 2).

2.0 Project Description

The project includes two (2) on-going agricultural cultivation sites, a storage building, drying tents, storage tent, and water storage tanks and bladders. The project is expected to remain within the current footprint.

2.1 Site Description

The project area consists of several greenhouses, outdoor cultivation, water diversions and storage tanks, associated storage buildings, and a residential cabin. A majority of the property is forested with mature Douglas fir (*Pseudotsuga menziesii*) stands with small amounts of tanoak (*Notholithocarpus densiflorus*), madrone (*Arbutus menziesii*), and other hardwoods. The parcel also contains approximately 7 acres of natural grassland lined with oak woodland in the southern portion of the property. Segments of Class II and Class III streams run through the property and drain into the Van Duzen River to the north (Figure 2).

The study area is on a well-drained 9- to 75-percent sloped gravelly substrate that has been disturbed and eroded over time. Consequently, many non-native species are present within the study area, especially within the sloping grassland (Appendix 1, Photo 1). In addition, the majority of the botanical species within the study area have upland status, reflecting the dry upland conditions found throughout the majority of the study area (SHN, 2020). Dominant species within the study area included annual dogtail grass (*Cynosurus echinatus*) and soft brome (*Bromus hordeaceus*) within the upland grassland areas. There were areas with isolated spreading rush (*Juncus patens*) on convex slopes and within erosional features in the upland grassland areas. The seasonal drainage and wetter portions of the study area support plants with a higher wetland ranking (Appendix 1, Photo 2) such as spreading rush, creeping bent grass (*Agrostis stolonifera*), and tall fescue (*Festuca arundinacea*). The site is mostly grassland with one drainageway adjacent to the study area. The drainage adjacent to the study area primarily consists of riparian vegetation with trees and shrubs.

The lower terrace is composed of ruderal and non-native species on a substrate of historic fill material. This area no longer supports agricultural activities (Appendix 1, Photo 3).







3.0 Methodology

3.1 Literature Review

This BRA includes a review of pertinent literature on habitat characteristics of the site and a review of information related to special-status species of plants and animals that could potentially use the described habitats. The findings for this report are a result of several sources. Resources for this determination included:

- California Natural Diversity Database (CNDDB) query for the Larabee Valley and surrounding USGS 7.5-minute topographic quadrangles (Showers Mountain, Blake Mountain, Dinsmore, Black Lassic, Blocksburg, Myers Flat, Bridgeville, and Yager Junction; California Department of Fish and Wildlife [CDFW], 2021a)
- Biogeographical Information and Observation System (BIOS; CDFW, 2021b)
- Electronic Inventory of Rare and Endangered Vascular Plants of California (California Native Plant Society [CNPS], 2021; CDFW, 2021c) query for a list of all plant species reported for the Larabee Valley and surrounding USGS 7.5-minute topographic quadrangles
- Special Animals of California List (CDFW, 2021d)
- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) was queried for threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of the proposed project and/or may be affected by the proposed project (USFWS, 2021).

From the database queries, a list of potential target special-status species for the study area was compiled. Tables 1 and 2 in Appendix 2 include species reported by the CNDDB and USFWS, and species listed in the CNPS inventory of rare plants.

3.2 Coordination with Permitting and Regulatory Agencies

SHN staff will subsequently coordinate with CDFW staff on biological resources concerns as needed.

3.3 Field Observations and Studies

Site visits were conducted for habitat availability assessment for biological resources presence during the typical wildlife breeding season and blooming period for plants. Special-status botanical surveys were conducted on May 20 and July 28, 2020. A habitat assessment and special-status wildlife survey was conducted on July 28, 2020. Table 1 in Appendix 3 lists the observed plants on site and Table 2 in Appendix 3 lists the observed animals on site.

4.0 Regulatory Setting

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of legislative acts. The following section summarizes the federal, State, and local regulations for special-status species, jurisdiction waters of the U.S. and State of California, and other sensitive biological resources. This section provides a listing and overview of these federal and State laws.



4.1 Federal Laws

4.1.1 Clean Water Act Sections 404 and 401

Under Section 404 (33 U.S. Code (USC) 1344) of the Clean Water Act (CWA), as amended, the Army Corps of Engineers (USACE) retains primary responsibility for permits to discharge dredged or fill material into waters of the U.S. All discharges of dredged or fill material into jurisdictional waters of the U.S. that result in permanent or temporary losses of waters of the U.S. are regulated by the USACE. A permit from the USACE must be obtained before placing fill or grading in wetlands or other waters of the U.S., unless the activity is exempt from CWA Section 404 regulation (for example, certain farming and forestry activities).

The USACE defines wetlands as "those areas that are inundated or saturated by surface or ground water 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" (Environmental Laboratory, 1987). In other words, the USACE defines wetlands by the presence of all three wetland indicators: hydrophytic vegetation, hydric soils, and wetlands hydrology.

Waters of the U.S. are defined at 33 Code of Federal Regulations (CFR) Part 328. They include traditional navigable waters; relatively permanent, non-navigable tributaries of traditional navigable waters; and certain wetlands. Following recent court cases, the U.S. Environmental Protection Agency (EPA) and USACE published a memorandum entitled Clean Water Act Jurisdiction (USACE/EPA, 2008) to guide the determination of jurisdiction over waters of the U.S., especially for wetlands. The applicability of Section 404 permitting over discharges to wetlands is, therefore, a two-step process: 1) determining the areas that are wetlands, and 2) where a wetland is present, assessing the wetland's connection to traditional navigable waters and non-navigable tributaries to determine whether the wetland is jurisdictional under the CWA. A wetland is considered jurisdictional if it meets certain specified criteria.

The USACE is required to consult with the USFWS and/or National Marine Fisheries Service (NMFS) under Section 7 of the Federal Endangered Species Act (FESA) if the action subject to CWA permitting could result in "Take" of federally listed species or an adverse effect to designated critical habitat. The project is within the jurisdiction of the Sacramento District of the USACE.

Section 401 of the CWA (33 USC 1341; EPA, 1977) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification from the state in which the discharge originates or would originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originates or would originate effluent limitations and water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs). The project is within the jurisdiction of the North coast RWQCB.

4.1.2 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 USC Sections 661-667e, March 10, 1994, as amended 1946, 1958, 1978, and 1995; USFWS, 1934) requires that whenever waters or channel of a stream or other body of water are proposed or authorized to be modified by a public or private agency under a federal license or permit, the federal agency must first consult with the USFWS and/or NMFS and with the head of the agency exercising administration over the wildlife resources of the state where construction will occur (in this case the CDFW), with a view to conservation of birds, fish, mammals, and all other classes of wild animals, and all types of aquatic and land vegetation upon which wildlife is dependent.



If direct permanent impacts occur to waters of the U.S. from a proposed project, then a permit from USACE under CWA Section 404 is required for the construction of the proposed project. USACE is required to consult with USFWS and/or NMFS as appropriate regarding potential impacts to federally-listed species under FESA. Such action may prompt consultation with CDFW, which would review the project pursuant to California Endangered Species Act (CESA) and issue a consistency letter with USFWS and/or NMFS, if required.

4.1.3 Federal Endangered Species Act

The United States Congress passed the FESA in 1973 to protect species that are endangered or threatened with extinction (USFWS, 1973). The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend and within which they live. The USFWS and the NMFS are the designated federal agencies responsible for administering the FESA.

The FESA prohibits the "Take" of endangered or threatened wildlife species. A "Take" is defined as harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1531, 50 CFR 17.3). An activity can be defined as a "Take" even if it is unintentional or accidental. Taking can result in civil or criminal penalties. Activities that could result in "Take" of a federally-listed species require an incidental "Take" authorization resulting from FESA Section 7 consultation or FESA Section 10 consultation. Plants are legally protected under the FESA only if "Take" occurs on federal land or from federal actions, such as issuing a wetland fill permit.

A federal endangered species is one that is considered in danger of becoming extinct throughout all, or a significant portion, of its range. A federal threatened species is one that is likely to become endangered in the foreseeable future. The USFWS also maintains a list of species proposed for listing as threatened or endangered. Proposed species are those for which a proposed rule to list as endangered or threatened has been published in the Federal Register. In addition to endangered, threatened, and proposed species, the USFWS maintains a list of candidate species. Candidate species are those for which the USFWS has on file sufficient information to support issuance of a proposed listing rule.

Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed endangered or threatened species may be present in the project area and determine whether the proposed project will have a potentially significant impact on such a species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA or result in the destruction or adverse modification of critical habitat designated or proposed to be designated for such species (16 USC 1536[3], [4]). Project-related impacts to species on the FESA endangered or threatened list would be considered significant and would require mitigation.

4.1.4 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in CFR Part 10, including feather or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21; USFWS, 1918). The MBTA also prohibits disturbance and harassment of nesting migratory birds at any time during their breeding season. The USFWS is responsible for enforcing the MBTA (16 U.S.C. 703). The migratory bird nesting season is generally considered to be between March 15 and August 15 within the study region.



4.2 State Laws

4.2.1 Porter-Cologne Water Quality Control Act

The State and RWQCB also maintain independent regulatory authority over the placement of waste, including fill, into waters of the State under the Porter-Cologne Water Quality Control Act (SWRCB, 1969). Waters of the State are defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies might not be regulated by other programs, such as Section 404 of the CWA. Waters of the State are regulated by the RWQCBs under the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require an USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the State, the RWQCBs have the option to regulate such activities under their State authority in the form of Waste Discharge Requirements (WDRs) or certification of WDRs.

4.2.2 California Endangered Species Act

The State of California enacted the CESA in 1984 (CDFW, 1984). The CESA is similar to the FESA but pertains to State-listed endangered and threatened species. Under the CESA, the CDFW has the responsibility for maintaining a list of threatened and endangered species designated under State law (California Fish and Game Code [CFGC]

2070). Section 2080 of the CFGC prohibits "Take" of any species that the commission determines to be an endangered or threatened species. "Take" is defined in Section 86 of the CFGC as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The State and federal lists of threatened and endangered species are generally similar; however, a species present on one list may be absent from the other. CESA regulations are also somewhat different from the FESA in that the State regulations included threatened, endangered, and candidate plants on non-federal lands within the definition of "Take." CESA allows for "Take" incidental to otherwise lawful development projects.

Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project area and determine whether the proposed project will have a potentially significant impact on such species. Project-related impacts to species on the CESA endangered or threatened list (or, in addition, designated by the CDFW as a "Species of Special Concern," which is a level below threatened or endangered status) would be considered significant and would require mitigation.

4.2.3 California Environmental Quality Act

California Environmental Quality Act (CEQA) Guidelines Sections 15125(c) and 15380(d) provide that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria (California National Resources Agency [CNRA], 1970). Thus, CEQA provides the ability to protect a species from potential project impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

The CNPS maintains a list of plant species native to California whose populations that are significantly reduced from historical levels, occur in limited distribution, or are otherwise rare or threatened with extinction. This



information is published in the Inventory of Rare and Endangered Plants of California (CNPS, 2021). Taxa with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, 2B, and 3 in the CNPS inventory consist of plants that meet the definitions of the CESA of the CFGC, are eligible for State listing, and meet the definition of Rare or Endangered under CEQA Guidelines Sections 15125(c) and 15380(d). Some taxa with a CRPR 4 may meet the definitions of the CESA of the CFGC. CRPR 4 populations may qualify for consideration under CEQA if they are peripheral or disjunct populations; represent the type locality of the species; or exhibit unusual morphology and/or occur on unusual substrates.

Additionally, CDFW maintains lists of special animals and plants. These lists include a species conservation ranking status from multiple sources, including FESA, CESA, federal departments with unique jurisdictions, CNPS, and other non-governmental organizations. Based on these sources, CDFW assigns a heritage rank to each species according to their degree of imperilment (as measured by rarity, trends, and threats). These ranks follow NatureServe's Heritage Methodology, in which all species are listed with a G (global) and S (state) rank. Species with State Ranks of S1-S3 are also considered highly imperiled.

CEQA Guidelines checklist IV(b) calls for the consideration of riparian habitats and sensitive natural communities. Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. However, these communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies, or regulations, or by the CDFW (i.e., the CNDDB program and Vegetation Classification and Mapping Program [VegCAMP]; CDFW, 2021e) or the USFWS. Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA (California Code of Regulations [CCR]: Title 14, Div. 6, Chap. 3, Appendix G).

Although sensitive natural communities do not (at present) have legal protection, CEQA calls for an assessment of whether any such resources would be affected, and requires a finding of significance if there will be substantial losses. High-quality occurrences of natural communities with heritage ranks of 3 or lower are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents (such as general plans) often identify these resources as well. Avoidance, minimizations, or mitigation measures should be implemented if project-affected stands of rare vegetation types or natural communities are considered high-quality occurrences of the given community.

As a trustee agency under CEQA, CDFW reviews potential project impacts to biological resources, including wetlands. In accordance with the CEQA thresholds of significance for biological resources, areas that meet the State criteria of wetlands and could be impacted by a project must be analyzed. Pursuant to CFGC Section 2785, CDFW defines wet areas as "lands which may be covered periodically or permanently with shallow water and which include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, fens, and vernal pools."

4.2.4 California Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species are subject to jurisdiction by the CDFW under Sections 1600-1616 of the CFGC. Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake will generally require a Streambed Alteration Agreement (SAA).



The term "stream," which includes creeks and rivers, is defined in the CCR as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life." This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation (14 CCR 1.72).

In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian is defined as "on, or pertaining to, the banks of a stream"; therefore, riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFW, 1994). Removal of riparian vegetation also requires an SAA from the CDFW.

4.2.5 California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the CFGC it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows [*Passer domesticus*] and European starlings [*Sturnus vulgaris*]). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the "Take" or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "Take" by the CDFW.

4.2.6 Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced with possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The CFGC sections (fish at Section 5515, amphibian and reptiles at Section 5050, birds at Section 3511, and mammals at Section 4700) dealing with "fully protected" species states that these species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," (CDFW, 1998) although "Take" may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "Take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize "Take" resulting from recovery activities for State-listed species.

Species of special concern (SSC) are broadly defined as animals not listed under the CESA, but that are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although the SSC designation provides no special legal status, they are given special consideration under CEQA during project review.

Table 2 in Appendix 2 includes potentially-occurring federal- and State-listed species and other special-status animals that may occur in the project area.



4.2.7 Native Plant Protection Act of 1973

The Native Plant Protection Act (NPPA) of 1973 (Section 1900-1913 of the CFGC) includes provisions that prohibit the taking of endangered or rare native plants from the wild and a salvage requirement for landowners. The CDFW administers the NPPA and generally regards as "rare" many plant species included on Lists 1A, 1B, 2A, 2B, 3, and 4 of the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2021).

Table 1 in Appendix 2 includes potentially-occurring endangered or rare native plants that may occur in the project area (including CNPS lists).

4.2.8 Natural Community Conservation Planning Act

The Natural Community Conservation Planning (NCCP) Act of 1991 is an effort by the State of California, and numerous private and public partners that is broader in its orientation and objectives than the CESA and FESA (refer to discussions above). The primary objective of the NCCP Act is to conserve natural communities at the ecosystem scale while accommodating compatible land use (CDFW, 1991). The NCCP Act seeks to anticipate and prevent the controversies and gridlock caused by species listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process.

4.3 Other Statutes, Codes, and Policies Affording Limited Species Protection—Humboldt County Streamside Management Area Ordinance

Riparian and wetland habitats receive protection under Humboldt County's Streamside Management Area Ordinance (SMAO); as defined in Title 3, Section 314-61.1 of the Humboldt County Code. Development and work within Streamside Management Area (SMAs) requires a special permit from the County, if those activities are not exempt.

The purpose of the SMAO is to provide oversight in the use and development of land located within wet areas such as rivers, creeks, springs, and other wetland types. This includes natural resource areas along both sides of streams containing the channel and adjacent land. In areas outside of urban development and expansion areas, SMAs are identified as a 100-foot setback from the stream transition line of perennial streams and 50-foot setback for streams with seasonal intermittent flow. In areas inside of urban development and expansion areas, SMAs are identified as a 50-foot setback from perennial streams and 25-foot setback for streams with seasonal intermittent flow. In areas inside of urban development and expansion areas, SMAs are identified as a 50-foot setback from perennial streams and 25-foot setback for streams with seasonal intermittent flow. The stream transition line is defined in the Humboldt County General Plan as, "that line closest to a stream where riparian vegetation is permanently established," which is typically interpreted in riparian areas as the closest rooted tree to the water course.

Routine maintenance activities are permitted under the SMAO, if trees that are more than 12 inches in diameter are not cut, and that no more than 6,000 cumulative square feet of woody vegetation is removed. Additionally, activities are not considered routine maintenance if they could result in a significant environmental impact. Significance with regard to environmental impact can be difficult to qualify on a case-by-case level. However, the California Department of Fish and Wildlife generally considers the removal of riparian woody vegetation greater than 4 inches in diameter as an activity that requires compensatory mitigation. Mitigation measures for projects within SMAs can include retaining snags and trees that support nesting birds, replanting of disturbed areas equal to the development area, and other potential site-specific habitat improvements.



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

On September 13, 2016, the Humboldt County Board of Supervisors adopted Ordinance Number 2559, amending provisions of Title III of the Humboldt County Code relating to the commercial cultivation, processing, manufacturing, distribution, testing, and sale of cannabis for medicinal or adult use for the areas outside the coastal zone. The ordinance established land use regulations concerning commercial cultivation, processing, manufacturing, and distribution of cannabis for medical use within the County of Humboldt in order to limit and control such cannabis activities in coordination with the State of California.

Section 55.4.11 establishes performance standards for biological resource protection for all cannabis cultivation and processing operations. Section 55.4.11(o) specifies performance standards for project-related noise produced by a generator used for commercial cannabis cultivation. The noise effects on wildlife are focused on avoiding impacts to the marbled murrelet (*Brachyramphus marmoratus*) and northern spotted owl (*Strix occidentalis caurina*). Project-related noise impacts are assumed to be less than significant if noise levels are 50 decibels or less at 100 feet distance or the edge of the nearest habitat, whichever is closer.

Section 55.4.11(v) and (w) specifies performance standards for mixed-light cultivation.

5.0 Special-status Biological Resources

An evaluation was conducted for the potential presence or absence of habitat for special-status botanical and animal species based on habitat availability in the vicinity of the study area. CNDDB RareFind (CDFW, 2021a), BIOS (CDFW, 2021b), and CNPS (CNPS, 2021) searches were completed for the Larabee Valley 7.5-minute USGS quadrangle and all adjacent quadrangles. The aforementioned databases were queried for historical and existing occurrences of state- and federally-listed threatened, endangered, and candidate botanical and animal species, species proposed for listing, and all special-status plants listed by the CNPS. In addition, a list of all federally-listed species that are known to occur or may occur in the vicinity was obtained from the USFWS' Information for Planning and Conservation database (USFWS, 2021).

Table 1 in Appendix 1 includes all botanical species reported from the queries, their preferred habitat, and whether there is suitable habitat present within the study area for the species. Table 2 includes all animal species reported from the queries, their preferred habitat, and whether there is suitable habitat present within the study area for the species. The potential for occurrence of those species included on the list were then evaluated based on the habitat requirements of each species relative to the conditions observed during field visits.

Each species was evaluated for its potential to occur in the study area according to the following criteria:

- **None**. Species listed as having "none" are those species for which:
 - there is no suitable habitat present in the study area (that is, habitats in the study area are unsuitable for the species requirements [for example, elevation, hydrology, plant community, disturbance regime, etc.]).
- Low. Species listed as having a "low" potential to occur in the study area are those species for which:
 - o there is no known record of occurrence in the vicinity, and
 - there is marginal or very limited suitable habitat present within the study area.
- **Moderate**. Species listed as having a "moderate" potential to occur in the study area are those species for which:



- there are known records of occurrence in the vicinity, and
- o there is suitable habitat present in the study area.
- **High**. Species listed as having a "high" potential to occur in the study area are those species for which:
 - there are known records of occurrence in the vicinity (there are many records and/or records in close proximity), and
 - there is highly suitable habitat present in the study area.

5.1 Special-status Botanical Species

Based on a review for special-status botanical species, 56 special-status botanical species have been reported from the region consisting of the site's quadrangle and their surrounding quadrangles. Of the special-status botanical species reported in the region, 45 botanical species are considered to have a low or no potential to occur at the project site and 11 species have a moderate or high potential (Table 1 in Appendix 2). Species with a moderate potential for occurrence within the study area are described below:

Coptis laciniata is a perennial herb in the Ranunculaceae family. Within its range State-wide, its blooming period is reported as March through April. This species is reported from meadows, seeps, and North coast coniferous forest streambanks. It often occurs on mesic sites. Habitat for this species exists adjacent to the study area, however it was not detected.

Erythronium oregonum is a perennial herb in the Liliaceae family. Within its range State-wide, its blooming period is reported as March through July. This species is reported from cismontane woodland, meadows, and seeps. Habitat for this species exists adjacent to the study area, however it was not detected.

Erythronium revolutum is a perennial herb in the Liliaceae family. Its elevation range is reported from 0 to 1,600 meters above sea level. Within its range State-wide, its blooming period is reported as March through July. This species is reported from bogs, fens, broadleaved upland forests, and North coast coniferous forests. Habitat for this species exists adjacent to the study area, however it was not detected.

Listera cordata is a perennial herb in the Orchidaceae family. Its elevation range is reported from 5 to 1,370 meters above sea level. Within its range State-wide, its blooming period is reported as February through July. This species is reported from bogs, fens, lower montane coniferous forests, and North coast coniferous forests. Habitat for this species exists adjacent to the study area, however it was not detected.

Lycopodium clavatum is a fern in the Lycopodiaceae family. Within its range State-wide, its blooming period is reported as June through September. This species is reported from lower montane coniferous forests, marshes, swamps, and North coast coniferous forests. Habitat for this species exists adjacent to the study area, however it was not detected.

Mitellastra caulescens is a perennial herb in the Saxifragaceae family. Within its range State-wide, its blooming period is reported as March through October. This species is reported from broadleaved upland forests, lower montane coniferous forests, meadows, seeps, and North coast coniferous forests. It is also found on mesic sites and roadsides. Habitat for this species exists adjacent to the study area, however it was not detected.



Montia howellii is an annual herb in the Montiaceae family. Within its range State-wide, its blooming period is reported as February through May. This species is reported from meadows, seeps, North coast coniferous forests, and vernal pools. Habitat for this species exists adjacent to the study area, however it was not detected.

Pleuropogon refractus is a perennial grass in the Poaceae family. Within its range State-wide, its blooming period is reported as April through August. This species is reported from lower montane coniferous forests, meadows, seeps, and riparian forests. Habitat for this species exists adjacent to the study area, however it was not detected.

Ribes laxiflorum is a perennial shrub in the Grossulariaceae family. Within its range State-wide, its blooming period is reported as March through July. This species is reported from North coast coniferous forests and sometimes on roadsides. Habitat for this species exists adjacent to the study area, however it was not detected.

Sanicula tracyi is a perennial herb in the Apiaceae family. Within its range State-wide, its blooming period is reported as April through July. This species is reported from cismontane woodland, lower montane coniferous forests, and upper montane coniferous forests. Habitat for this species exists adjacent to the study area, however it was not detected.

Sidalcea malviflora ssp. *patula* is a perennial herb in the Malvaceae family. Within its range State-wide, its blooming period is reported as May through August. This species is reported from coastal bluff scrub, coastal prairie, and North coast coniferous forests. It is often reported in roadcuts. Habitat for this species exists adjacent to the study area, however it was not detected.

5.2 Special-status Animal Species

Based on a review of special-status animal species, 39 special-status animal species have been reported with the potential to occur in the project region. Of the special-status animal species potentially occurring in the region, 17 animal species are considered to have a no or low potential to occur at the project site and 22 species have a moderate to high potential (Table 2 in Appendix 2). Species with a moderate or high potential for occurrence within the study area are described below.

Additionally, USFWS's Critical Habitat Portal query for habitat designated as critical for species listed under the FESA reported that the closest designated critical habitat is for the northern spotted owl, 1.6 miles to the east of the study area. The nearest known historical Activity Center of this species is approximately 0.6 miles to the northeast (HUM0155). Project-related activities are not likely to impact this species or its habitat.

5.2.1 Amphibians

The northern red-legged frog (Rana aurora) occupies humid forest, woodlands, and grasslands, usually near water.

Status: Federal None, State None, Species of Special Concern, Global Rank Apparently Secure, State Rank Vulnerable. Potential dispersal habitat exists for this species within portions of the study area. Project activities are not anticipated to impact this species.

The Foothill yellow-legged frog (*Rana boylii*) frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. They are sometimes found in isolated pools; vegetated backwaters; and deep, shaded, spring-fed pools.



Status: Federal None, State None, Species of Special Concern, Global Rank Vulnerable, State Rank Vulnerable. Habitat does exist for this species in the study area. With existing setbacks from waterways, project activities are not expected to impact this species.

5.2.2 Birds

The Cooper's hawk (*Accipiter cooperii*) occurs in woodlands, riparian forest, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks. This species builds stick platform nests lined with bark in crotches of riparian deciduous trees and second-growth conifers near streams.

Status: Federal None, State None, Watchlist, Global Rank Secure, State Rank Apparently Secure. Foraging and nesting habitat for this species exists in and adjacent to the study area. Measures for avoiding and minimizing impacts to nesting birds are included in Section 7.0 Recommendations.

The northern goshawk (Accipiter gentils) occupies coniferous forests, uses old nests and often near water, usually on north slopes.

Status: Federal None, State None, Species of Special Concern, Global Rank Secure, State Rank Vulnerable. Foraging and potential nesting habitat for this species exists in and adjacent to the study area. Measures for avoiding and minimizing impacts to nesting birds are included in Section 7.0 Recommendations.

The golden eagle (*Aquila chrysaetos*) forages along rolling foothills, desert, and mountain areas. Nests are built on a cliff face with outcroppings or large mature trees.

Status: Federal None, State None, Sensitive, Global Rank Secure, State Rank Vulnerable.

Suitable foraging habitat exists for this species within portions of the study area, although this species tends to use larger open grassland prairies for foraging. Project-related activities are not anticipated to impact this species.

The yellow-breasted chat (*Icteria virens*) inhabits thickets and other dense, regrowing areas such as bramble bushes, powerline corridors, and shrubs along streams.

Status: Federal none, State none, Species of Special Concern, Global Rank Secure, State Rank Vulnerable. Suitable habitat exists along the streams adjacent to the study area. With existing setbacks from waterways, project-related activities are not anticipated to impact this species. However, measures for avoiding and minimizing impacts to nesting birds are included in Section 7.0 Recommendations.

The yellow warbler (*Setophaga petechia*) occupies thickets and other disturbed or regrowing habitats, particularly along streams and wetlands.

Status: Federal none, State none, Species of Special Concern, Global Rank Secure, State Rank Vulnerable/Apparently Secure. Suitable habitat exists along the streams adjacent to the study area. With existing setbacks from waterways, project-related activities are not anticipated to impact this species. However, measures for avoiding and minimizing impacts to nesting birds are included in Section 7.0 Recommendations.

The northern spotted owl (*Strix occidentalis caurina*) generally inhabit older forests that contain multi-layered vegetation and a dense, closed canopy. Open space for movement is required within and below the upper canopy.

Status: Federal Threatened, State Threatened, Species of Special Concern, Global Rank Vulnerable, State Rank Imperiled/Vulnerable.

Suitable habitat exists for this species within the study area, although higher quality habitat exists to the east. The nearest Designated Critical Habitat for this species is approximately 1.6 miles to the east of the project



site. With light and noise standards in place under the CMMLUO, project-related activities are not anticipated to impact this species. However, additional measures to avoid and minimize indirect impacts to raptors are included in Section 7.0 Recommendations.

The American peregrine falcon (*Falco peregrinus anatum*) occupies a broad range of habitat types, often along coastlines, mountain ranges, and riparian forest. Nests are built on cliffs and perches are often high structures including trees and power poles.

Status: Federal Delisted, State Delisted, Global Rank Apparently Secure, State Rank Vulnerable/Apparently Secure.

Suitable foraging habitat exists for this species within the study area. Project activities are not anticipated to impact this species. However, additional measures to avoid and minimize indirect impacts to raptors are included in Section 7.0 Recommendations.

The osprey (*Pandion haliaetus*) are most common around estuaries, salt marshes, lakes and rivers. Nests are built on broken-top trees or tall human-made structures.

Status: Federal None, State None, Global Rank Secure, State Rank Apparently Secure.

Suitable nesting habitat exists for this species in the northern portion of the study area, closer to the Van Duzen River. Project activities are not anticipated to impact this species.

5.2.3 Fish

Steelhead – Northern California distinctive population segment (DPS) (*Oncorhynchus mykiss irideus* pop. 16) occur in rivers and streams from Redwood Creek in Del Norte County to the Gualala River in Sonoma County. They spawn in gravel substrates upriver and travel to the ocean as juveniles.

Status: Federal Threatened, State None, Global Rank Imperiled/Vulnerable (subspecies), State Rank Imperiled/Vulnerable.

Potential suitable habitat exists for this species in the streams within the study area. With existing setbacks from waterways, project-related activities are not anticipated to impact this species.

Chinook salmon – California coastal evolutionary significant unit (ESU) (*Onorhynchus tshawytscha* pop. 17) migrate upstream to spawn and juveniles migrate downstream to mature in the ocean.

Status: Federal Threatened, State None, Global Rank Secure, State Rank Critically Imperiled.

Potential suitable habitat exists for this species in the streams within the study area. With existing setbacks from waterways, project-related activities are not anticipated to impact this species.

5.2.4 Insects

The Wawona riffle beetle (*Atractelmis wawona*) is found primarily in streams, sometimes in lakes, and sometimes associated with submerged wood.

Status: Federal None, State None, Global Rank Critically Imperiled/Vulnerable, State Rank Critically Imperiled/Imperiled.

Suitable habitat exists for this species within the study area. With existing setbacks from waterways, project-related activities are not anticipated to impact this species.

The obscure bumblebee (*Bombus caliginosus*) nest either underground or in abandoned bird nests. Status: Federal None, State None, Vulnerable, Global Rank Apparently Secure, State Rank Critically Imperiled/Imperiled.

Suitable habitat exists for this species within the study area, however this species tends to occupy coastal areas. Project-related activities are not anticipated to impact this species.



The western bumblebee (*Bombus occidentalis*) nests underground and forages on a variety of flowering plants. Status: Federal None, State None, Sensitive, Global Rank Imperiled/Vulnerable, State Rank Critically Imperiled. Suitable habitat exists for this species within the study area. With existing State pesticide regulations, projectrelated activities are not anticipated to impact this species.

5.2.5 Mammals

The silver-haired bat (*Lasionycteris noctivagans*) is primarily a forest dweller, feeds on insects near water and open brushy areas. They roost in hollow trees, snags, buildings, rock crevices, caves, and under bark. Status: Federal None, State None, Global Rank Secure, State Rank Vulnerable/Apparently Secure. Suitable habitat exists for this species within the study area. No tree removal is proposed, project-related activities are not anticipated to impact this species.

The fisher (*Pekania pennanti*) West Coast DPS uses mature conifer forests and deciduous riparian areas with heavy canopy closure. They make their dens in cavities, snags, logs, and rocky areas.

Status: Federal None, State Threatened, Species of Special Concern, Global Rank (subspecies) Imperiled/Vulnerable, State Rank Imperiled/Vulnerable.

Potential habitat exists for this species within the study area, although they tend to occupy more mature forest stands. Project-related activities are not anticipated to impact this species.

The North American porcupine (*Erethizon dorsatum*) occurs in upland forests and coniferous woodlands, spending much of their time in trees. It makes its den in hollow trees or rocky areas. They have also adapted to harsh environments such as shrublands, tundra, and deserts. Some porcupines eat bark and stems. They also eat nuts, tubers, seeds, grass, leaves, fruit, and buds. Porcupines are also known to eat bugs and small lizards.

Status: Federal None, State None, Global Rank Secure, State Rank Vulnerable.

Suitable habitat for this species exists within the study area. No tree removal is proposed, project-related activities are not anticipated to impact this species.

The long-eared myotis (*Myotis evotis*) roosts singly or in small groups in buildings, crevices, spaces under bark, and snags. It eats a variety of insects and beetles.

Status: Federal None, State None, Sensitive, Global Rank Secure, State Rank Vulnerable.

Suitable foraging habitat for this species exists within the study area. No tree removal or building demolition is proposed, project-related activities are not anticipated to impact this species.

Yuma myotis (*Myotis yumanensis*) usually feeds on insects over water and roosts in buildings, mines, caves, crevices, and under bridges.

Status: Federal None, State None, Sensitive, Global Rank Secure, State Rank Apparently Secure. Suitable foraging habitat for this species exists within the study area. No structure demolition is proposed, project-related activities are not anticipated to impact this species.

Townsend's big-eared bat (*Corynorhinus townsendii*) occupies coniferous forest, riparian forest, chaparral, and foothill grasslands, most common in mesic sites.

Status: Federal None, State None, Species of Special Concern, Global Rank Vulnerable/Apparently Secure, State Rank Imperiled.

Suitable habitat for this species exists within the study area. No tree removal is proposed and existing activities may already detour this species from the site as they are highly sensitive to disturbance. Further project-related activities are not anticipated to impact this species.



American badger (*Taxidea taxus*) prefers open area and grassland prairies. They sleep and birth their young in burrowed underground dens.

Status: Federal None, State None, Species of Special Concern, Global Rank Secure, State Rank Vulnerable. Suitable habitat for this species exists within the study area. Project-related activities are not anticipated to impact this species.

5.3 Special-status Natural Communities and Habitats

Sensitive natural communities are habitats that are generally defined by vegetation type and geographical location and are increasingly restricted in abundance and distribution. Recognition of natural communities is an ecosystem-based approach to maintaining biodiversity in California. Holland-type CNDDB natural communities are habitat for numerous special-status botanical and animal species. CDFW no longer updates their tracking of Holland-type CNDDB natural communities and has since standardized alliance and association-level vegetation nomenclature for California to comply with the National Vegetation Classification System. High-quality occurrences of natural communities with heritage ranks of 3 or lower are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts.

California oat grass prairie (*Danthonia californica* Herbaceous Alliance [G3S2]) was observed in the adjacent grassland area, however it was not detected within the study area and the project is not expected to impact any of these natural communities. The California oat grass prairie is also protected by a fence surrounding the cultivation area (Appendix 1, Photo 4).

6.0 Conclusion

This Biological Resources Assessment outlines information related to biological resources that have the potential to occur within the project area. No special-status species were observed during field visits, although habitat does exist onsite for several animals that may move into the area. Compliance with all applicable permit conditions, existing laws and regulations, and following recommendations listed below in Section 7.0 are expected to avoid and minimize impacts on special-status species.

7.0 Recommendations

- **Nesting Bird Surveys:** If construction activities begin during the bird nesting season (generally March 15 to August 15), a qualified biologist should conduct surveys no more than seven days prior to activities, within the construction limits and within 100 feet (200 feet for raptors) of the construction limits.
 - If an active nest is located during the survey, a no-disturbance buffer should be established around the nest by the qualified biologist, in consultation with CDFW and USFWS.
 - Protective buffers (no-disturbance area around the nest) should be established at a distance determined by the biologist based on the nesting species, its sensitivity to disturbance, and type of and duration of disturbance expected. Protective buffers should remain in place until the young have fledged.
 - Construction activities outside buffers may proceed while active nests are being monitored, at the discretion of the qualified biologist. If active nests are found to be at risk due to construction activities, construction activities should be delayed until the qualified biologist determines that the young have fledged.



- **Relocation/Old Site Restoration**: Remove all materials from the "lower terrace" where cultivation has been abandoned.
- **Integrated Pest Management**: Sanitation, structural exclusion, and non-toxic rodent deterrents are recommended to minimize indirect impacts on raptors which prey on rodents.

8.0 References

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Photos 1



Photo 1. Typical vegetation adjacent to the study area.



Photo 2. Typical vegetation in wetland areas.



Photo 3. Disturbed vegetation on lower terrace.



Photo 4. Boundary of cultivation.



Special-Status Species 2 Scoping Lists

Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC Green Tree Farm, April 2021													
Scientific Name	Common Name	Family	Lar FedList	CalList	ey and Su GRank	rroundin SRank	g 7.5-minute RPlant Rank	e USGS Quadra Bloom Period	ngles General Habitat	Micro Habitat	Potential of Occurrence		
Allium hoffmanii	Beegum onion	Alliaceae	None	None	G4	S4	4.3	Jun-Jul	Lower montane coniferous forest (serpentinite)	1100 - 1800 meters	None		
Anisocarpus scabridus	scabrid alpine tarplant	Asteraceae	None	None	G3	S3	1B.3	Jul-Aug (Sep)	Upper montane coniferous forest (metamorphic, rocky)	1650 - 2300 meters	Low		
Arctostaphylos hispidula	Howell's manzanita	Ericaceae	None	None	G4	S3	4.2	Mar-Apr	Chaparral (serpentinite or sandstone)	120 - 1250 meters	Low		
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	Ericaceae	None	None	G5T3	\$3	1B.3	(Jan) Mar- May (Jul)	Chaparral, Cismontane woodland, Lower montane coniferous forest	volcanic	Low		
Arnica spathulata	Klamath arnica	Asteraceae	None	None	G3?	S3	4.3	May-Aug	Lower montane coniferous forest (serpentinite)	640 - 1800 meters	Low		
Astragalus agnicidus	Humboldt County milk-vetch	Fabaceae	CE	None	G2	S2	1B.1	Apr-Sep	Broadleaved upland forest, North coast coniferous forest	openings, disturbed areas, sometimes roadsides	Low		
Astragalus rattanii var. rattanii	Rattan's milk-vetch	Fabaceae	None	None	G4T4	S4	4.3	Apr-Jul	Chaparral, Cismontane woodland, Lower montane coniferous forest	gravelly streambanks	Low		



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC Green Tree Farm, April 2021 Larabee Valley and Surrounding 7.5-minute USGS Quadrangles													
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence		
Astragalus umbraticus	Bald Mountain milk-vetch	Fabaceae	None	None	G4	S2	2B.3	May-Aug	Cismontane woodland, Lower montane coniferous forest	sometimes roadside	Low		
Calycadenia micrantha	small- flowered calycadeni a	Asteraceae	None	None	G2	S2	1B.2	Jun-Sep	Chaparral, Meadows and seeps (volcanic), Valley and foothill grassland	Roadsides, rocky, talus, scree, sometimes serpentinite, sparsely vegetated areas	Low		
Carex praticola	northern meadow sedge	Cyperaceae	None	None	G5	S2	2B.2	May-Jul	Meadows and seeps (mesic)	0 - 3200 meters	Low		
Carex scabriuscula	Siskiyou sedge	Cyperaceae	None	None	G4G5	S4	4.3	May-Jul	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	mesic, sometimes serpentinite seeps	Low		
Collomia tracyi	Tracy's collomia	Polemoniace ae	None	None	G4	S4	4.3	Jun-Jul	Broadleaved upland forest, Lower montane coniferous forest	rocky, sometimes serpentinite	Low		
Coptis laciniata	Oregon goldthrea d	Ranunculace ae	None	None	G4?	S3?	4.2	(Feb) Mar- May (Sep- Nov)	Meadows and seeps, North coast coniferous forest (streambanks)	Mesic	High		



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC														
	Green Tree Farm, April 2021													
Larabee Valley and Surrounding 7.5-minute USGS Quadrangles														
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence			
Cypripedium fasciculatum	clustered lady's- slipper	Orchidaceae	None	None	G4	S4	4.2	Mar-Aug	Lower montane coniferous forest, North coast coniferous forest	usually serpentinite seeps and streambanks	Low			
Cypripedium montanum	mountain lady's- slipper	Orchidaceae	None	None	G4	S4	4.2	Mar-Aug	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest	185 - 2225 meters	Low			
Epilobium oreaanum	Oregon	Onagraceae	None	None	G2	S2	1B.2	Jun-Sep	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	mesic	Low			
Epilobium septentrionale	Humboldt County fuchsia	Onagraceae	None	None	G4	S4	4.3	Jul-Sep	Broadleaved upland forest, North coast coniferous forest	sandy or rocky	Low			
Erigeron maniopotamicus	Mad River fleabane daisy	Asteraceae	None	None	G2?	52?	18.2	Mav-Aug	Lower montane coniferous forest, Meadows and seeps (open, dry)	open, disturbed areas (road	low			
Erythronium oregonum	giant fawn lily	Liliaceae	None	None	G4G5	S2.	2B.2	Mar-Jun (Jul)	Cismontane woodland, Meadows and seeps	sometimes serpentinite, rocky, openings	Moderate			



	Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC Green Tree Farm, April 2021 Larabee Valley and Surrounding 7.5-minute USGS Quadrangles													
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence			
Erythronium revolutum	coast fawn lily	Liliaceae	None	None	G4G5	S3	2B.2	Mar-Jul (Aug)	Bogs and fens, Broadleaved upland forest, North coast coniferous forest	Mesic, streambanks	Moderate			
Fritillaria glauca	Siskiyou fritillaria	Liliaceae	None	None	G3G4	\$3	4.2	(Apr-May) Jun-Jul	Alpine boulder and rock field, Subalpine coniferous forest, Upper montane coniferous forest	serpentinite, talus slopes	Low			
Fritillaria purdyi	Purdy's fritillary	Liliaceae	None	None	G4	S4	4.3	Mar-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest	175 - 2255 meters, usually serpentine	Low			
Gilia capitata ssp. pacifica	Pacific gilia	Polemoniace ae	None	None	G5T3	S2	18.2	Apr-Aug	Coastal bluff scrub, Chaparral (openings), Coastal prairie, Valley and foothill grassland	5 - 1665 meters	Low			
Hemizonia congesta ssp. tracyi	Tracy's tarplant	Asteraceae	None	None	_		4.3	May-Oct	Coastal prairie, lower montane coniferous forest	120 - 1200 meters, openings, sometimes serpentinite	Low			
Hosackia yollabolliensis	Yolla Bolly Mtns. bird's-foot trefoil	Fabaceae	None	None	G2	S2	1B.2	Jun-Aug	Meadows and seeps, Upper montane coniferous forest (openings)	dry barren exposed slopes, often gravelly	Low			
Howellia aquatilis	water howellia	Campanulac eae	None	FT	G3	S2	2B.2	Jun	Marshes and swamps (freshwater)	1085 - 1290 meters	Low			



		Regio	onally Occ	urring Sp	ecial-stati	Tal us Botani	ble 1 cal Species	Scoping List CN	NDDB, CNPS, IPaC				
	Larabee Valley and Surrounding 7.5-minute USGS Quadrangles												
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence		
Iliamna latibracteata	California globe mallow	Malvaceae	None	None	G2G3	S2	18.2	Jun-Aug	Montane chaparral, lower montane coniferous forest, riparian scrub	60 - 2000 meters, often in burned areas	Low		
Kopsiopsis hookeri	small groundco ne	Orobanchac eae	None	None	G4?	S1S2	2B.3	Apr-Aug	North coast coniferous forest	90 - 885 meters	None		
Lathyrus biflorus	two- flowered pea	Fabaceae	None	None	G1	S1	1B.1	Jun-Aug	Lower montane coniferous forest (serpentinite)	1370 - 1385 meters	Low		
Lathyrus glandulosus	sticky pea	Fabaceae	None	None	G3	S3	4.3	Apr-Jun	Cismontane woodland	300 - 800 meters	None		
Leptosiphon acicularis	bristly leptosipho n	Polemoniace ae	None	None	G4?	S4?	4.2	Apr-Jul	Chaparral, cismontane woodland, coastal prairie, valley & foothill grassland	55 - 1500 meters	Low		
Lilium rubescens	redwood lily	Liliaceae	None	None	G3	53	4.2	Apr-Aug (Sep)	Broadleaved upland forest, Chaparral, Lower montane coniferous forest, North coast and Upper montane coniferous forest	Sometimes serpentinite, sometimes roadsides	Low		
Listera cordata	heart- leaved twayblade	Orchidaceae	None	None	G5	S4	4.2	Feb-Jul	Bogs and fens, Lower montane coniferous forest, North coast coniferous forest	5 - 1370 meters	Moderate		



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC														
	Green Tree Farm, April 2021 Larabee Valley and Surrounding 7.5-minute USGS Quadrangles													
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence			
Lupinus constancei	The Lassics Iupine	Fabaceae	None	None	G1	S1	1B.1	Jul	Lower montane coniferous forest (serpentinite)	1500 - 2000 meters	None			
Lupinus elmeri	South Fork Mountain Iupine	Fabaceae	None	None	G2	S2	1B.2	Jun-Jul (Aug)	Lower montane coniferous forest	1218 - 2000 meters	None			
Lycopodium	running-	Lycopodiace	Nono	Nono	65	\$2	4.1	Jun-Aug	Lower montane coniferous forest (mesic), Marshes and swamps, North coast coniferous forest (mosic)	often edges, openings, and	Madarata			
Lycopus uniflorus	northern buglewee d	Lamiaceae	None	None	G5	S4	4.3	Jul-Sept	Bogs & fens, marshes & swamps	5 - 2000 meters	Low			
Meesia triquetra	three- ranked hump moss	Meesiaceae	None	None	G5	S4	4.2	Jul	Bogs and fens, Meadows and seeps, Subalpine coniferous forest, Upper montane coniferous forest (mesic)	soil	Low			
Mitellastra	leafy- stemmed	Saxifragacea						(Mar) Apr-	Broadleaved upland forest, Lower montane coniferous forest, Meadows and seeps, North coast	mesic, sometimes				
caulescens	mitrewort	е	None	INONE	65	54	4.2	Oct	coniferous forest	roadsides	ivioderate			



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB_CNPS_IPaC														
	Green Tree Farm, April 2021													
Larabee Valley and Surrounding 7.5-minute USGS Quadrangles														
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence			
Montia howellii	Howell's montia	Montiaceae	None	None	G3G4	S2	2B.2	(Feb) Mar- May	Meadows and seeps, North coast coniferous forest, Vernal pools	vernally mesic, sometimes roadsides	Moderate			
Packera bolanderi var. bolanderi	seacoast ragwort	Asteraceae	None	None	G4T4	S2S3	2B.2	(Jan-Apr) May-Jul (Aug)	Coastal scrub, North coast coniferous forest	Sometimes roadsides	None			
D	white- flowered		Nees	Nees	62	63	10.0	(Mar) May-	Broadleaved upland forest, Lower montane coniferous forest, North coast	sometimes				
Piperia candida Pityopus californicus	California	Ericaceae	None	None	G4G5	53	4.2	(Mar-Apr)	Coniferous forest Broadleaved upland forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest	mesic	Low			
cultornicus	slender bog-	Lincaceae				54	T.L		Lower montane coniferous forest,	mesic				
Platanthera stricta Pleuropogon	orchid nodding semaphor	Orchidaceae	None	None	G5	S3	4.2	May-Aug (Mar) Apr-	Meadows and seeps Lower montane coniferous forest, meadows & seeps,	mesic	Low			
refractus	e grass	Poaceae	None	None	G4	S4	4.2	Aug	riparian forest		Moderate			



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC Green Tree Farm, April 2021															
	Larabee Valley and Surrounding 7.5-minute USGS Quadrangles														
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence				
Ptilidium	Pacific								Lower montane coniferous forest, Upper montane	Usually epiphytic on trees, fallen and decaying logs, and stumps; rarely on humus					
californicum	fuzz wort	Ptilidiaceae	None	None	G4G5	S3S4	4.3	May-Aug	coniferous forest	over boulders	Low				
Ribes laxiflorum	trailing black currant	Grossulariac eae	None	None	G5	S4	4.3	Mar-Jul (Aug)	North coast coniferous forest	sometimes roadside	Moderate				
Sabulina decumbens	The Lassics sandwort	Caryophyllac	None	None	G1	S1	18.2	lut	Lower montane coniferous forest, Upper montane coniferous forest	serpentinite	Low				
	Tracy's								Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous						
Sanicula tracyi	sanicle	Apiaceae	None	None	G4	S4	4.2	Apr-Jul	forest	openings	Moderate				
Codure languages	pale								Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane and Upper montane coniferous	Serpentinite or					
flavidum	stonecrop	Crassulaceae	None	None	G5T4Q	S4	4.3	May-Jul	forest	volcanic	Low				



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC Green Tree Farm April 2021													
Larabee Valley and Surrounding 7.5-minute USGS Quadrangles													
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence		
Sidalcea malachroides	maple- leaved checkerblo om	Malvaceae	None	None	G3	53	4.2	(Mar) Apr- Aug	Broadleaved upland forest, Coastal prairie, Coastal scrub, North coast coniferous forest, Riparian woodland	Often in disturbed areas	Low		
Sidalcea malviflora ssp. patula	Siskiyou checkerblo om	Malvaceae	None	None	G5T2	S2	1B.2	May-Aug	Coastal bluff scrub, Coastal prairie, North coast coniferous forest	often roadcuts	Moderate		
Thermopsis robusta	robust false lupine	Fabaceae	None	None	G2	S2	1B.2	May-Jul	Broadleaved upland forest, North coast coniferous forest		Low		
Usnea longissima	Methusela h's beard lichen	Parmeliacea e	None	None	G4	S4	4.2	N/A	Broadleaved upland forest, North coast coniferous forest	On tree branches; usually on old- growth hardwoods and conifers	Low		
Veratrum insolitum	Siskiyou false- hellebore	Melanthiace ae	None	None	G4	S4	4.3	Jun-Aug	Chaparral & lower montane coniferous forest	clay, 45 - 1635 meters	Low		
Wyethia Ionaicaulis	Humboldt County wyethia	Asteraceae	None	None	G4	S4	4.3	Mav-Jul	Broadleaved upland forest, Coastal prairie, Lower montane coniferous forest	sometimes roadsides	Low		



Table 1 Regionally Occurring Special-status Botanical Species Scoping List CNDDB, CNPS, IPaC Green Tree Farm, April 2021 Larabee Valley and Surrounding 7.5-minute USGS Quadrangles											
Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro Habitat	Potential of Occurrence
1. Species indicator	status as assi	gned by Federa	l Endangere	d Species A	Act (FESA), C	California E	ndangered Spe	cies Act (CESA)), and California Departmer	t of Fish and Wildlife	e (CDFW):
C: candidate			FP: fully protected			VU: vulnerable					
CT: candidate threatened			NT: nearly threatened			WL: watch	list				
D: delisted PT: proposed threate			hreatened								
DPS: distinct	population se	egment	S: sen	sitive							
E: endang	ered		SSC: s	pecies of s	special con	cern					
ESU: evolutio	onarily signific	ant unit	T: t	hreatened	l						
2. Species Heritage	rank as assig	ned by California	a Departme	nt of Fish a	nd Wildlife	(CDFW):					
G1/S1: critica	Ily imperiled										
G2/S2: imper	iled										
G3/S3: vulne	rable										
G4/S4: appar	ently secure										
G5/S5: secure	e										



	Table 2								
	Regionally Occurring Special-status Animal Species Scoping List BIOS, RareFind (CNDDB) and IPaC								
	Green Tree Farm, April 2021								
	Larabee Valley and Surrounding 7.5-minute USGS quadrangles								
Scientific				Other				Potential for	
Name	Common Name	FFSA	CESA	status	GRank	SRank	Habitat	Occurrence	
Nume	connion runic			Juius	A		Habitat	occurrence	
	Ampridians								
							Inhabits cold, clear, rocky streams in wet forests. They		
Ascaphus truei	Pacific tailed frog	None	None	SSC	G4	S3S4	do not inhabit ponds or lakes.	None	
							Humid forests, woodlands, grasslands, & streamsides		
							in NW CA, near dense riparian cover, can be found far		
	northern red-						from water, in damp woods and meadows during non-		
Rana aurora	legged frog	None	None	SSC	G4	S3	breeding season.	Moderate	
							Frequents rocky streams and rivers with rocky		
			Endangered				substrate and open, sunny banks, forests, chaparral, &		
	foothill yellow-		(except North				woodlands. Sometimes in isolated pools, vegetated		
Rana boylii	legged frog	None	coast Clade)	S, SSC	G3	S3	backwaters, and deep, shaded, spring-fed pools.	High	
							Found in shallow, cold, clear, well-shaded rocky		
							streams with year-round flow in addition to waterfalls		
							and seepages. Occasionally found in riparian		
Rhyacotriton	southern torrent						vegetation adjacent to water, but usually found in		
variegatus	salamander	None	None	S, SSC	G3G4	S2S3	contact with water.	Low	
					В	irds			
							Stick platform nests in crotches of riparian deciduous		
Accipiter							trees and second-growth conifers near streams. Nest is		
cooperii	Cooper's hawk	None	None	WL	G5	S4	lined with bark.	High	
							Nest in predominantly interior mountain mature and		
							old-growth forest stands with dense canopy cover and		
							open understories. Forages in mature and forests as		
Accipiter gentilis	northern goshawk	None	None	SSC	G5	S3	well as meadow edges and open brush.	Moderate	
							Needs open terrain for hunting. Builds large platform		
Aquila				FP,			nests in rugged, open habitats; cliffs and large trees in		
chrysaetos	golden eagle	None	None	WL	G5	S3	open areas.	Moderate	
							Breeds above the high tide line on coastal beaches,		
Charadrius							sand spits, dune-backed beaches, sparsely-vegetated		
alexandrines	Western snowy						dunes, beaches at creek and river mouths, and salt		
nivosus	plover	T	None	SSC	G3T3	S2	pans at lagoons and estuaries.	None	



	Table 2								
	Regio	nally Oc	curring Speci	al-status A	nimal Spec	ies Scoping	List BIOS, RareFind (CNDDB) and IPaC		
Larabee Valley and Surrounding 7.5-minute USGS guadrangles									
Scientific	Common Name	FFSA	CESA	Other	GRank	SRank		Potential for	
Coccyzus americanus	Western yellow- billed Cuckoo	T	E	S, BCC	G5T2T3	S1	Use a variety of riparian habitats. Cottonwood and willow trees are an important foraging habitat in areas where the species has been studied in California.	None	
lcteria virens	yellow-breasted chat	None	None	SSC	G5	S3	Thickets and other dense, regrowing areas such as bramble bushes, clearcuts, powerline corridors, and shrubs along streams.	Moderate	
Setophaga petechia	yellow warbler	None	None	SSC	G5	S3S4	Thickets and other disturbed or regrowing habitats, particularly along streams and wetlands.	Moderate	
Strix occidentalis caurina	northern spotted owl	Т	т	SSC	G3T3	S2S3	Generally, inhabit older forests that contain multi- layered, multi-species, closed canopy structure but may occur in younger forest with large snags, tree cavities, and large woody debris. Requires open space within and below the upper canopy.	Moderate	
Falco peregrinus anatum	American peregrine falcon	D	D	FP, S	G4T4	S3S4	Occupies a broad range of ecological communities. Perches on cliffs, power poles, and other tall structures.	Moderate	
Empidonax traillii	Willow flycatcher	None	E	BCC	G5T3T4	S1S2	Occupies areas with willows or other shrubs near standing or running water. They may also breed in drier scrubby areas.	Low	
Psiloscops flammeolus	flammulated owl	None	None	BCC	G4	S2S4	Breeds in open pine forest, in mountains, and especially ponderosa pine forest. Feeds nocturnally on insects. Nests in tree cavities.	Low	
Pandion haliaetus	osprey	None	None	WL, S	G5	S4	Rivers, lakes, and coast where large numbers of fish are present. May be most common around major coastal estuaries and salt marshes.	Moderate	
	1	1	T		Fi	ish		1	
Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	Т	т	None	G4T2Q	S2?	Anadromous; spend first half of life rearing and feeding in streams and tributaries. Spawning habitat is small streams with stable gravel substrates.	Low	



	Table 2							
	Regionally Occurring Special-status Animal Species Scoping List BIOS, RareFind (CNDDB) and IPaC							
	Green Tree Farm, April 2021							
	Larabee Valley and Surrounding 7.5-minute USGS guadrangles							
Scientific	Scientific Other Potential for							
Name	Common Name	FESA	CESA	status	GRank	SRank	Habitat	Occurrence
							Anadromous: capable of surviving in a wide range of	
Oncorhynchus	steelhead -						temperature conditions. Spawning habitat consists of	
mykiss irideus	northern California						gravel substrates free of excessive silt.	
pop. 16	DPS	Т	None	None	G5T2T3Q	S2S3	DSP has springtime entry into the Klamath River.	Moderate
							No. Calif coastal streams south to Middle Fork Eel	
							River.	
Oncorhynchus							Cool, swift, shallow water & clean loose gravel for	
mykiss irideus	summer-run						spawning, & suitably large pools in which to spend the	
pop. 36	steelhead trout	None	None	SSC	G5T4Q	S2	summer.	None
							Anadromous fish, migrating upstream as adults to	
Oncorhynchus	chinook salmon -						spawn in freshwater streams, and migrating as	
tshawytscha	California coastal						juveniles downstream to grow and mature in the	
рор. 17	ESU	Т	None	None	G5	S1	ocean.	Moderate
					Ins	ects		
							Found primarily in streams, although sometimes found	
Atractelmis	Wawona riffle						in lake margins, some species associated with	
wawona	beetle	None	None	None	G1G3	S1S2	submerged wood.	Moderate
							Coastal areas from Santa Barbara County north to	
Bombus	obscure bumble						Washington state. Nests underground or above	
caliginosus	bee	None	None	VU	G4?	S1S2	ground in abandoned bird nests.	Moderate
9							Typically nests underground in abandoned rodent	
Bombus	western bumble						burrows or other cavities. Generalist forager visiting a	
occidentalis	bee	None	None	S	G2G3	S1	wide variety of flowering plants.	Moderate
					Mam	mals		
							Specialized feeder of needles of Douglas fir and grand	
							fir. Nest frequently in trees and in shallow burrows at	
							the base of fir trees. Humid, coastal, mature conifer	
Arborimus pomo	Sonoma tree vole	None	None	SSC	G3	S3	forest.	Low



	Table 2 Regionally Occurring Special-status Animal Species Scoping List BIOS, RareFind (CNDDB) and IPaC Green Tree Farm April 2021								
			Larabee Va	alley and	Surroundin	ng 7.5-minu	ite USGS quadrangles		
Scientific Name	Common Name	FESA	CESA	Other status	GRank	SRank	Habitat	Potential for Occurrence	
Lasionycteris noctivagans	silver-haired bat	None	None	None	G5	S3S4	Primarily a forest dweller; feeds mainly on moths and other insects close to forest streams, ponds, and open brushy areas. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	High	
Martes caurina humboldtensis	Humboldt marten	т	E	SSC	G5T1	S1	Late-successional coniferous forests, but may occur in earlier seral stages with large logs and stumps; generally avoid nonforested areas including prairies and clearcuts that lack overhead cover.	None	
Pekania pennanti	fisher - West Coast DPS	None	None	S, SSC	G5T2T3Q	S2S3	Large areas of dense mature coniferous or mixed forest, Hollow trees, logs, rock crevices, and dens of other animals.	Moderate	
Erethizon dorsatum	North American porcupine	None	None	None	G5	S3	Upland or lower montane coniferous forests, spending much of the time in trees.	Moderate	
Muotic quotic	long orred mystic	Nono	None	S	65	52	Feeds on a variety of arthropods including moths, flies, spiders, and especially beetles. Roosts singly, or in small groups in buildings, crevices, spaces under bark, and snags.	Moderate	
Taxidea taxus	American badger	None	None	SSC	G5	S3	Grassland prairies, prefer open areas, and sleep and birth young in burrowed underground dens.	Moderate	
Myotis thysanodes	fringed myotis	None	None	S	G4	\$3	Uses open habitats, early successional stages, streams, lakes, and ponds as foraging areas. Feeds mostly on insects and other arthropods. Roosts in colonies located in caves, mines, buildings, or crevices. Generally, at elevations 4,000 ft and higher.	Low	
Myotis volans	long-legged myotis	None	None	None	G5	S3	Common in woodland and forest habitats above 4,000 ft. Forages on flying insects (primarily moths) in chaparral, coastal scrub, and in early successional stages of woodlands and forests. Roosts in rock crevices, buildings, under tree bark, mines, and caves.	Low	



	Table 2							
	Regio	nally Oc	curring Special-	status Aı	nimal Spec	ies Scoping	List BIOS, RareFind (CNDDB) and IPaC	
	Green Tree Farm, April 2021							
	1	1	Larabee Va	lley and S	Surroundin	ig 7.5-minu	te USGS quadrangles	1
Scientific				Other				Potential for
Name	Common Name	FESA	CESA	status	GRank	SRank	Habitat	Occurrence
							This species usually feeds on small flying insects over	
							water sources such as ponds, streams, and stock tanks.	
Myotis							Roosts in buildings, mines, caves, crevices, and under	
yumanensis	Yuma myotis	None	None	S	G5	S4	bridges.	Moderate
							Coniferous forests, riparian forests, chaparral, and	
							foothill grasslands.	
Corynorhinus	Townsend's big-						Throughout California in a wide variety of habitats.	
townsendii	eared bat	None	None	SSC	G3G4	S2	Most common in mesic sites.	Moderate
	Mollusks							
							Riparian corridors and uplands within Klamath mixed-	
							conifer forests having a deciduous hardwood	
							understory. The snail is primarily found in moist but	
							well-drained, well-shaded canyons or streamside	
Monadenia							benches covered with a layer of leaf mold at least four	
infumata setosa	Trinity bristle snail	None	Т	VU	G2T2	S2	inches deep.	None
							Seems to be limited to the vicinity of perennial and	
Ancotrema	hooded						intermittent streams, in old coarse woody debris, leaf	
voyanum	lancetooth	None	None	None	G1G2	S1S2	mold of riparian hardwoods.	Low
	Ten Mile						Terrestrial moisture is required for respiration and	
Novo intersessa	shoulderband	None	None	None	G2	52	often hatching of eggs	low
							Shallow areas of clean, clear lakes, ponds and large	
Anodonta							rivers. They prefer lower elevations and a soft, silty	
californiensis	California floater	None	None	S	G3Q	S2	substrate to burrow into.	None
		_			Ren	otiles		
				1			Associated with permanent or nearly permanent water	
							in a wide variety of habitat types. Omnivorous:	
							consuming aquatic plant material & invertebrates as	
							well as fishes and frogs. Require basking sites such as	
							partially submerged logs, rocks, mats of floating	
Emys	western pond			S, SSC,			vegetation, or open mud banks. Hibernation in colder	
marmorata	turtle	None	None	VU	G3G4	S3	areas is passed underwater in bottom mud.	Low



	Table 2								
	Regionally Occurring Special-status Animal Species Scoping List BIOS, RareFind (CNDDB) and IPaC								
	Green Tree Farm, April 2021								
	Larabee Valley and Surrounding 7.5-minute USGS quadrangles								
Scientific				Other				Potential for	
Name	Common Name	FESA	CESA	status	GRank	SRank	Habitat	Occurrence	
1. Species indicat	tor status as assigned	by Feder	al Endangered Spe	cies Act (F	ESA), Califor	nia Endangere	d Species Act (CESA), and California Departmen	nt of Fish and Wildlife (CDFW):	
C: candidate		FP: fully protected			VU: vulnera	VU: vulnerable			
CT: candidate threatened		NT: nearly threatened			WL: watch list				
D: delisted PT: pr			PT: proposed th	T: proposed threatened					
DPS: distinct population segment S: sensitive									
E: enda	ngered		SSC: species of sp	ecial cond	cern				
ESU: evolu	tionarily significant ur	nit	T: threatened						
2. Species Herita	ge rank as assigned b	y Califorr	nia Department of F	ish and W	/ildlife (CDFV	V):			
G1/S1: crit	ically imperiled								
G2/S2: imp	periled								
G3/S3: vuli	nerable								
G4/S4: app	parently secure								
G5/S5: sec	ure								





Table 3 Botanical Species Observed 5/20/2020 and 7/28/2020 Green Trees Farm Dinsmore CA							
Scientific Name		- Family					
Acer macrophyllum	big leaf maple	Sapindaceae					
	red alder	Betulaceae					
Arbutus menziesii	madrone	Fricaceae					
Notholithocarpus densiflorus	tanoak	Fagaceae					
Pseudotsuga menziesii		Pinaceae					
Ouercus garryana var. garryana	Oregon white oak	Fagaceae					
	interior live oak	Fagaceae					
	California bay tree						
Shrube	California Day tree	Lauraceae					
Baccharis nilularis ssn							
consanguinea	covote brush	Asteraceae					
Berberis nervosa	Oregon grape	Berberidaceae					
Ceanothus integerrimus var.		Demonidational					
integerrimus	deer brush	Rhamnaceae					
Ceanothus thyrsiflorus	blue blossom	Rhamnaceae					
Cytisus scoparius	Scotch broom	Fabaceae					
Holodiscus discolor	ocean spray	Rosaceae					
Rosa gymnocarpa	wood rose	Rosaceae					
Rubus armeniacus	Himalayan blackberry	Rosaceae					
Rubus parviflorus	thimbleberry	Rosaceae					
, Rubus ursinus	California blackberry	Rosaceae					
Salix lasiolepis	arrovo willow	Salicaceae					
Ferns and Allies							
Athvrium filix-femina	lady fern	Woodsiaceae					
Blechnum spicant	deer fern	Blechnaceae					
Equisetum arvense	horsetail	Equisetaceae					
Polystichum munitum	sword fern	Drvopteridaceae					
Pteridium aquilinum	bracken fern	Dennstaedtiaceae					
Sedges and Rushes	L						
Carex densa	dense flowered sedge	Cyperaceae					
Carex unilateralis	lateral sedge	Cyperaceae					
Cyperus eragrostis	three cornered sedge	Cyperaceae					
Juncus bufonius	toad rush	Juncaceae					
	slender juncus						
	spreading rush						
Grasses		Vulleadead					
Aira carvonhyllea	silver bairgrass	Poaceae					
Anthoxanthum odoratum	sweet vernal grass	Poaceae					
Avena harbata	slender wild oat	Poaceae					
Briza maxima		Poaceae					
Bromus carinatus	California brome	Poaceae					
Bromus bordopoous							
Bromus madritansis	red brome						
Dactylis glomorata							
Daciyiis giullelala							
Danunonia calliomica	California oat grass	Puaceae					



Table 3 Botanical Species Observed 5/20/2020 and 7/28/2020 Green Trees Farm Dinsmore CA						
Scientific Name	Common Name	Family				
Deschampsia danthonoides	annual bairgrass	Poaceae				
Elymus daucus ssp. daucus	blue wild rve	Poaceae				
Estuca arundinacea	tall fescue	Poaceae				
Festuca bromoides	brome fescue	Poaceae				
Holcus lanatus	velvet grass	Poaceae				
Hordeum murinum	foxtail barley	Poaceae				
Trisetum canescens	nodding trisetum	Poaceae				
Herbs	nedaling theotain	1 000000				
Anapholis margaritacea	pearly everlasting	Asteraceae				
Anthriscus caucalis	bur chervil	Apiaceae				
Aquilegia formosa	western columbine	Ranunculaceae				
Bellis perenne	English daisy	Asteraceae				
Calochortus amabilis	golden fairy lantern	Liliaceae				
Cardamine oligosperma	bittercress	Brassicaceae				
Carduus pycnocephalus	Italian thistle	Asteraceae				
Carduus pychocephalus ssp.						
pycnocephalus	Italian thistle	Asteraceae				
Centaurea calcitrapa	purple star thistle	Asteraceae				
Cerastium glomeratum	mouse-ear chickweed	Caryophyllaceae				
Chlorogalum pomerideanum	wavyleaf soap plant	Agavaceae				
Cirsium vulgare	bull thistle	Asteraceae				
Clarkia amoena ssp. amoena	farewell to spring	Onagraceae				
Clarkia rhomboidea	diamond clarkia	Onagraceae				
Claytonia perfoliata	miner's lettuce	Montiaceae				
Collomia heterophylla	varied leaved collomia	Polemoniaceae				
Cryptantha affinis	common cryptantha	Boraginaceae				
Cynoglossum grande	western hounds tongue	Boraginaceae				
Daucus carota	Queen Anne's lace	Apiaceae				
Dichelostemma ida-maia	firecracker flower	Themidaceae				
Epilobium densiflorum	willow herb	Onagraceae				
Erodium botrys	big heron bill	Geraniaceae				
Eurhyrichium oreganum	Oregon eurhynchium moss	Brachytheciaceae				
Galium aparine	cleaver plant	Rubiaceae				
Galium parisiense	wall bedstraw	Rubiaceae				
Galium trifidum	trifid bedstraw	Rubiaceae				
Geranium dissectum	cutleaf geranium	Geraniaceae				
Heracleum maximum	common cowparsnip	Apiaceae				
Hieracium albiflorum	white flowered hawkweed	Asteraceae				
Hydrophyllum tenuipes	pacific water leaf	Boraginaceae				
Hypochaeris glabra	smooth cats ear	Asteraceae				
Hypochaeris radicata	hairy cats ear	Asteraceae				
Iris purdyi	Purdy's iris	Iridaceae				
Lathyrus latifolius	everlasting pea	Fabaceae				
Leucanthemum vulgare	oxeye daisy	Asteraceae				
Linum bienne	flax	Linaceae				
Lupinus bicolor	annual lupine	Fabaceae				
Lysimachia arvensis	scarlet pimpernel	Myrsinaceae				



Table 3Botanical Species Observed 5/20/2020 and 7/28/2020Green Trees Farm. Dinsmore. CA						
Scientific Name	Common Name	Family				
Lysimachia latifolia	pacific star flower	Myrsinaceae				
Madia exigua	small tarweed	Asteraceae				
Malva parviflora	cheeseweed mallow	Malvaceae				
Matricaria discoidea	pineapple weed	Asteraceae				
Medicago polymorpha	bur clover	Fabaceae				
Mentha pulegium	pennyroyal	Lamiaceae				
Myosotis discolor	forget me not	Boraginanceae				
Osmorhiza berteroi	mountain sweet cicely	Apiaceae				
Petasites frigidus var. palmatus	western coltsfoot	Asteraceae				
Plantago lanceolata	English plantain	Plantaginaceae				
Plantago major	broadleaf plantain	Plantaginaceae				
Ranunculus californicus	California buttercup	Ranunculaceae				
Ranunculus repens	creeping buttercup	Ranunculaceae				
Raphanus sativus	jointed charlock	Brassicaceae				
Ribes sangineum	pink flowered currant	Grossulariaceae				
Rumex acetocella	sheep sorrel	Polygonaceae				
Rumex crispus	curly dock	Polygonaceae				
Sagina apetala	dwarf pearlwort	Caryophyllaceae				
Sanicula crassicaulis	pacific sanicle	Apiaceae				
Saxifraga mertensiana	wood saxifrage	Saxifragaceae				
Senecio minimus	coast burnweed	Asteraceae				
Senecio sylvaticus	woodland groundsel	Asteraceae				
Sherardia arvensis	field madder	Rubiaceae				
Silene laciniata ssp. californica	California Indian pink	Caryophyllaceae				
Sonchus oleraceus	common sowthistle	Asteraceae				
Stachys ajugoides	bugle hedge nettle	Lamiaceae				
Stellaria media	chickweed	Caryophyllaceae				
Taraxacum officinale	dandelion	Asteraceae				
Tillima grandiflorus	fringe cups	Saxifragaceae				
Torilis arvensis	hedge parsley	Apiaceae				
Trifolium dubium	little hop clover	Fabaceae				
Trifolium fucatum	bull clover	Fabaceae				
Trifolium repens	white clover	Fabaceae				
Trifolium subterranean	subterranean clover	Fabaceae				
Trifolium subterraneum	subterranean clover	Fabaceae				
Trifolium variegatum var. major	large variegated clover	Fabaceae				
Triteleia hyacinthine	wild hyacinth	Themidaceae				
Vancouveria hexandra	inside out flower	Berberidaceae				
Vicia ludoviciana ssp. ludoviciana	Louisiana vetch	Fabaceae				
Vicia sativa	spring vetch	Fabaceae				
Whipplea modesta	modesty	Hydrangeaceae				
Vines						
Lonicera hispidula	pink honeysuckle	Caprifoliaceae				
Toxicodendron diversilobum	poison oak	Anacardiaceae				
134 Species						



	Table 4 Animals Observed 7/28/2020								
	Green Tree Farms, Dinsmore, CA								
Scientific Name	Common Name	Family	Nesting Habit	Listed?					
		Birc	ls						
Melozone crissalis	California towhee	Passerellidae	California Towhees typically build their nests in a low fork (3-12 feet high) in a shrub or small tree.	No					
Cathartes aura	turkey vulture	Cathartidae	Turkey Vultures nest in rock crevices, caves, ledges, thickets, mammal burrows and hollow logs, fallen trees, abandoned hawk or heron nests, and abandoned buildings	No					
Corvus corax	common raven	Corvidae	Common Ravens build their nests on cliffs, in trees, and on structures such as power-line towers, telephone poles, billboards, and bridges	No					
Melanerpes formicivorus	acorn woodpecker	Picidae	Acorn Woodpeckers excavate multiple cavities, any one of which may be used for nesting (the rest are used for nocturnal roosting). They dig cavities in dead or living limbs, large or small, either in the granary (storage) tree or any other large tree. The woodpeckers reuse nest holes for many years.	No					
Spinus tristis	American Goldfinch	Fringillidae	The nest is often built high in a shrub, where two or three vertical branches join; usually shaded by clusters of leaves or needles from above, but often open and visible from below.	No					
		Inse	cts						
Vanessa virginiensis	American lady	Nymphalidae	Prefers open areas with low vegetation, weedy fields, and woodland clearings.	No					
Papilio zelicaon	Anise swallowtail	Papilionidae	Bare hills and mountains, humanmade gardens, vacant fields and lots, as well as roadsides.	No					



Eureka, CA Arcata, CA Redding, CA Willits, CA Fort Bragg, CA Coos Bay, OR Klamath Falls, OR

