



P.O. Box 733, Hydesville, CA 95547 . (707) 768-3743 . (707) 768-3747 fax

Biological Resource Assessment

**Lewis and Sally Call
Larry Lampi**

Humboldt County

APN: 017-203-002, 017-203-001

Exemptions: 1-26EX-00125-HUM, 1-26EX-00127-HUM

**Prepared by
Hohman and Associates
May 11, 2026**

Setting

This document assesses habitats and potentially occurring special-status plants and animals; and identifies potential impacts of approved Structure Protection Exemptions #1-26EX-00127-HUM and # 1-26EX-00125-HUM as it applies to activities within the California Coastal Zone. These exemptions cover portions of parcels 017-203-002 and 017-203-001 owned by Lewis & Sally Call and Larry Lampi, respectively. The Lampi property is directly north of the Call property.

The Project Area on the Call property is approximately 3.4 acres and the area on the Lampi ownership is 0.1 acres. Both are located in Section 31, Township 5 North, Range 1 East; HB&M, approximately 1 mile south south-east of Redwood Acres in Eureka on the Arcata South USGS 7.5' Quad. The property lies within the California Floristic Province, Northwestern California region, and North Coast sub-region. The project area is in the Ryan Slough Cal Watershed (1110.000104). There is an unnamed Class III watercourse that runs through the property but is excluded from the operational boundaries. This watercourse eventually flows to Ryan Creek. Ryan Creek is the closest named watercourse and generally runs north. The closest point to the Project Area is approximately 2,700 feet to the west. Adjacent properties are rural residential and commercial timberland, with recent harvest activity.

Habitat within the properties that contain the Project Area is composed of heavily timbered forest land, dominated by coast redwood (*Sequoia sempervirens*) with a small portion of Douglas-fir (*Pseudotsuga menziesii*), grand fir (*Abies grandis*), and other conifers. There are grassy openings maintained by the landowners adjacent to the habitable structures. The upper reaches of an unnamed Class III watercourse runs from southwest to northeast in the southeast corner of the Call property.

Methods

A list of special-status species was downloaded from CNDDDB BIOS for the Arcata South and adjacent Eureka 7.5 minute quadrangles. Species on the CNDDDB list were primarily included based on State or Federal listing status or CDFW designation. Native pollinators found in the area were also included based on State rarity and their potential to be impacted by project activities. Additional species were added to the special-status list for consideration based on potential habitat or high levels of conservation concern. All special-status animals found in the Arcata South and Eureka quadrangles are in the tables below. Special-status plants with a moderate or high potential of occurrence are further described following the tables. Local knowledge and available spatial data was also used for habitat analysis.

References

- California Department of Fish and Wildlife. California Natural Diversity Database (CNDDDB) – Commercial version dated May 2, 2026. Retrieved May 06, 2026.
- California Natural Diversity Database (CNDDDB). April 2026. Special Animals List. California Department of Fish and Wildlife. Sacramento, CA.

- California Natural Diversity Database (CNDDDB). April 2026. State and Federally Listed Endangered and Threatened Animals of California. California Department of Fish and Wildlife. Sacramento, CA.
- California Natural Diversity Database (CNDDDB). April 2026. Special Vascular Plants, Bryophytes, and Lichens List. California Department of Fish and Wildlife. Sacramento, CA.
- California Natural Diversity Database (CNDDDB). April 2026. State and Federally Listed Endangered, Threatened, and Rare Plants of California. California Department of Fish and Wildlife. Sacramento, CA.
- Cornell Lab of Ornithology websites and mobile apps.
- iNaturalist. 2026. Available from <https://www.inaturalist.org>. Accessed May 6, 2026.
- IUCN. 2026. The IUCN Red List of Threatened Species. <https://www.iucnredlist.org>. Accessed on May 6, 2026.
- Johnson, O. W., Ruckelshaus, M. H., Grant, W. S., Waknitz, F. W., Garrett, A. M., Bryant, G. J., Neely, K., & Hard, J. J. (1999). Status review of coastal cutthroat trout from Washington, Oregon, and California. US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northwest Fisheries Science Center.
- NatureServe. 2026. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Available <https://explorer.natureserve.org/>. Accessed on May 6, 2026.
- Sibley, D.A., 2003. The Sibley field guide to birds of Western North America. Alfred A. Knopf, New York.
- Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento. <https://www.wildlife.ca.gov/Conservation/SSC/Birds>.
- U.S. Fish & Wildlife Service (USFWS). (n.d.). Pacific Lamprey (*Entosphenus tridentatus*) <https://www.fws.gov/species/pacific-lamprey-entosphenus-tridentatus>. Accessed on May 6, 2026.
- U.S. Fish and Wildlife Service (USFWS ECOS). ECOS Environmental Conservation Online System. <https://ecos.fws.gov/ecp/>. Accessed: May 6, 2026.
- Vladykov, V. D., & Follett, W. I. (1958). Redescription of *Lampetra ayresii* (Günther) of western North America, a species of lamprey (Petromyzontidae) distinct from *Lampetra fluviatilis* (Linnaeus) of Europe. Journal of the Fisheries Board of Canada, 15(1), 47-77.
- Xerces Society for Invertebrate Conservation. Bumble bee conservation. Portland, OR. <http://xerces.org/bumblebees/>
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updated by CWHR Program Staff, February 2005. <https://www.wildlife.ca.gov/data/cwhr/life-history-andrange>

Rank Definitions

Global Conservation Status Definitions

Listed below are definitions for interpreting NatureServe global (range-wide) conservation status ranks. These ranks are assigned by NatureServe scientists or by a designated lead office in the NatureServe network.

G1 Critically Imperiled—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2 Imperiled—At high risk of extinction or elimination due to very restricted range, very few populations, steep declines, or other factors.

G3 Vulnerable—At moderate risk of extinction or elimination due to a restricted range, relatively few populations, recent and widespread declines, or other factors.

G4 Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5 Secure—Common; widespread and abundant.

G#G# Range Rank—A numeric range rank (e.g., G2G3, G1G3) is used to indicate the range of uncertainty about the exact status of a taxon or ecosystem type. Ranges cannot skip more than two ranks (e.g., GU should be used rather than G1G4).

Intraspecific Taxon Conservation Status Ranks

T# Intraspecific Taxon (trinomial)—The status of intraspecific taxa (subspecies or varieties) are indicated by a “T-rank” following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T subrank cannot imply the subspecies or variety is more abundant than the species. For example, a G1T2 subrank should not occur. A vertebrate animal population, (e.g., listed under the U.S. Endangered Species Act or assigned candidate status) may be tracked as an intraspecific taxon and given a Trank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status.

Subnational (S) Conservation Status Ranks

S1 Critically Imperiled—Critically imperiled in the jurisdiction because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the jurisdiction.

S2 Imperiled—Imperiled in the jurisdiction because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from jurisdiction.

S3 Vulnerable—Vulnerable in the jurisdiction due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5 Secure—Common, widespread, and abundant in the jurisdiction.

S#S# Range Rank — A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).

Rank Qualifiers

? Inexact Numeric Rank—Denotes inexact numeric rank; this should not be used with any of the Variant Global Conservation Status Ranks or GX or GH.

Q Questionable taxonomy that may reduce conservation priority— Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or inclusion of this taxon or type in another taxon or type, with the resulting taxon having a lower-priority (numerically higher) conservation status rank. The “Q” modifier is only used at a global level and not at a national or subnational level.

The California Rare Plant Ranks

1A: Plants Presumed Extirpated in California and either rare or extinct elsewhere

The plants of Rank 1A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes those plant taxa that are both presumed extinct, as well as those plants which are presumed extirpated in California and rare elsewhere. A plant is extinct if it no longer occurs anywhere. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

1B: Plants Rare, Threatened, or Endangered in California and Elsewhere (Includes Rare Plant Ranks 1B.1, 1B.2, 1B.3)

The plants of Rank 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. California Rare Plant Rank 1B plants constitute the majority of plant taxa tracked by the CNDDB, with more than 1,000 plants assigned to this category of rarity.

2A: Plants Presumed Extirpated in California, but more common elsewhere

The plants of Rank 2A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes only those plant taxa that are presumed extirpated in California, but that are more common elsewhere in their range. Note: Plants of both Rank 1A and 2A are presumed extirpated in California; the only difference is the status of the plants outside of the state.

2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere (Includes Rare Plant Ranks 2B.1, 2B.2, 2B.3)

The plants of Rank 2B are rare, threatened or endangered in California, but more common elsewhere. Plants common in other states or countries are not eligible for consideration under the provisions of the **Federal** Endangered Species Act; however they are eligible for consideration under the **California** Endangered Species Act. This rank is meant to highlight the importance of protecting the geographic range and genetic diversity of more widespread species by protecting those species whose ranges just extend into California. Note: Plants of both Rank 1B and 2B are rare, threatened or endangered in California; the only difference is the status of the plants outside of the state.

3: Plants for which we need more information - Review list

Many of the plants constituting California Rare Plant Rank 3 meet the definitions of the California Endangered Species Act of the California Fish and Game Code and are eligible for state listing. Impacts to these species or their habitat should be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they may meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

4: Plants of limited distribution - Watch list

Plants with a California Rare Plant Rank of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Should the degree of endangerment or rarity of a California Rare Plant Rank 4 plant change, we will transfer it to a more appropriate rank. Some of the plants constituting California Rare Plant Rank 4 meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and we strongly recommend that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, based on CEQA Guidelines §15125 (c) and/or §15380.

Threat Ranks:

The California Rare Plant Ranks (CRPR) use a decimal-style threat rank. The threat rank is an extension added onto the CRPR and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. So most CRPRs read as 1B.1, 1B.2, 1B.3, etc. Note that some Rank 3 plants do not have a threat code extension due to difficulty in ascertaining threats for these species. Rank 1A and 2A plants also do not have threat code extensions since there are no known extant populations of the plants in California.

Threat Code extensions and their meanings:

- .1** - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2** – Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat)
- .3** – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

FESA and CESA abbreviation definitions

CR – California Rare

CE – California Endangered

FE – Federally Endangered

Table 1. Special Status Animals (from CNDDB Bios 6 for USGS Quads: Arcata South and Eureka)

BAA, Biological Assessment Area, defined as 0.7 mile radius circle around the Project Area perimeter

Taxon Group	Scientific Name	Common Name	Federal Listing	CA Listing	Global Rank	State Rank	Potential in BAA
Amphibians	<i>Ascaphus truei</i>	Pacific tailed frog	None	None	G4	S3S4	Possible
Amphibians	<i>Rana aurora</i>	northern red-legged frog	None	None	G4	S3	Yes
Amphibians	<i>Rana boylei</i> pop. 1	foothill yellow-legged frog - north coast DPS	None	None	G3T4	S4	Yes
Amphibians	<i>Rhyacotriton variegatus</i>	southern torrent salamander	None	None	G3?	S2S3	Yes
Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	Threatened	Threatened	T3	S2	Yes
Birds	<i>Pelecanus occidentalis californicus</i>	California brown pelican	Delisted		T3	S3	No
Birds	<i>Nannopterum auritum</i>	double-crested cormorant	None	None	G5	S4	No
Birds	<i>Botaurus lentiginosus</i>	American bittern	None	None	G5	S3	No
Birds	<i>Ardea herodias</i>	great blue heron	None	None	G5	S4	Yes
Birds	<i>Ardea alba</i>	great egret	None	None	G5	S4	Yes
Birds	<i>Egretta thula</i>	snowy egret	None	None	G5	S4	Yes
Birds	<i>Nycticorax nycticorax</i>	black-crowned night heron	None	None	G5	S4	Yes
Birds	<i>Pandion haliaetus</i>	osprey	None	None	G5	S4	Yes
Birds	<i>Elanus leucurus</i>	white-tailed kite	None	None	G5	S3S4	Yes
Birds	<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	Endangered	G5	S3	Yes
Birds	<i>Circus hudsonius</i>	northern harrier	None	None	G5	S3	Yes
Birds	<i>Falco peregrinus anatum</i>	American peregrine falcon	Delisted	Delisted	G4T4	S3S4	Possible
Birds	<i>Coturnicops noveboracensis</i>	yellow rail	None	None	G4	S3	Possible
Birds	<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	Endangered	Endangered	G3	S2	Possible
Birds	<i>Anarhynchus nivosus nivosus</i>	western snowy plover	Threatened	None	G3T3	S3	No
Birds	<i>Anarhynchus montanus</i>	mountain plover	None	None	G3	S2	No
Birds	<i>Numenius americanus</i>	long-billed curlew	None	None	G4	S2	No
Birds	<i>Thalasseus elegans</i>	elegant tern	None	None	G4	S3	No
Birds	<i>Athene cunicularia</i>	burrowing owl	None	Candidate Endangered	G4	S2	No

Birds	<i>Riparia riparia</i>	bank swallow	None	Threatened	G5	S3	Yes
Fish	<i>Entosphenus tridentatus</i>	Pacific lamprey	None	None	G4	S3	Possible
Fish	<i>Lampetra richardsoni</i>	western brook lamprey	None	None	G4G5	S3S4	Yes
Fish	<i>Acipenser medirostris</i> pop. 2	green sturgeon - northern DPS	None	None	G2T1	S1	No
Fish	<i>Oncorhynchus kisutch</i> pop. 2	coho salmon - southern Oregon / northern California ESU	Threatened	Threatened	G5T2Q	S2	No
Fish	<i>Oncorhynchus tshawytscha</i> pop. 17	chinook salmon - California coastal ESU	Threatened	None	T2	S2	No
Fish	<i>Oncorhynchus clarkii clarkii</i>	coast cutthroat trout	None	None	G5T4	S3	Yes
Fish	<i>Oncorhynchus mykiss irideus</i> pop. 49	steelhead - northern California DPS winter-run	Threatened	None	G5T3Q	S3	Yes
Fish	<i>Spirinchus thaleichthys</i>	longfin smelt	Proposed Endangered	Threatened	G5	S1	Possible
Fish	<i>Thaleichthys pacificus</i>	eulachon	Threatened	None	G5	S1	No
Fish	<i>Eucyclogobius newberryi</i>	tidewater goby	Endangered	None	G3	S3	Possible
Fish	<i>Acipenser medirostris</i> pop. 2	green sturgeon - northern DPS	None	None	T1	S1	No
Fish	<i>Acipenser transmontanus</i>	white sturgeon	None	Candidate Threatened	G3	S2	No
Insects	<i>Cicindela hirticollis gravida</i>	sandy beach tiger beetle	None	None	T2	S2	No
Insects	<i>Bombus caliginosus</i>	obscure bumble bee	None	None	G2G3	S1S2	Yes
Insects	<i>Bombus occidentalis</i>	western bumble bee	None	Candidate Endangered	G3	S1	Yes
Insects	<i>Scaphinotus behrensi</i>	Behrens' snail-eating beetle	None	None	G2G4	S2S4	Possible
Mammals	<i>Aplodontia rufa humboldtiana</i>	Humboldt mountain beaver	None	None	G5TNR	SNR	Possible
Mammals	<i>Arborimus pomo</i>	Sonoma tree vole	None	None	G3	S3	Possible
Mammals	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None	None	G4	S2	Possible
Mammals	<i>Enhydra lutris nereis</i>	southern sea otter	Threatened	None	T2	S3	No
Mammals	<i>Erethizon dorsatum</i>	North American porcupine	None	None	G5	S3	Yes
Mammals	<i>Pekania pennanti</i>	Fisher	None	None	G5	S2S3	Yes
Mollusks	<i>Anodonta californiensis</i>	California floater	None	None	G3	S2	No
Mollusks	<i>Littorina subrotundata</i>	Newcomb's littorine snail	None	None	G5	S1	No

Reptiles	Actinemys marmorata	northwestern pond turtle	Proposed Threatened	None	G2	SNR	Possible
----------	---------------------	--------------------------	---------------------	------	----	-----	----------

Table 2. Plants

Scientific Name	Common Name	Federal Listing	CA Listing	Global Rank	State Rank	CRPR Rank	Habitat	Potential in BAA
Fissidens pauperculus	minute pocket moss	None	None	G3?	S2	1B.2	North coast coniferous forest.	Possible
Usnea longissima	Methuselah's beard lichen	None	None	G5	S4	4.2	North coast coniferous forest, broadleaved upland forest.	Likely
Sulcaria spiralis	twisted horsehair lichen	None	None	G3G4	S2	1B.2	North Coast coniferous forest (immediate coast), coastal dunes.	No
Abronia umbellata var. breviflora	pink sand-verbena	None	None	G4G5T2	S2	1B.1	Coastal dunes and coastal strand.	No
Angelica lucida	sea-watch	None	None	G5	S3	4.2	Coastal bluff scrub / dunes as well as (coastal salt) marshes and swamps	No
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	None	None	G2T2	S2	1B.2	Coastal dunes (mesic) / scrub as well as (coastal salt, streamsides) marshes and swamps	No
Cardamine angulata	seaside bittercress	None	None	G4G5	S3	2B.1	North coast coniferous forest, lower montane coniferous forest.	Yes
Carex arcta	northern clustered sedge	None	None	G5	S1	2B.2	Bogs and fens, North Coast coniferous forest (mesic)	Yes
Carex lyngbyei	Lyngbye's sedge	None	None	G5	S3	2B.2	Marshes and swamps (brackish or freshwater).	Yes
Carex praticola	northern meadow sedge	None	None	G5	S2	2B.2	Meadows and seeps.	Yes
Castilleja ambigua var. humboldtensis	Humboldt Bay owl's-clover	None	None	G5T2	S2	1B.2	Marshes and swamps.	Yes
Castilleja litoralis	Oregon coast paintbrush	None	None	G3	S3	2B.2	Coastal bluff scrub, coastal dunes, coastal scrub.	No

<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	None	None	G4?T2	S2	1B.2	Marshes and swamps (coastal salt)	No
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	None	None	G5?	S3	4.3	North Coast coniferous forest; Riparian forest	Possible
<i>Collinsia corymbosa</i>	round-headed collinsia	None	None	G1	S1	1B.2	Coastal dunes	No
<i>Eleocharis parvula</i>	small spikerush	None	None	G5	S3	4.3	Marshes and swamps	Possible
<i>Erysimum menziesii</i>	Menzies' wallflower	Endangered	Endangered	G1	S1	1B.1	Coastal dunes	No
<i>Erythronium revolutum</i>	coast fawn lily	None	None	G4G5	S3	2B.2	Bogs and fens, broadleaved upland forest, north coast coniferous forest.	Possible
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	None	None	G5T3	S3	1B.2	Coastal bluff scrub, chaparral, coastal prairie, valley and foothill grassland.	Possible
<i>Gilia millefoliata</i>	dark-eyed gilia	None	None	G2	S2	1B.2	Coastal dunes.	No
<i>Glehnia littoralis</i> ssp. <i>leiocarpa</i>	American glehnia	None	None	G5T5	S2S3	4.2	Coastal dunes	No
<i>Hesperis matronalis</i> var. <i>brevifolia</i>	short-leaved evax	None	None	G4T3	S2	1B.2	coastal bluff scrub / dunes / prairie from 0 to 215 meters above sea level	No
<i>Hosackia gracilis</i>	harlequin lotus	None	None	G3G4	S3	4.2	Broadleaved upland forest; closed-cone and north coast coniferous forest; cismontane wood-land. Coastal bluff scrub / prairie. Meadows and seeps; marshes & swamps; valley & foothill grassland	Possible
<i>Lasthenia californica</i> ssp. <i>macrantha</i>	perennial goldfields	None	None	G3T2	S2	1B.2	coastal bluff scrub / dunes	No
<i>Lathyrus glandulosus</i>	sticky pea	None	None	G3	S3	4.3	Cismontane woodland	Possible
<i>Lathyrus japonicus</i>	seaside pea	None	None	G5	S2	2B.1	Coastal dunes.	No
<i>Lathyrus palustris</i>	marsh pea	None	None	G5	S2	2B.2	Bogs and fens, lower montane coniferous forest, marshes and swamps, north coast coniferous	Possible

							forest, coastal prairie, coastal scrub.	
<i>Layia carnosa</i>	beach layia	Threatened	Endangered	G2	S2	1B.1	Coastal dunes, coastal scrub.	No
<i>Lilium kelloggii</i>	Kellogg's lily	None	None	G3	S3	4.3	Lower montane coniferous forest; North Coast coniferous forest	Possible
<i>Lilium occidentale</i>	western lily	Endangered	Endangered	G1G2	S1	1B.1	Bogs & fens; marshes & swamps (freshwater); North Coast coniferous forest (openings). Coastal bluff scrub / prairie.	Possible
<i>Listera cordata</i>	heart-leaved twayblade	None	None	G5	S4	4.2	Bogs and fens; Lower montane coniferous forest; North Coast coniferous forest	:Likely
<i>Lycopodium clavatum</i>	running-pine	None	None	G5	S3	4.1	Lower montane coniferous forest, north coast coniferous forest, marshes and swamps.	Likely
<i>Mitellastraca caulescens</i>	leafy-stemmed mitrewort	None	None	G5	S4	4.2	Broadleafed upland forest; lower montane coniferous forest; north coast coniferous forest; Meadows & seeps	Possible
<i>Monotropa uniflora</i>	ghost-pipe	None	None	G5	S2	2B.2	Broadleafed upland forest, north coast coniferous forest.	Yes
<i>Montia howellii</i>	Howell's montia	None	None	G3G4	S2	2B.2	Meadows and seeps, north coast coniferous forest, vernal pools.	Possible
<i>Oenothera wolfii</i>	Wolf's evening-primrose	None	None	G2	S1	1B.1	Coastal bluff scrub, coastal dunes, coastal prairie, lower montane coniferous forest.	Possible
<i>Pleuropogon refractus</i>	nodding semaphore grass	None	None	G4	S4	4.2	Lower montane coniferous forest; North Coast coniferous forest; Riparian forest; meadows and seeps	Likely
<i>Ribes laxiflorum</i>	trailing black currant	None	None	G5?	S3	4.3	North Coast coniferous forest	Possible
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	None	None	G3	S3	4.2	Broadleafed upland forest; North Coast coniferous forest; Riparian woodland. Coastal prairie / scrub	Yes
<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Siskiyou checkerbloom	None	None	G4G5T2	S2	1B.2	Coastal bluff scrub, coastal prairie, north coast coniferous forest.	Possible

<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	None	None	G5T2	S2	1B.2	north coast & lower montane coniferous forests, meadows and seeps, near meadows, and in gravelly soil from 5 - 1,805 m.	Possible
<i>Silene scouleri</i> ssp. <i>scouleri</i>	Scouler's catchfly	None	None	G5T4T5	S2S3	2B.2	Coastal bluff scrub, coastal prairie, valley & foothill grassland	Possible
<i>Spergularia</i> <i>canadensis</i> var. <i>occidentalis</i>	western sand- spurrey	None	None	G5T4	S1	2B.1	Marshes and swamps (coastal salt)	No
<i>Viola palustris</i>	alpine marsh violet	None	None	G5	S1S2	2B.2	Coastal scrub, bogs and fens.	No

Potential Special-Status Species Details

I. Potentially Occurring Special Status Birds

1. Peregrine falcon (*Falco peregrinus anatum*)

Special Status: Federally Delisted, State Delisted, California Department of Forestry & Fire protection “Sensitive”, Protected under Migratory Bird Treaty Act; NatureServe Ranks: G4T4, S3S4

Family: Falconidae

Habitat/Life-history Requirements: The formerly federally endangered peregrine falcon was delisted in 1999 due to recovery (USFWS ECOS). The peregrine falcon is an uncommon year-round resident and migrant in California (Zeiner et al. 1988). Peregrine falcons typically use cliffs and ledges near bodies of water for cover and nesting areas, but they may also nest on buildings or bridges in the city (Sibley 2003, Cornell Lab). Peregrine falcons may breed in woodland, forest, or coastal habitat (Zeiner et al. 1988). Riparian and wetland areas are important habitat yearlong (Zeiner et al. 1988).

Status within the Project Area: RareFind observations in the two-quad search have redacted locations, however descriptions from as recently as 2020 around Humboldt Bay include nest sites on bridges (not present) and large, live redwoods with broken tops. Habitat is present within the BAA and adjacent to the project area that could support this species. There is limited potential nesting habitat within the Project Area.

Potential Impact/Mitigation: If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

2. Bank swallow (*Riparia riparia*)

Status: State threatened, Bureau of Land Management “Sensitive”, protected under Migratory Bird Treaty Act, NatureServe Ranks G5, S4

Family: Hirundinidae

Habitat/Life-history Requirements: Bank Swallows live in low areas along rivers, streams, ocean coasts, and reservoirs. Their territories usually include vertical cliffs or banks where they nest in colonies. Bank Swallows live in low areas along rivers, streams, ocean coasts, and reservoirs. Their territories usually include vertical cliffs or banks where they nest in colonies.

Status within the Project Area: Potential habitat does occur within the BAA but does not exist within the project area.

Potential Impact/Mitigation The project should not significantly impact nesting bank swallows or their habitat.

3. Great blue heron (*Ardea herodias*)

Special Status: California Department of Forestry & Fire protection “Sensitive”; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S4

Family: Ardeidae

Habitat/Life-history Requirements: Great Blue Herons live in both freshwater and saltwater habitats, and also forage in grasslands and agricultural fields, where they stalk frogs and mammals. Most breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests. Great Blue Herons nest mainly in trees, but will also nest on the ground, on bushes, in mangroves, and on structures such as duck blinds, channel markers, or artificial nest platforms (Cornell Lab).

Status within the Project Area: RareFind occurrences include Woodley Island and the north end of the bay near the Mad River Slough. Marginal foraging and nesting opportunities exist within the BAA, but there are none in the project area.

Potential Impact/Mitigation: The project should not significantly impact great blue herons or their foraging habitat, however it is within range of potentially desirable nesting areas. If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

4. Osprey (*Pandion haliaetus*)

Special Status: CDFW Watch List; Protected under Migratory Bird Treaty Act; NatureServe Ranks: G5, S4

Family: Accipitridae

Habitat/Life-history Requirements: Ospreys primarily prey on fish and they require large fishbearing waters for hunting (Zeiner et al. 1988). Ospreys typically make large nests in tall snags or trees high off the ground in open forest habitats (Zeiner et al.) within 15 miles of a “good fish-producing body of water” (CNDDB).

Status within the Project Area: There have been many sighting and nests located generally on the east side of Humboldt Bay in the Eureka and South Arcata quads. The closest RareFind occurrence was in 1998 when a nest was identified in a snag near the junction of Ryan Creek and Ryan Slough, in the BAA. The proximity to good hunting grounds as well as the potential for nest trees on the site means there is potential habitat occurring within the Project Area.

Potential Impact/Mitigation: If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

5. White-tailed kite (*Elanus leucurus*)

Special Status: CDFW fully protected, Protected under Migratory Bird Treaty Act; Nature Serve Ranks: G5, S3S4

Family: Accipitridae

Habitat/Life-history Requirements: The white-tailed kite is a common to uncommon, yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas. Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Uses trees with dense canopies for cover. Forages from a central perch over areas as large as 1.9 sq mi (CWHR). White-tailed kites typically nest in the upper third of trees that may be 10–160 feet tall (Cornell Lab). There have been many recent observations throughout the Humboldt Bay area on iNaturalist, though RareFind identifies only two nest sites within the two-quad search (in 2014 and 2015.)

Status within the Project Area: Within the BAA as well as the Project Area there is potential habitat, with many edges of forest/grassland that provide hunting and nesting grounds.

Potential Impact/Mitigation: The project is not expected to significantly impact either hunting or nesting habitat white-tailed kites. If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

6. **Great egret (*Ardea alba*)**

Special Status: CDFW Sensitive; NatureServe Ranks: G5, S4

Family: Ardeidae

Habitat/Life-history Requirements: Feeds in shallow water and along shores of estuaries, lakes, ditches, and slow-moving streams, in salt ponds and mudflats, and in irrigated croplands and pastures (Palmer 1962). Roosts communally in trees, usually near water and suitable foraging ground, at a height of 6-12 m. Rookeries have been documented on RareFind on islands in the Humboldt Bay as recently as 2011, with iNaturalist observations peppering the whole of the bay.

Status within the Project Area: While the BAA does contain potential habitat, the Project Area itself does not contain suitable habitat.

Potential Impact/Mitigation: If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

7. **Snowy egret (*Egretta thula*)**

Special Status: NatureServe Ranks: G5, S4

Family: Ardeidae

Habitat/Life-history Requirements: Feeds in shallow water or along shores of wetlands or aquatic habitats (Kushlan 1976a). Roosts and nests in dense, emergent vegetation and in trees near water or suitable foraging ground. Typically, tree nests are 1.5-3 m (5-10 ft) above ground, but may be up to 9 m (30 ft) (Palmer 1962). Rookeries have been documented on RareFind on islands in the Humboldt Bay as recently as 2011, with iNaturalist observations peppering the whole of the bay.

Status within the Project Area: While the BAA does contain potential habitat, the Project Area itself does not contain suitable habitat for foraging or nesting.

Potential Impact/Mitigation: If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

8. Black-crowned night heron (*Nycticorax nycticorax*)

Special Status: NatureServe Ranks: G5, S4

Family: Ardeidae

Habitat/Life-history Requirements: Feeds mostly nocturnally and crepuscularly (Palmer 1962). Nests in dense-foliaged trees, dense, fresh or brackish emergent wetlands, or dense shrubbery or vine tangles, usually near aquatic or emergent feeding areas, though non-breeding roosting might be further from water. Generally they like lake margins, mud-borded bays, and marshy areas. Rookeries have been documented on RareFind on islands in the Humboldt Bay as recently as 2011, with iNaturalist observations peppering the whole of the bay.

Status within the Project Area: While the BAA does contain potential habitat, the Project Area itself does not contain suitable habitat for foraging or nesting.

Potential Impact/Mitigation: If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

9. Bald eagle (*Haliaeetus leucocephalus*)

Special Status: Removed from the T&E list in 2007. NatureServe Ranks: G5, S3

Family: Accipitridae

Habitat/Life-history Requirements: Generally found along ocean or lake margins or rivers for both nesting and wintering (nests often within 1 mile of water). Tend to nest in large diameter trees with well-spaced branches or broken tops. Winter roosts may be 10-12 miles from feeding areas.

Status within the Project Area: Local RareFind occurrences within the Arcata South quad include a 2022 nest site near Indianola cutoff, about 3 air-miles from the project site. iNaturalist has many recent sightings around the bay. Given local occurrence and suitable proximate hunting ground, the Project Area comprises suitable habitat for both nesting and roosting.

Potential Impact/Mitigation: The project is not expected to impact roosting or nesting habitat for bald eagle. However, if vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be

prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

10. Northern harrier (*Circus hudsonius*)

Special Status: NatureServe Ranks: G5, S3

Family: Accipitridae

Habitat/Life-history Requirements: General habitat includes coastal salt and freshwater marsh areas, with nesting and foraging in grasslands. Nests are built on the ground in shrubby vegetation, usually on the edge of a marsh area.

Status within the Project Area: While desirable marsh habitats exist within the BAA, they are not present in the Project Area. iNaturalist shows observations nearby, but at lower elevations in the marshes along the nearby sloughs and creeks (not Ryan Creek).

Potential Impact/Mitigation: The project should not impact the northern harrier.

11. Yellow rail (*Coturnicops noveboracensis*)

Special Status: CDFW Species of Special Concern. USFWS Birds of Conservation Concern. NatureServe Ranks: G4, S3

Family: Rallidae

Habitat/Life-history Requirements: This species is not common in California, generally described as inhabiting wet meadows and shallow marshes east of the Rockies.

Status within the Project Area: In 2013 RareFind occurrence documents an injured bird found in Eureka, rehabilitated, and released at the Arcata Marsh. There are no recorded observations on the California north coast on iNaturalist. It is highly unlikely another would be found in the area, and if so, it might be in the BAA but not the Project Area itself.

Potential Impact/Mitigation: The project should not impact the yellow rail.

12. California Ridgeway's rail (or San Francisco Bay Ridgeway's Rail) (*Rallus obsoletus obsoletus*)

Special Status: NatureServe Ranks: G3, S2

Family: Rallidae

Habitat/Life-history Requirements: CNDDDB indicates that breeding populations existed on Indian Island in the bay in 1932, but there are no records since. There are no recorded observations on the California north coast on iNaturalist.

Status within the Project Area: The project area is outside the known range of the rail.

Potential Impact/Mitigation: The project should not impact California Ridgeway's rail.

13. Northern spotted owl (NSO)(*Strix occidentalis caurina*)

Special Status: Threatened at both national and state level. 'Near Threatened' on the IUCN Red List. NatureServe Ranks: G3, S2

Family: Strigidae

Habitat/Life-history Requirements: NSOs primarily nest in cavities or on platforms of large trees.

Status within the Project Area: The BAA and the Project Area both contain potential habitat for the NSO. The large areas of commercial timberland to the west and south are actively harvested and therefore routinely surveyed for NSO activity. The closest documented Activity Center is about 1.25 miles south-southeast of the Project Area.

Potential Impact/Mitigation: The limited scale of this project should not significantly alter the potential nesting, roosting, or foraging habitat for NSO.

If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest

II. Mammals

1. Humboldt mountain beaver (*Aplodontia rufa humboldtiana*)

Special Status: CDFW Special Animals List (2025), NatureServe Ranks: G5TNR, SNR

Family: Muridae

Habitat/Life-history Requirements: The Humboldt mountain beaver occurs throughout Cascade and Klamath ranges. Mountain beavers occur in dense riparian-deciduous and open, brushy stages of most forest types, in the Coast Ranges, most populations occur below 2700 ft. Frequent open and intermediate-canopy coverage with a dense understory near water. Deep, friable soils are required for burrowing, along with a cool, moist microclimate (CWHR).

Status within the Project Area: Several occurrences are mapped in CNDDDB 2023 surrounding the project area. The only RareFind occurrence this century was in 2012 on Fickle Hill Rd. in Arcata. iNaturalist shows some observations outside of the two-quad search in Trinidad. There are areas of potential habitat within the BAA, but within the Project Area the Class III watercourse is not of suitable size to provide desirable beaver habitat.

Potential Impact/Mitigation: This project is not expected to significantly impact Humboldt mountain beavers or their habitat.

2. Fisher - West Coast DPS (*Pekania pennanti*)

Special Status: CDFW Species of Special Concern; NatureServe Ranks: G5, S2S3

Family: Mustelidae

Habitat/Life-history Requirements: The fisher uses large expanses of forest with moderate to high canopy closure, and will avoid open forest, grasslands, and wetlands (USFWS 2014). Fishers use cavities in live trees, snags and down logs for reproductive dens (USFWS 2014). Structural complexity is a critical element of fisher habitat, necessary to provide cover for resting and denning, and habitat for prey (USFWS 2014).

Status within the Project Area: CNDDDB 2025 notes one sighting in 2015 at a baited camera trap in the Sunny Brae Forest. Because they are so elusive, lack of confirmed sightings nearer to Eureka can not be used to indicate lack of presence.

Potential Impact/Mitigation: The property contains forested area that is contiguous with enough large forested area that could be suitable fisher habitat. The scale of the proposed project will not significantly impact fishers or their habitat.

3. North American porcupine (*Erethizon dorsatum*)

Special Status: CDFW Special Animals List (2025); NatureServe Ranks: G5, S3

Family: Erethizontidae

Habitat/Life-history Requirements: The American porcupine is most commonly found in montane conifer, Douglas-fir, alpine dwarf-shrub, and wet meadow habitats (Zeiner et al. 1988). The herbivore

feeds on a wide variety of aquatic and terrestrial herbs, shrubs, fruits, leaves, and buds in the summer (Zeiner et al. 1988). During the winter, the porcupine diet includes evergreen leaves, twigs, bark, and cambium of trees, particularly conifers (Zeiner et al. 1988).

Status within the Project Area: Although widely distributed throughout North America and occurring in many habitats, the North American porcupine is considered vulnerable in California. One occurrence is mapped over four miles south of the project area as per CNDDDB 2025. Given their wide variety of habitats, much of the BAA and the Project Area itself are considered possible habitat.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact North American porcupines or their habitat.

4. Sonoma (red) tree vole (*Arborimus pomio*)

Special Status: NatureServe Ranks: G3, S3

Family: Cricetidae

Habitat/Life-history Requirements: Because they feed specifically on needles of Douglas-fir and grand fir, this is also where the voles nest. Males and females each make nests, with males most frequently in the trees, or sometimes in shallow burrows at the base of fir trees, beneath litter; and females constructing large, domed nursery nests of Douglas-fir needles, from 2-45 m above the ground. Tend to be found in mature stands of Douglas-fir, redwood, or mixed evergreen trees in fog belt.

Status within the Project Area: They have been documented as occurring in the Freshwater Creek watershed as recently as 1992. Because they are so elusive, lack of confirmed sightings nearer to Eureka cannot be used to indicate lack of presence. The BAA does contain possible, though not ideal habitat (less Douglas-fir dominated) and the Project Area is described as only 10% Douglas-fir, making it less than ideal.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact Sonoma tree voles or their habitat.

5. Townsend's big-eared bat (*Corynorhinus townsendii*)

Special Status: California Species of Special Concern. NatureServe Ranks: G4, S2

Family: Vespertilionidae

Habitat/Life-history Requirements: Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. May use separate sites for night, day, hibernation, or maternity roosts. Hibernation sites are cold, but not below freezing. Small clusters or groups (usually fewer than 100 individuals) of females and young form the maternity colony. Prefers mesic habitats. Gleans from brush or trees or feeds along habitat edge.

Status within the Project Area: The manmade structures within the BAA and Project Area are unlikely to be suitable for any colony to form, though perhaps lone males might roost. Foraging habitat is present.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact foraging habitat of Townsend's big-eared bat.

III. Amphibians and Reptiles

1. Pacific tailed frog (*Ascaphus truei*)

Special Status: CDFW "Species of Special Concern"; NatureServe Ranks: G4, S3S4

Family: Ascaphidae

Habitat/Life-history Requirements: The Pacific tailed frog requires permanent, cool streams in conifer-dominated habitats including redwood, Douglas-fir, mixed-conifer, and ponderosa pine habitats. They prefer turbulent waters with rocky substrates in steep-walled valleys with dense vegetation, where the water temperature remains low (Zeiner et al. 1988).

Status within the Project Area: It is possible that the streams within the BAA are considered possible habitat. The project area does not have a watercourse that is suitable for the Pacific tailed frog.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the Pacific tailed frog or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

2. Northern red-legged frog (*Rana aurora*)

Special Status: CDFW “Species of Special Concern”; NatureServe Ranks: G2, SNR

Family: Ranidae

Habitat/Life-history Requirements: Found in riparian areas and permanent bodies of relatively quiet water such as ponds, pools along streams, reservoirs, springs, lakes and marshes. This frog is highly aquatic, preferring shorelines with extensive vegetation for terrestrial cover and escaping to pools 3 feet or deeper.

Status within the Project Area: This frog has been found around the Humboldt Bay in various sloughs, creeks, and wetland areas over the years. Though the BAA does provide possible habitat, the project area does not contain the necessary watercourse or riparian ecosystem in which these frogs are found.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the northern red-legged frog or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

3. Foothill yellow-legged frog (*Rana boylei*)

Special Status: State Candidate for listing as Threatened; CDFW Species of Special Concern; NatureServe Ranks: G3, S3

Family: Ranidae

Habitat/Life-history Requirements: The foothill yellow-legged frog primarily inhabits rocky streams or rivers with permanent water, and may be found in many habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadows (Zeiner et al. 1988). Breeding primarily occurs in low-velocity, shallow stream habitats with high habitat heterogeneity (Yarnell 2013). Foothill yellow-legged frogs may also travel substantial distances overland and use seasonally wet areas (Bourque 2008).

Status within the Project Area: This frog has been found around the Humboldt Bay in various sloughs, creeks, and wetland areas over the years. Though the BAA does provide possible habitat, the project area does not contain the riparian ecosystem in which these frogs are found. It is possible that overland travel could happen through the project area, though it is unlikely.

Potential Impact/Mitigation: Work will not be occurring during the wet season, minimizing the likelihood of impacting overland travel. The limited scope of this project will not significantly impact the foothill yellow-legged frog or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

4. **Southern torrent salamander (*Rhyacotriton variegatus*)**

Special Status: CDFW Species of Special Concern; NatureServe Ranks: G3G4, S2S3

Family: Rhyacotritonidae

Habitat/Life-history Requirements: The southern torrent salamander primarily occupies cold, shaded permanent streams and seeps in redwood, Douglas fir, mixed conifer, montane riparian and montane hardwood-conifer habitats in Sonoma, Mendocino, Humboldt and Lake Counties. It requires rapid, permanent streams with rocky substrate for breeding and larval development, and on land normally occurs only very close to a stream or seepage (Zeiner et al. 1988).

Status within the Project Area: This salamander has been found around the Humboldt Bay in various creeks, and wet areas over the years. Though the BAA does provide potential habitat, the Project Area does not contain southern torrent salamander habitat, as the small portion of Class III watercourse (plus a 25' buffer) is excluded from the operational area.

Potential Impact/Mitigation: Work will not be occurring during the wet season, minimizing the likelihood of impacting overland travel. The limited scope of this project will not significantly impact the southern torrent salamander or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

5. **Northwestern pond turtle (*Actinemys marmorata*)**

Special Status: CDFW "Species of Special Concern"; Endangered Species Act proposed threatened; United States Forest Service & Bureau of Land Management "Sensitive" NatureServe Ranks: G2, SNR

Family: Emydidae

Habitat/Life-history Requirements: The northwestern pond turtle is associated with permanent or nearly permanent water bodies including rivers, creeks, small lakes, ponds and marshes. Preferred sites within a given water body generally involve deeper pools and sections with ample basking sites such as logs, rocks, or floating mats of vegetation (NatureServe).

Status within the Project Area: A couple of recent sighting of northwestern pond turtles have occurred in the region but outside the BAA. Though the BAA does provide potential habitat, the Project Area does not contain a suitable watercourse or standing water for northwestern pond turtle habitat.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the northwestern pond turtle or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

IV. Fishes

1. **Coast cutthroat trout (*Oncorhynchus clarkii*)**

Special Status: American Fisheries Society "Vulnerable"; CDFW "Species of Special Concern"; U.S. Forest Service "Sensitive"; NatureServe Ranks: G5T4, S3

Family: Salmonidae

Habitat/Life-history Requirements: Coastal cutthroat trout have a complex life history in which they depend on freshwater streams and rivers for spawning and rearing. Coastal cutthroat trout require cool, clean, and well oxygenated water. In California, spawning is reported to begin in November, with peak spawning in late December in larger river basins and late January and February in the

smaller coastal rivers and streams. Redds are primarily built in the tails of pools in streams with low stream gradient and low flows, usually less than 0.3 m³/s during the summer (Johnson et al. 1999).

Status within the Project Area: A 2014 survey did find this trout in the BAA in Ryan Creek. The Class III watercourse adjacent to the operational area is not suitable habitat for cutthroat trout.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the coast cutthroat trout or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

2. **Steelhead – northern California DPS winter-run (*Oncorhynchus mykiss irideus* pop. 49)**

Special Status: Federally Threatened; CDFW “Species of Special Concern”; NatureServe Ranks: G5T3Q, S3

Family: Salmonidae

Habitat/Life-history Requirements: Steelhead are anadromous rainbow trout that migrate to the ocean as juveniles and return to freshwater habitats to spawn. The Northern California Distinct Population Segment (DPS) ranges from Redwood Creek to just south of the Gualala River, and includes the Eel River watershed (Moyle et al. 2008). Salmonids, including steelhead, require cool, clear perennial streams and rivers with structural complexity for cover and low suspended sediment. Steelhead may swim upstream during the winter to spawn in stream segments that are not accessible to other salmonids during low flows (Moyle et al. 2008). Sedimentation is a major threat to salmonids in their early life stages.

Status within the Project Area: A 2018 survey did find this trout in the BAA in Ryan Creek. The Class III watercourse adjacent to the operational area is not suitable habitat for steelhead.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the steelhead or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

3. **Pacific lamprey (*Entosphenus tridentatus*)**

Special Status: American Fisheries Society “Vulnerable” ; Bureau of Land Management “Sensitive”; CDFW “Species of Special Concern”; U.S. Forest Service “Sensitive”; NatureServe Ranks: G4, S3

Family: Petromyzontidae

Habitat/Life-history Requirements: Pacific lamprey use different habitats during different life stages, and including both riverine and oceanic environments. Young, or larval, Pacific lamprey filter-feed from burrows in the river bottom. As adults in the marine environment, Pacific lampreys are parasitic and feed on a variety of fish. Pacific lampreys spawn in similar habitats to salmon; in gravel bottomed streams, at the upstream end of riffle habitat, typically above suitable young larvae habitat. Larval lamprey drift downstream to areas of low velocity and fine substrates where they burrow, grow and live as filter feeders for two to seven years (U.S. FWS).

Status within the Project Area: There is no record of a Pacific lamprey found in Ryan Creek, however they have been found in other sloughs and streams of Humboldt Bay and the BAA does contain potential habitat. The Class III watercourse adjacent to the operational area is not suitable habitat for Pacific lamprey.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the Pacific lamprey or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

4. **Western brook lamprey (*Lampetra richardsoni*)**

Special Status: CDFW “Species of Special Concern”; U.S. Forest Service “Sensitive”; NatureServe Ranks: G4G5, S3S4

Family: Petromyzontidae

Habitat/Life-history Requirements: Spawning behavior is similar to that of Pacific lamprey (Schultz 1930, Morrow 1980). Spawning adult brook lamprey build nests in gravel riffles that are slightly smaller in diameter than their body lengths. Western brook lampreys have habitat requirements similar to those of salmonid species, with which they co-occur. They need clear, cold, water in little disturbed watersheds, as well as clean gravel near cover for spawning (Vladykov and Follet).

Status within the Project Area: Surveys from 2004-2007 and 2011-2014 found western brook lamprey annually in Ryan Creek. The Class III watercourse adjacent to the operational area is not suitable habitat for western brook lamprey.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the western brook lamprey or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

5. **Longfin smelt (*Spirinchus thaleichthys*)**

Special Status: Proposed for ‘Endangered status at the national level; considered ‘Threatened’ by CA. NatureServe Ranks: G5, S1

Family: Osmeridae

Habitat/Life-history Requirements: Found in open waters of estuaries.

Status within the Project Area: The longfin smelt has been documented in the neighboring Freshwater Slough (within the BAA), but never in Ryan Creek. The Class III watercourse adjacent to the operational area is not suitable habitat for longfin smelt.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the longfin smelt or their habitat.

6. **Tidewater goby (*Eucyclogobius newberryi*)**

Special Status: ‘Endangered’ at the national level. NatureServe Ranks: G3, S3

Family: Oxudercidae

Habitat/Life-history Requirements: The goby is found in brackish water habitats along the length of the California coast. Generally it keeps to shallow lagoons and lower stream reaches; they need still, but not stagnant water with high oxygen levels.

Status within the Project Area: Capture and release in 2009/10 happened in multiple waterways of the northern Humboldt Bay, including within the BAA. The Class III watercourse adjacent to the operational area is not suitable habitat for tidewater goby.

Potential Impact/Mitigation: The limited scope of this project will not significantly impact the tidewater goby or their habitat. Effort will be made to limit potential increased erosion from project activity which might reach the nearby stream system.

V. Invertebrates

1. **Behrens’ snail-eating beetle (*Scaphinotus behrensi*)**

Special Status: CDFW Special Animals List; NatureServe Ranks: G2G4, S2S4

Family: Carabidae

Habitat/Life-history Requirements: Behrens snail-eating beetle can be found from lowlands to midlands, sea level- 1170 meters altitude, in temperate coniferous rainforests. Microsite requirements include shaded, moderately moist ground. Behrens' snail-eating beetle is nocturnal, taking cover in the day under old fallen trees and in leaf litter, sometimes in rotten tree trunks (GBIF).

Status within the Project Area: The property does not contain habitat suitable for Behrens' snail-eating beetle. The nearest RareFind observation of Behrens' snail-eating beetle was in 1975 in Jolly Giant Canyon.

Potential Impact/Mitigation: The project will not significantly impact Behrens' snail eating beetle or their habitat.

2. Western bumble bee (*Bombus occidentalis*)

Special Status: State Candidate Endangered, IUCN Vulnerable, NatureServe Ranks: G3, S1

Family: Apidae

Habitat/Life-history Requirements: The western bumble bee is a generalist short-tongued forager that may be found in open habitats such as grassy areas, urban parks and gardens, chaparral and shrub areas, and mountain meadows (IUCN). Like many bumble bees, the western bumble bee nests underground in abandoned rodent holes (IUCN). The western bumble bee is threatened by disease, habitat loss and degradation, and insecticides.

Status within the Project Area: The property and BAA have the potential to support many native pollinators, particularly in grassy openings adjacent to the project area. 1971 was the last RareFind occurrence near the "north end of the city of Eureka."

Potential Impact/Mitigation: The project should not impact open areas where potential western bumble bee habitat occurs.

3. Obscure bumble bee (*Bombus caliginosus*)

Special Status: IUCN Vulnerable, NatureServe Ranks: G2G3, S1S2

Family: Apidae

Habitat/Life-history Requirements: Habitats include open grassy coastal prairies and coast range meadows. It nests underground, but also above ground in abandoned bird nests. The obscure bumble bee is threatened by disease, habitat loss and degradation, and insecticides.

Status within the Project Area: Potential open prairie habitat does occur within the BAA but not within the project area.

Potential Impact/Mitigation: The project should not impact open areas where potential obscure bumble bee habitat occurs.

VI. Plants

1. Pacific gilia (*Gilia capitata* ssp. *pacifica*)

Special Status: California Rare plant rank 1B.2; Heritage rank G5T3, S2

Family: Polemoniaceae

Habitat/Life-history Requirements: Pacific gilia habitats include coastal bluff scrub, chaparral, and coastal prairie, valley, and foothill grasslands, ranging in elevation from 5 to 1,345 meters above sea level.

Status within the Project Area: There is documented occurrence within the neighboring Eureka quad, and there is potential habitat within the BAA in the grasslands, but suitable habitat is not present within the project area.

Potential Impact/Mitigation: The project does not significantly impact Pacific gilia.

2. Howell's montia (*Montia howellii*)

Special Status: California Rare plant rank 2B.2; Heritage rank G3G4, S2

Family: Montiaceae

Habitat/Life-history Requirements: Howell's montia habitats include meadows/seeps, north coast coniferous forest, and wetlands. It occurs in vernal wet sites (often on compacted soil), ranging from 10 to 1,005 meters above sea-level.

Status within the Project Area: Identified within both quads, however last RareFind occurrence was in 2000 (east of Freshwater) and subsequent surveys did not identify it. Closer to the project area, colonies were identified in the McKay Tract off Guptil Gulch (which flows into Ryan Creek). Suitable habitat may exist within the grassy areas near the Project Area. The Project Area may contain potential habitat, particularly near the Class III watercourse.

Potential Impact/Mitigation: Soil compaction will be minimized as much as possible and wet areas will be avoided. No work will occur within the buffer zone of the Class III watercourse.

3. Siskiyou checker-bloom (*Sidalcea malviflora* ssp. *patula*)

Special Status: California Rare plant rank 1B.2; Heritage rank G5T2, S2

Family: Malvaceae

Habitat/Life-history Requirements: Reported habitats include coastal bluff scrub, coastal prairie, north coast coniferous forest, open coastal forest, and roadcuts from 5 - 1,255 meters above sea level.

Status within the Project Area: Last identified in the Eureka quad; found in town in mowed grassy area adjacent to conifer stand. The project is taking place in the forested sections of the property and should have minimal impact on potential impact for Siskiyou checker-bloom.

Potential Impact/Mitigation: The project does not significantly impact Siskiyou checker-bloom.

4. Coast checker-bloom (*Sidalcea oregana* ssp. *eximia*)

Special Status: California Rare plant rank 1B.2; Heritage rank G5T2, S2

Family: Malvaceae

Habitat/Life-history Requirements: Reported habitats include north coast and lower montane coniferous forests, meadows and seeps, near meadows, and in gravelly soil from 5 to 1,805 meters above sea level.

Status within the Project Area: Identified in the Eureka quad over 100 years ago; no RareFind documentation since. Although suitable habitat may exist within the project area for this species, its occurrence is highly unlikely.

Potential Impact/Mitigation: The project does not significantly impact coast checker-bloom.

5. Minute pocket moss (*Fissidens pauperculus*)

Special Status: California Rare plant rank 1B.2; Heritage rank G3?, S2

Family: Fissidentaceae

Habitat/Life-history Requirements: Habitats include north coast coniferous forests, particularly requiring damp coastal soil from 10-1024m above sea level.

Status within the Project Area: Identified most recently in 1995 along Jolly Giant Creek, significantly north of the project area. However similar potential habitat does exist in the project area, no RareFind occurrences are reported closer than the town of Freshwater since 1967.

Potential Impact/Mitigation: The project does not significantly impact minute pocket moss. Disturbance to soil and downed woody debris will be minimized.

6. Seaside bittercress (*Cardamine angulata*)

Special Status: California Rare plant rank 2B.1; Heritage Rank G4G5, S3

Family: Brassicaceae

Habitat/Life-history Requirements: Habitat described as lower montane and north coast coniferous forests, generally in wet areas along stream banks from 15-915m above sea level.

Status within the Project Area: Identified in the Arcata South quad with last RareFind occurrence in 1964 near town of Freshwater. Though potential habitat exists within the BAA, there are no streambanks or probable habitat areas in the project area itself.

Potential Impact/Mitigation: The project does not significantly impact seaside bittercress; disturbance to wet areas will be avoided.

7. Northern clustered sedge (*Carex arcta*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G5, S1

Family: Cyperaceae

Habitat/Life-history Requirements: Generally found in bogs and fens in mesic north coast coniferous forests between 60-1400m above sea level.

Status within the Project Area: RareFind reports this as being found in 1912 in “beds of winter ponds” with no reports since. Though wet areas like those described may be present in the BAA they are not found in the Project Area.

Potential Impact/Mitigation: The project does not significantly impact northern clustered sedge. Disturbance to identified wet areas will be avoided.

8. Lyngbye’s sedge (*Carex lyngbyei*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G5, S3

Family: Cyperaceae

Habitat/Life-history Requirements: Generally found in brackish or adjacent freshwater in marshes and swamp areas between 0-10m above sea level.

Status within the Project Area: Found in sloughs around Humboldt Bay; possible in the BAA in Ryan Creek, since it is a tributary to Freshwater Slough. However the project area is at elevation and does not directly impact the creek or slough system.

Potential Impact/Mitigation: The project does not significantly impact Lyngbye’s sedge.

9. Northern meadow sedge (*Carex praticola*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G5, S2

Family: Cyperaceae

Habitat/Life-history Requirements: Found in mesic meadows and seeps from 0-3200m above sea level.

Status within the Project Area: Last RareFind listing is from 1915 on a slough of Humboldt Bay. While there is possible habitat, the lack of modern observations makes it incredibly unlikely that it would occur in the BAA or in the Project Area.

Potential Impact/Mitigation: The project does not significantly impact northern meadow sedge. Wet areas will not be disturbed.

10. Humboldt Bay owl's-clover (*Castilleja ambigua* var. *humboldtiensis*)

Special Status: California Rare plant rank 1B.2; Heritage Rank G5T2, S2

Family: Orobanchaceae

Habitat/Life-history Requirements: Found in coastal salt marshes and swamps.

Status within the Project Area: Most recent RareFind occurrence was in 2015, but multiple occurrences around Humboldt Bay in the recent past indicate the possibility of habitat occurring within the BAA. CalFlora includes records of observations along sloughs near Freshwater slough (Eureka and Faye). Given the low elevation and proximity to salt or brackish water, the habitat for this species does not occur in the Project Area.

Potential Impact/Mitigation: The project does not significantly impact Humboldt Bay owl's-clover.

11. Coast fawn lily (*Erythronium revolutum*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G4G5, S3

Family: Liliaceae

Habitat/Life-history Requirements: Generally found in bogs and fens in broadleafed upland forest or north coast coniferous forest areas from 0-1600m above sea level.

Status within the Project Area: Last RareFind identification in the two quads in 1918. Though habitat may exist in the project area, the lack of identifications nearby makes it highly unlikely to occur.

Potential Impact/Mitigation: The project does not significantly impact the coast fawn lily. Disturbance of wet areas will be avoided.

12. Marsh pea (*Lathyrus palustris*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G5, S2

Family: Fabaceae

Habitat/Life-history Requirements: Generally found in bogs and fens of lower montane or north coast coniferous forest as well as marshes and swamps, coastal prairie, and coastal scrubland areas usually between 1-100m above sea level.

Status within the Project Area: Last RareFind occurrence in the two quad search was in 1918; there is one CalFlora identification in 2003 down on the Elk River Slough. Even though habitat exists in the project area it is highly unlikely given the lack of local presence.

Potential Impact/Mitigation: The project does not significantly impact the marsh pea.

13. Western lily (*Lilium occidentale*)

Special Status: California Rare plant rank 1B.1; Heritage Rank G1G2, S1

Family: Liliaceae

Habitat/Life-history Requirements: Generally found in bogs and fens as well as freshwater marshes and swamps. Sometimes in openings in North Coast coniferous forest or coastal bluff scrub or prairie areas. Occurring from 2-185m above sea level.

Status within the Project Area: Observations early in the 1900s include some along Ryan Slough, in the BAA; no modern observations. Though potential habitat exists in the BAA it is very unlikely to occur in the Project Area.

Potential Impact/Mitigation: The project does not significantly impact the western lily. Disturbance of wet areas will be avoided.

14. Ghost-pipe (*Monotropa uniflora*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G5, S2

Family: Ericaceae

Habitat/Life-history Requirements: Found in broadleaved upland forest and north coast coniferous forest, usually from 10-550m above sea level.

Status within the Project Area: The only RareFind observation in the two quad search occurred near the project area at Redwood Acres in 1971. Lack of further observations makes it unlikely to be found in the BAA or Project Area.

Potential Impact/Mitigation: The project does not significantly impact ghost-pipe.

15. Scouler's catchfly (*Silene scouleri* ssp. *scouleri*)

Special Status: California Rare plant rank 2B.2; Heritage Rank G5T4T5, S2S3

Family: Carophyllaceae

Habitat/Life-history Requirements: Found along coastal bluff scrub or prairie as well as valley and foothill grassland areas between 0-600m above sea level.

Status within the Project Area: There are no modern recorded observations after one RareFind occurrence listing in 1904 of Scouler's catchfly "near Eureka" on Black Bluff. Though there are grassland areas (potential habitat) within the BAA, the project will be taking place in the forested sections of the property and therefore should not be disruptive.

Potential Impact/Mitigation: The project does not significantly impact Scouler's catchfly.

VII. Wetland

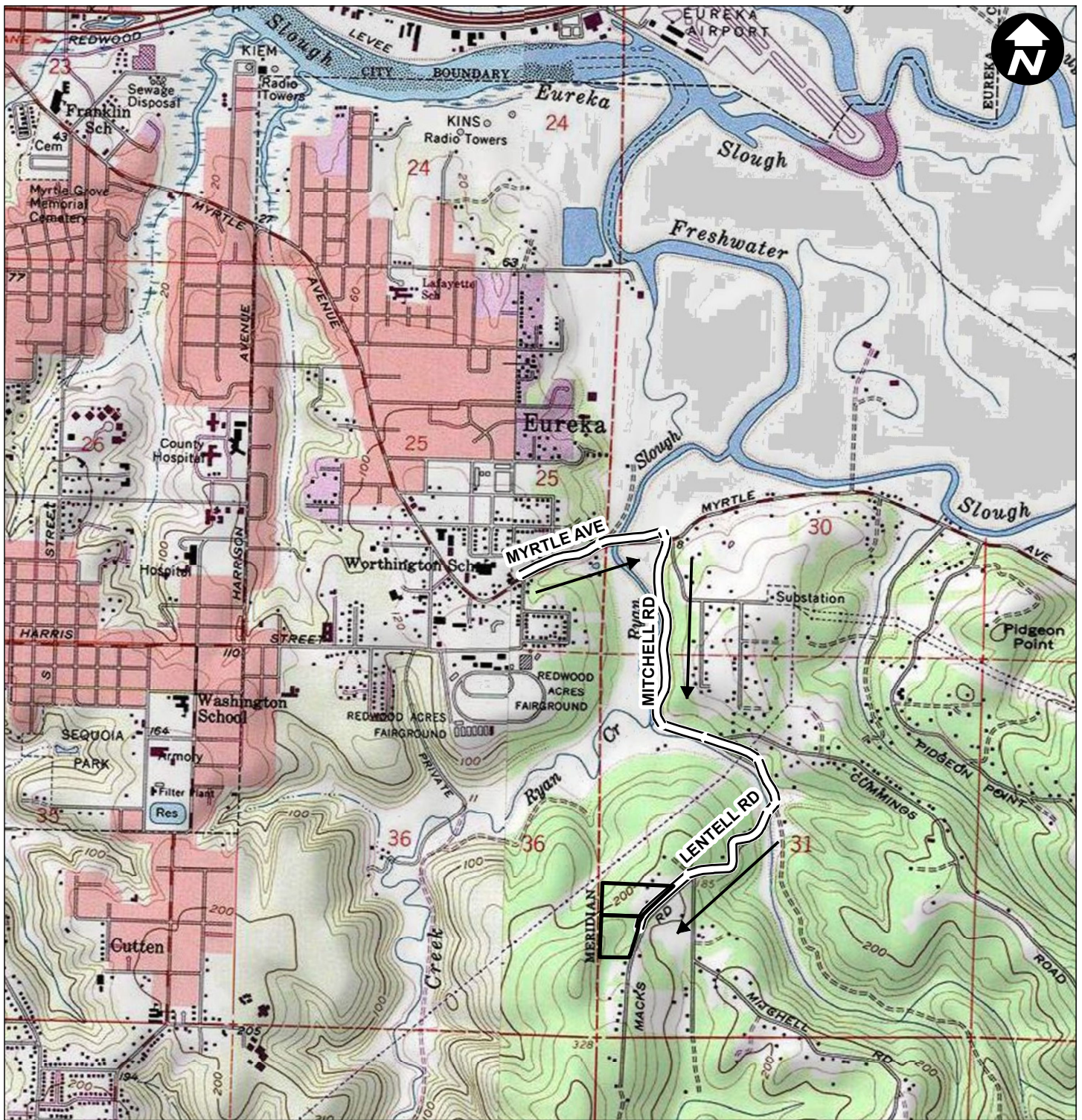
No wetlands have been identified within the Project Area based on Humboldt County Web GIS. There are no wetlands within or adjacent to the Project Area.

VIII. Results

No birds, mammals, reptiles, fishes or invertebrates considered sensitive, rare, threatened, or endangered, candidate species have the potential to be significantly affected by the project as planned. There is potential for nesting birds to be present during nesting season (February 15 – August 15). If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Within 14 days prior to disturbance, pre-construction surveys for nesting pairs, nests, and eggs shall occur within the Project Area and within 100 feet (200 feet for raptors) of the Project Area. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW and implemented to prevent abandonment of the active nest.

No plants considered sensitive, rare, threatened, or endangered (including candidate species) in the United States and/or The State of California are thought to occur within the Project Area.

No wetland areas have been identified within the Project Area.



Lewis & Sally Call and Larry Lampi
0-150' & 150-300' Structure
Protection Exemption
General Location Map
APN: 017-203-002 & 017-203-001

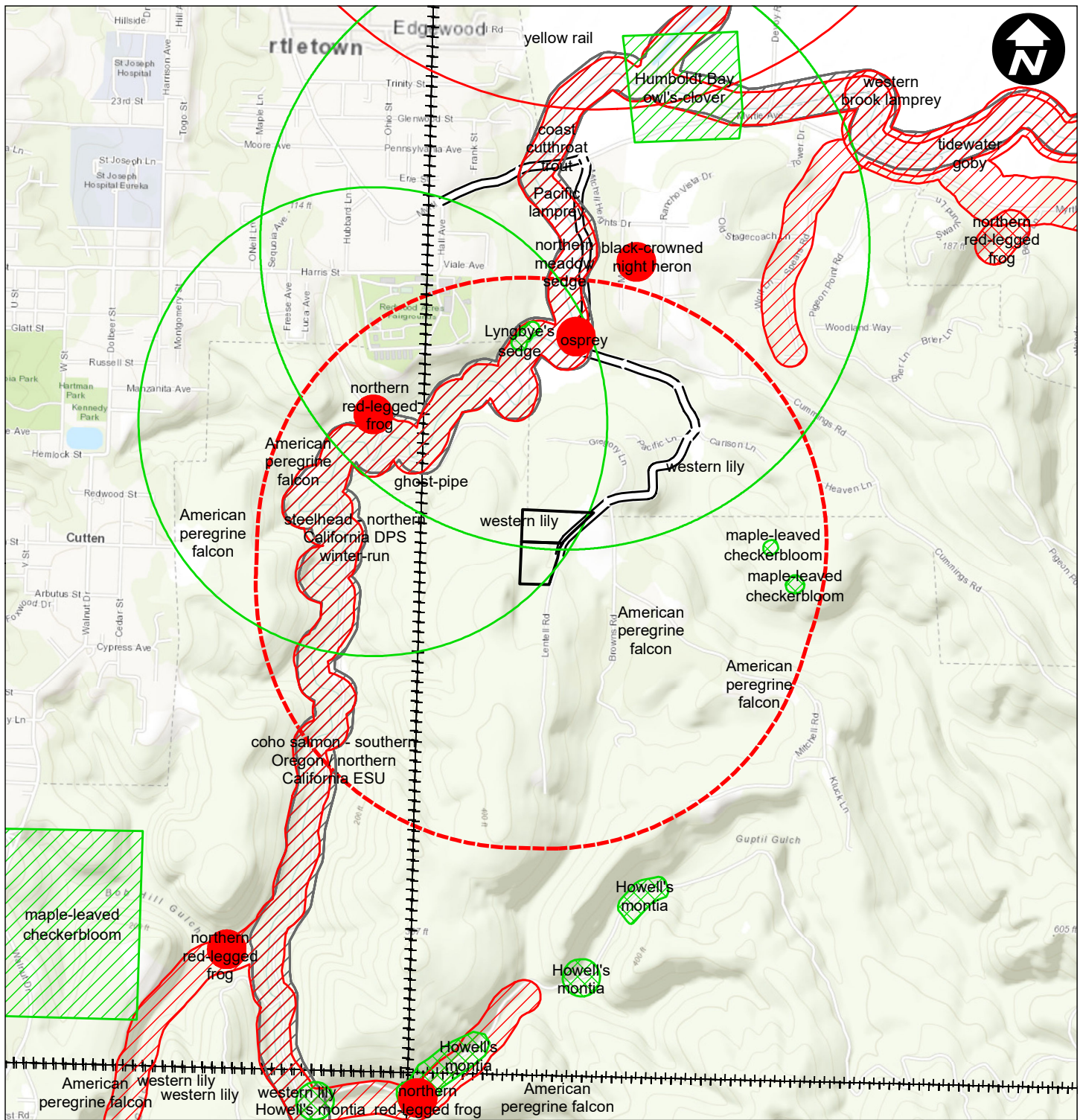
Section 31; T5N; R1E; HB&M; Humboldt County
 Located on the Arcata South 7.5' USGS Quadrangle

 Parcel Boundary
 Access Route

0 1,000 2,000 4,000
 Feet

Contour Interval: 40'
 1 inch = 2,000 feet

Hohman And Associates Forestry Consultants
 Date: 5/11/2026



Lewis & Sally Call and Larry Lampi
0-150' & 150-300' Structure
Protection Exemption
CNDDDB Map
APN: 017-203-002, 017-203-001

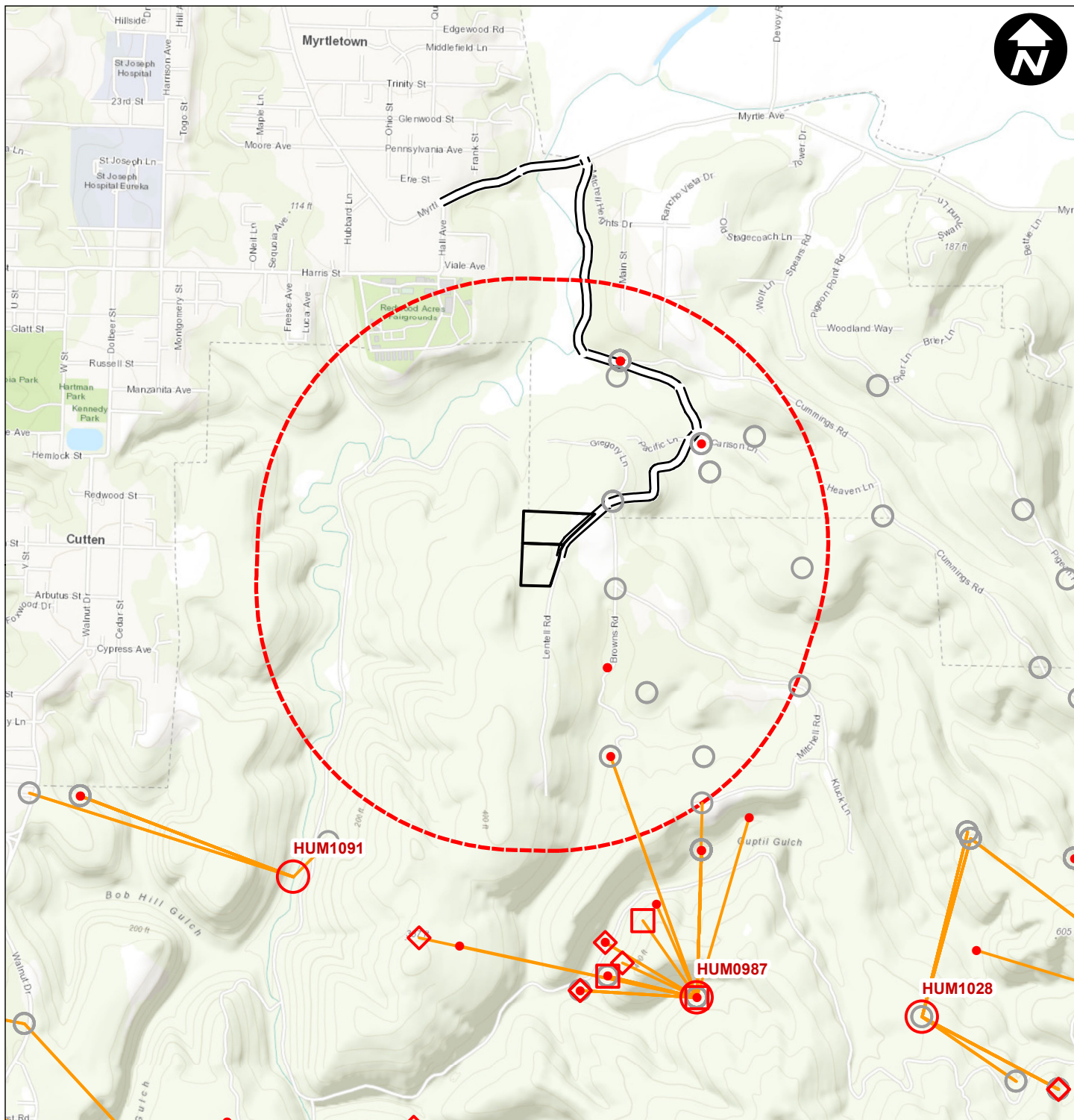
Section 31; T5N; R1E; HB&M; Humboldt County
 Located on the Arcata South 7.5' USGS Quadrangle

■ Plant (80m)	■ Terrestrial Comm. (80m)	■ Multiple (80m)
▨ Plant (specific)	▨ Terrestrial Comm. (specific)	▨ Multiple (specific)
▤ Plant (non-specific)	▤ Terrestrial Comm. (non-specific)	▤ Multiple (non-specific)
○ Plant (circular)	○ Terrestrial Comm. (circular)	○ Multiple (circular)
■ Animal (80m)	■ Aquatic Comm. (80m)	■ Sensitive EO's (Commercial only)
▨ Animal (specific)	▨ Aquatic Comm. (specific)	▨ Parcel Boundary
▤ Animal (non-specific)	▤ Aquatic Comm. (non-specific)	▤ Coastal_NSO_Buffer
○ Animal (circular)	○ Aquatic Comm. (circular)	

0 900 1,800 3,600
 Feet

Contour Interval: 40'
 1 inch = 2,000 feet

Hohman And Associates Forestry Consultants
 Date: 5/11/2026



Lewis & Sally Call and Larry Lampi
0-150' & 150-300' Structure
Protection Exemption
NSO Map
APN: 017-203-002, 017-203-001

Section 31; T5N; R1E; HB&M; Humboldt
 County
 Located on the Arcata South 7.5' USGS
 Quadrangle

- Parcel Boundary
- Coastal NSO Buffer (0.7 mi.)
- Nest
- Young
- Pair
- Other Positive Observation
- Negative Observation
- Activity Center
- Abandoned Activity Center
- Not Valid Activity Center
- Spotted Owl Spider Diagram

0 1,000 2,000 4,000
 Feet

Contour Interval: 40'
 1 inch = 2,000 feet

Hohman And Associates Forestry Consultants
 Date: 5/11/2026