



Technical Memorandum

September 14, 2023

To	Hank Seemann, Deputy Director Humboldt County Public Works Department	Contact No.	707-267-2206
Copy to	Andrea Hilton, GHD Environmental Planning Lead	Email	Jane.cipra@ghd.com
From	Jane Cipra, GHD Botanist	Project No.	12609240
Project Name	Humboldt Bay Trail - Eureka to College of the Redwoods Planning Study		
Subject	Natural Resource Reconnaissance Technical Memorandum		

1. Introduction

1.1 Summary

This Technical Memorandum reports the results of the Natural Resource Reconnaissance survey for the Humboldt County Public Works Department’s (County) proposed extension of the Humboldt Bay Trail from the Elk River Estuary to the College of the Redwoods as analyzed under the Humboldt Bay Trail – Eureka to College of the Redwoods Planning Study (Project). The purpose of this survey is to identify potential environmental constraints along the Great Redwood Trail Agency right of way and directly adjacent areas.

The goal of this Project is to extend pedestrian and bicycle access south of Eureka approximately 4.5 miles to College of the Redwoods as part of the larger Great Redwood Trail Project, which is a 320-mile, world-class, multi-use rail-to-trail project connecting California’s San Francisco and Humboldt Bays. The alignment for this section of the trail is has not been finalized; however, the potential alignment was evaluated at a reconnaissance level for the presence of wetlands, Sensitive Natural Communities (SNCs), and suitable habitat for special status plants and wildlife.

1.2 Project Description and Location

The proposed Project is located south of Eureka in Humboldt County, California, near the southeast edge of Humboldt Bay along the railroad corridor at elevations between approximately 0 - 30 (NAVD 88) feet above sea level (**Appendix A, Figure 1**). The proposed alignment would begin near the southern terminus of the recently constructed Eureka Waterfront Trail near the Tooby Road trailhead and would extend south through or near the towns of King Salmon and Fields Landing to the College of the Redwoods campus (**Appendix A, Figure 2**).

The Project is located on Township 4 North, Range 1 West, Sections 8, 17, 20, 29, as depicted on the Fields Landing U.S. Geological Survey 7.5-minute quadrangle. The Project is entirely within the coastal zone and spans the Appeal, Local, and State jurisdictions (**Appendix A, Figure 3**).

Construction would require work adjacent to the Humboldt Bay shoreline and drainage features, which may require in-water work to repair the shoreline, replace, or enhance culverts or similar drainage features, remove existing debris and riprap, and/or develop features to increase resiliency to sea level rise, such as living shorelines. The Project also includes a bridge replacement in estuary habitat along a tributary to White Slough near the College of the Redwoods campus.

2. Methods

GHD Botanist Jane Cipra and GHD Environmental Planning Lead Andrea Hilton conducted reconnaissance level site visits on July 31 and August 24, 2023, to identify potential alignments and sensitive resources in the Project Area. The railroad alignment and elevations were mapped using a centimeter accuracy EOS Gold Sub-decimeter Global Positioning System (GPS) Receiver with Global Navigation Satellite System (GNSS) and an iPad running ArcGIS Collector software. Potential wetlands, SNCs, and suitable wildlife habitat were identified in the Project Area, but not mapped. Botanical nomenclature follows A Manual for California Vegetation (Sawyer, et al. 2009) and The Jepson Manual (Baldwin et al. 2012).

Database searches for sensitive plant and wildlife species that could occur in the Project vicinity were conducted by GHD on September 13, 2023 (**Appendix B**). Database searches included the California Natural Diversity Database (CNDDDB) QuickView tool (CDFW 2023a), California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants (CNPS 2023a), U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC; USFWS 2023), National Oceanic and Atmospheric Association (NOAA) Critical Habitat (NOAA 2023), and the NOAA Fisheries, West Coast Region, California Species List Tool.

Plant species on CNPS California Rare Plant Rank (CRPR) Lists 1 and 2 are considered eligible for state listing as endangered or threatened pursuant to the California Fish and Game Code (FGC). The California Department of Fish and Wildlife (CDFW) has oversight of these special status plant species as a trustee agency. As part of the California Environmental Quality Act (CEQA) process, such species should be considered as they meet the definition of threatened or endangered under Sections 2062 and 2067 of the California FGC. Scoping for special status plant species included any state or federally listed plants as well as plant species on CNPS CRPR List.

Scoping for special status wildlife species included those that are state or federally listed, and those listed by CDFW as Species of Special Concern, Fully Protected, Watch List, or included on CDFW's Special Animals List.

The database search encompassed eight U.S. Geological Survey (USGS) quadrangles (quads) centered on the Project Area quad (Fields Landing) and the surrounding seven quads: Eureka, Arcata South, McWhinney Creek, Cannibal Island, Ferndale, Fortuna, and Hydesville. All special status plant or wildlife species tracked by CNDDDB that are known to occur within a one mile radius of the Project Area are shown on **Figure 5** in **Appendix A**.

Natural Communities and SNCs were evaluated and identified using the Manual of California Vegetation, Online Edition (CNPS 2023b). SNCs are vegetation Alliances or Associations with a state rarity rank of S1-S3 and/or are on the List of California SNCs (CDFW 2023c).

3. Natural Resources in the Project Area

3.1 Potential Aquatic Resources

The Project is located along the shore of Humboldt Bay and crosses tributaries of King Salmon Slough, White Slough, and other small drainages (e.g., **Appendix A, Figure 4**). The railroad currently crosses the King Salmon Slough tributary over a culvert east of the Humboldt Bay Power Plant. The majority of the project is above the mean high tide line of Humboldt Bay; however, some portions of the Project may be located near the high tide line depending on the final alignment (e.g., **Appendix C, Photos 5 and 6**).

Many potential three- and one-parameter wetlands are present on either side of the railroad prism (**Appendix C, Photos 5-9, 11, 12, and 14**). Wetlands are primarily located along the margins of the elevated railroad prism. Construction of the trail entirely within the existing railroad prism would likely avoid and/or minimize permanent impacts to wetlands; however, avoidance of wetlands along the entire alignment would likely be infeasible. Additionally, the potential trail alignment is directly adjacent to the Humboldt Bay shoreline in some locations (**Appendix C, Photos 5, 7, 10, and 11**).

Three-parameter wetland types mapped in the Project Area by the USFWS National Wetland Inventory (NWI) include palustrine freshwater emergent wetland, freshwater forested shrub wetland, and estuarine and marine wetland (**Appendix A, Figure 4**). One-parameter wetlands in the Project Area would include any vegetation stands that are dominated by hydrophytes as ranked on the National Wetland Plant List (USACE 2020).

Three-parameter wetlands are regulated by the U.S. Army Corps of Engineers (USACE) and the North Coast Regional Water Quality Control Board. One-parameter wetlands are regulated by the California Coastal Commission and Humboldt County via the Humboldt Bay Area Plan (HBAP) Local Coastal Program (LCP).

3.2 Potential Upland Sensitive Natural Communities (SNCs)

Natural vegetation communities listed as Sensitive in the California Natural Diversity Database (CNDDB) and on the California Sensitive Natural Communities List would be assessed within the future CEQA review process (CDFW 2023). SNCs are primarily classified at the alliance level according to A Manual of California Vegetation (Sawyer et al. 2009). Legacy SNCs are listed in CNDDB according to the Holland classification system (1986), and Holland types may be used when a current Alliance-level classification does not exist (CDFW 2023). CDFW considers alliances with a NatureServe State Rank of S1 to S3 or those identified as sensitive by the California Vegetation Classification and Mapping Program (VegCAMP) to be SNCs, and therefore these alliances are considered during the CEQA process (CDFW 2023).

The following upland vegetation types may be present in the Project Area at varying amounts based on field reconnaissance observations and review of available Google Street view imagery that captures vegetation present along the railroad corridor. Surveys and mapping would be required to determine if individual trees and stands are sufficiently contiguous to be considered communities.

- Salal – berry brambles – California blackberry Association (**Appendix C, Photo 17**)
- Coastal willow thickets (**Appendix C, Photo 18**)
- Beach pine forest (**Appendix C, Photo 19**)
- California wax myrtle
- Red alder – salal Association (**Appendix C, Photo 20**).

Additional SNCs present that also qualify as one- or three-parameter wetlands would be included in wetland mitigations and not double-counted as SNCs for mitigation.

3.3 Potential Environmentally Sensitive Areas (ESHA)

Environmentally Sensitive Habitat Areas (ESHAs) are defined by the Coastal Act as follows:

“Environmentally sensitive area” means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.” (Pub. Resources Code, Section 30107.5)

The Coastal Act’s designation of ESHA generally includes vegetation alliances listed in CDFW’s California Sensitive Natural Communities List with an S1- S3 ranking as well as habitats for special status species, wetlands, riparian areas, and other areas that provide important ecosystem functions (CCC 2013).

The HBAP LCP identifies specific ESHA including but not limited to:

- Wetlands and estuaries, including Humboldt Bay and the mouth of the Mad River
- Rare plant communities
- Dune vegetation

During the reconnaissance level field review, a few rare plant individuals of seawatch (*Angelica lucida*) were observed; however, protocol level surveys would be required to determine if the population present is extensive enough to be considered a community. No dune vegetation is present in the Project Area.

New development in ESHA is restricted by the HBAP but allows for accessway improvements as follows:

Accessway Improvements and Funding

a. Public agencies or other entities having or accepting responsibility for accessways shall provide support facilities compatible with the character of the land and adequate for the number of people using them prior to opening the access to public use.

(1) Minimal improvements should be scheduled for unimproved access points in character with the rural nature of the communities they serve, and accessways accepted by the responsible entity or agency should include but shall not be limited to, the following as they are found consistent with the identified uses, modes of access and limitations as identified in Section 3.50C.

- (a) parking*
- (b) roads*
- (c) trails, stairs, and ramps*
- (d) sanitary facilities (including trash collection)*
- (e) facilities for the handicapped (f) fencing and barriers to inappropriate uses*
- (g) signing of access points, trails and hazard areas*
- (h) maintenance and operation of the accessway and support facilities*

3.4 Special Status Species

Special status species in the Project Area include those listed under the state or federal Endangered Species Act (CESA or ESA) as well as species identified by the California Department of Fish and Wildlife (CDFW) and the California Native Plant Society (CNPS).

3.4.1 Special Status Plants

There is very low potential for any state or federally listed plants to be encountered in the Project Area. Based on an initial review of CNDDDB occurrences in the Project Area (**Appendix A, Figure 5**) and habitats observed in the site visit, the special status plants in **Table 1** have a high potential to occur in the Project Area. Special status plant species are those with state or federal listings or with a California Rare Plant Rank (CRPR) of 1 through 4.

Table 1 Special Status Plants with a High Potential to Occur in the Project Area

Species	CRPR	CNPS Rank Definitions (CNPS 2023a)
Humboldt Bay owl's-clover (<i>Castilleja ambigua</i> var. <i>humboldtiensis</i>)	1B.2	1B = Plants rare, threatened or endangered in California and elsewhere 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
Lyngbye's sedge (<i>Carex lyngbyei</i>)	2B.2	2B: Plants rare, threatened, or endangered in California but common elsewhere 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
Point Reyes salty bird's-beak (<i>Chloropyron maritimum</i> ssp. <i>palustre</i>)	1B.2	1B = Plants rare, threatened or endangered in California and elsewhere 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
Sea-watch (<i>Angelica lucida</i>)	4.2	4: Plants of limited distribution, a watch list 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
Western sand-spurrey (<i>Spergularia canadensis</i> var. <i>occidentalis</i>)	2B.1	2B: Plants rare, threatened, or endangered in California but common elsewhere 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

3.4.2 Special Status Wildlife Species

Special Status Mammals

Seven special status mammals have potential for suitable habitat in the Project area (**Table 2**).

Table 2 Special Status mammals with Suitable Aquatic Habitat

Species	Federal and/or State Status
Hoary Bat (<i>Lasiurus cinereus</i>)	CDFW Special Animals List
Humboldt Mountain Beaver (<i>Aplodontia rufa</i> <i>humboldtiana</i>)	CDFW Special Animals List
Long-Eared Myotis (<i>Myotis evotis</i>)	CDFW Special Animals List
Pallid Bat (<i>Antrozous pallidus</i>)	CDFW Species of Special Concern
Silver-Haired Bat (<i>Lasionycteris noctivagans</i>)	CDFW Special Animals List
Townsend's Big-Eared Bat (<i>Corynorhinus townsendii</i>)	CDFW Species of Special Concern
Yuma Myotis (<i>Myotis yumanensis</i>)	CDFW Special Animals List

Special Status Birds

Nine special status bird species are likely to have suitable nesting habitat in the Project Area (**Table 3**). Bald Eagles have special federal protection through the Bald and Golden Eagle Protection Act. Additional bird species may be identified during future biological review.

Table 3 Special Status Birds

Species	Federal and/or State Status
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Bald and Golden Eagle Protection Act, State Endangered, CDFW Fully Protected
Black-crowned Night Heron (<i>Nycticorax nycticorax</i>)	CDFW Special Animals List
Double-crested Cormorant (<i>Nannopterum auritum</i>)	CDFW Watch List
Great Blue Heron (<i>Ardea herodias</i>)	CDFW Special Animals List
Great Egret (<i>Ardea alba</i>)	CDFW Special Animals List
Northern Harrier (<i>Circus hudsonius</i>)	CDFW Species of Special Concern
Osprey (<i>Pandion haliaetus</i>)	State Endangered, CDFW Watch List
Snowy Egret (<i>Egretta thula</i>)	CDFW Special Animals List
White-tailed Kite (<i>Elanus leucurus</i>)	CDFW Fully Protected

Special Status Fish

Humboldt Bay and its estuaries provide suitable habitat for nine special status aquatic species (**Table 4**):

Table 4 Special Status Fish with Suitable Aquatic Habitat

Species	Federal and/or State Status
Chinook Salmon (<i>Oncorhynchus tshawytscha</i> pop. 17)	Federally Threatened
Coho Salmon (<i>Oncorhynchus kisutch</i> pop. 2)	Federally Threatened, State Threatened
Green Sturgeon (<i>Acipenser medirostris</i>) Southern DPS	Federally Threatened, CDFW Species of Special Concern
Longfin Smelt (<i>Spirinchus thaleichthys</i>)	Federal candidate for listing, State Threatened
Pacific Lamprey (<i>Entosphenus tridentatus</i>)	CDFW Species of Special Concern
Steelhead trout – Northern California DPS (<i>Oncorhynchus mykiss irideus</i> pop. 16)	Federally Threatened
Summer-Run Steelhead Trout (<i>Oncorhynchus mykiss irideus</i> pop. 36)	State Candidate for Listing
Tidewater Goby (<i>Eucyclogobius newberryi</i>)	Federally Endangered
Western Brook Lamprey (<i>Lampetra richardsoni</i>)	CDFW Species of Special Concern

Special Status Reptiles and Amphibians

The Western Pond Turtle (*Emys marmorata*) and Northern Red-legged Frog (*Rana aurora*) are likely to be encountered in the Project Area, especially around the freshwater ponds near the College of the Redwoods. Both are state species of concern but are not federally listed.

Special Status Invertebrates

The Obscure Bumble Bee (*Bombus caliginosus*) and Newcomb's Littorine Snail (*Littorina subrotundata*) both have potential to occur in the Project Area. Both are on the CDFW Special Animals List but are not state or federally listed.

3.5 Invasive species

Invasive species present in the Project Area include Himalayan blackberry (*Rubus armeniacus*), spartina (*Spartina densiflora*), and pampas grass (*Cortaderia jubata*). Removal of these species as feasible is recommended and may contribute towards mitigation for impacts to SNCs and ESHA.

4. Permits Likely to be Required

This Project is subject to the requirements of CEQA. The lead agency remains to be determined. An Initial Study and Mitigated Negative Declaration (IS/MND) is the likely CEQA pathway but remains to be confirmed by the CEQA lead agency in the future. National Environmental Policy Act (NEPA) compliance is not presently required, as there is no federal nexus with the Project. Future federal funding would trigger NEPA. The Project requires the permits listed below:

- Clean Water Act (CWA) Section 404 – U.S. Army Corps of Engineers
- CWA Section 401 - North Coast Regional Water Quality Control Board
- Endangered Species Act Section 7 consultation for aquatic species (salmonids and Tidewater Goby) with both NOAA Fisheries and the U.S. Fish and Wildlife Service
- Coastal Development Permit - California Coastal Commission (The Coastal Development Permit for the Project would be consolidated up to the State level.)
- Shoreline Development Permit - Humboldt Bay Harbor, Recreation, and Conservation District
- California Department of Fish and Wildlife – Lake and Streambed Alteration Agreement (TBD based on jurisdictional determination of involved Project drainages) and CESA compliance for Longfin Smelt

5. Conclusion

The purpose of this evaluation was to identify and evaluate environmental constraints along the potential trail alignment(s). Aquatic resources in the Project Area include palustrine freshwater emergent wetlands, freshwater forested shrub wetlands, estuarine and marine wetlands, and tributaries to King Salmon Slough, White Slough, and other small drainages.

Special status species with potential to occur in the Project Area include five plants, seven mammals, nine fish, nine birds, one amphibian, one reptile, and two invertebrates. This field effort and reporting is intended to help guide the design and construction of the project in a manner which avoids and/or minimizes impacts to sensitive resources in the Project Area.

During the construction phase, the Project has the potential to temporarily or permanently impact habitats that require mitigation. Permanent impacts to one-parameter wetlands, three-parameter wetlands, or upland SNCs would require mitigation at ratios satisfactory to permitting agencies. If present, ESHA located outside of wetlands or upland SNCs would also require mitigation.

Future studies recommended to advance environmental compliance for the Project include a wetland delineation, seasonally appropriate rare plant surveys, a biological resources evaluation, and SNC mapping.

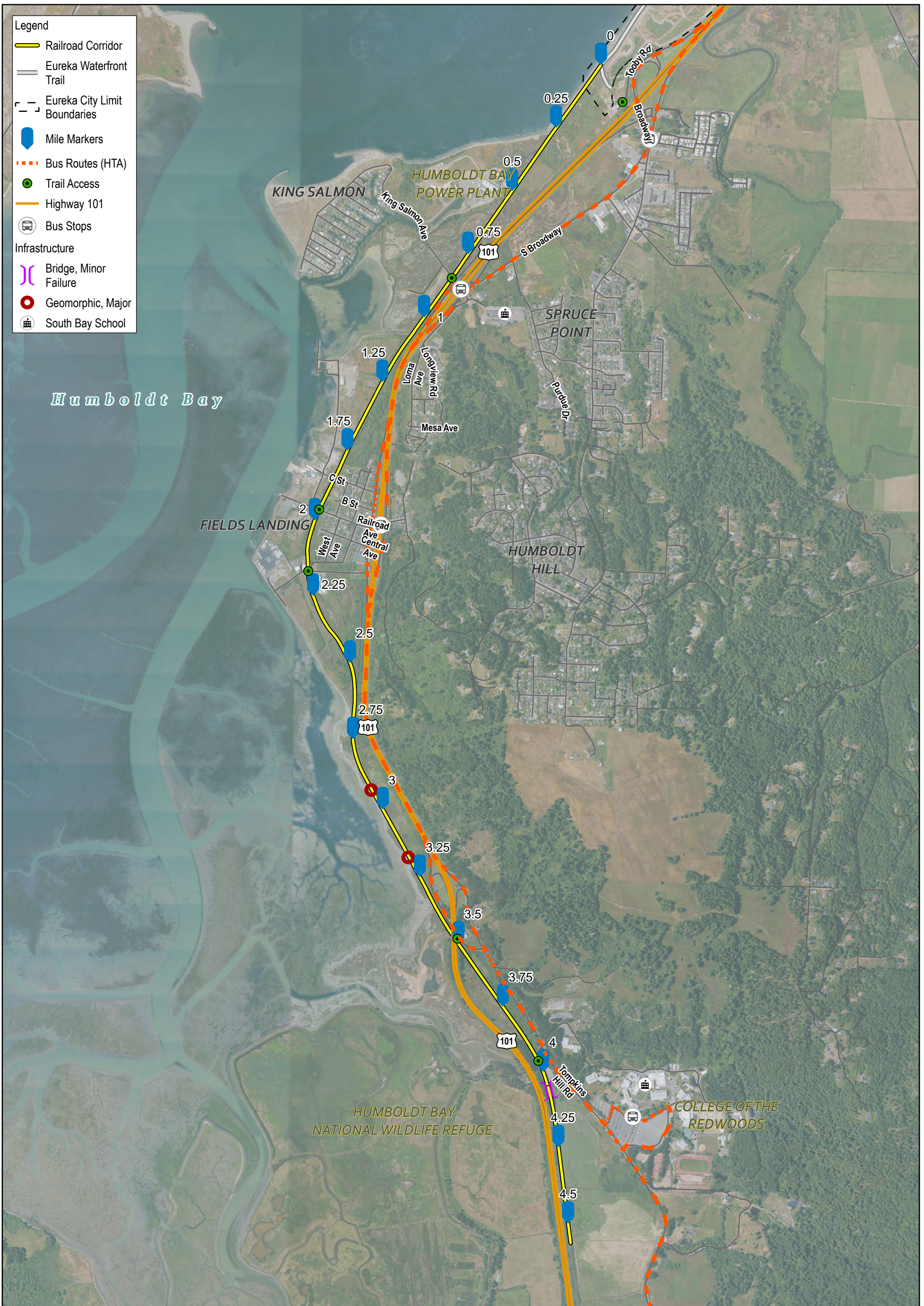
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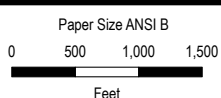
Appendices

Appendix A

Figures



- Legend**
- Railroad Corridor
 - Eureka Waterfront Trail
 - Eureka City Limit Boundaries
 - Mile Markers
 - Bus Routes (HTA)
 - Trail Access
 - Highway 101
 - Bus Stops
- Infrastructure**
- Bridge, Minor Failure
 - Geomorphic, Major
 - South Bay School















Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

County of Humboldt
Humboldt Bay Trail-Eureka to College of the Redwoods

Project No. 12609240
Revision No. -
Date September 2023

Project Overview

FIGURE 1

- Legend**
-  Railroad Corridor
 -  Eureka Waterfront Trail
 -  Assessor Parcels
 -  Eureka City Limit Boundaries
 -  Highway 101
 -  Mile Markers
 -  Trail Access
- Infrastructure**
-  Geomorphic, Major
 -  Bus Route (HTA)
 -  Water Main (HCSD)
 -  Sewer Pressure Main (HCSD)
 -  PG&E Powerline (approximate location)



CITY OF EUREKA
ELK RIVER ESTUARY PROJECT

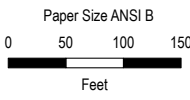
Tooby Road Trailhead

Tooby Rd

Vista Pt

Severt Ln

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Work in Progress













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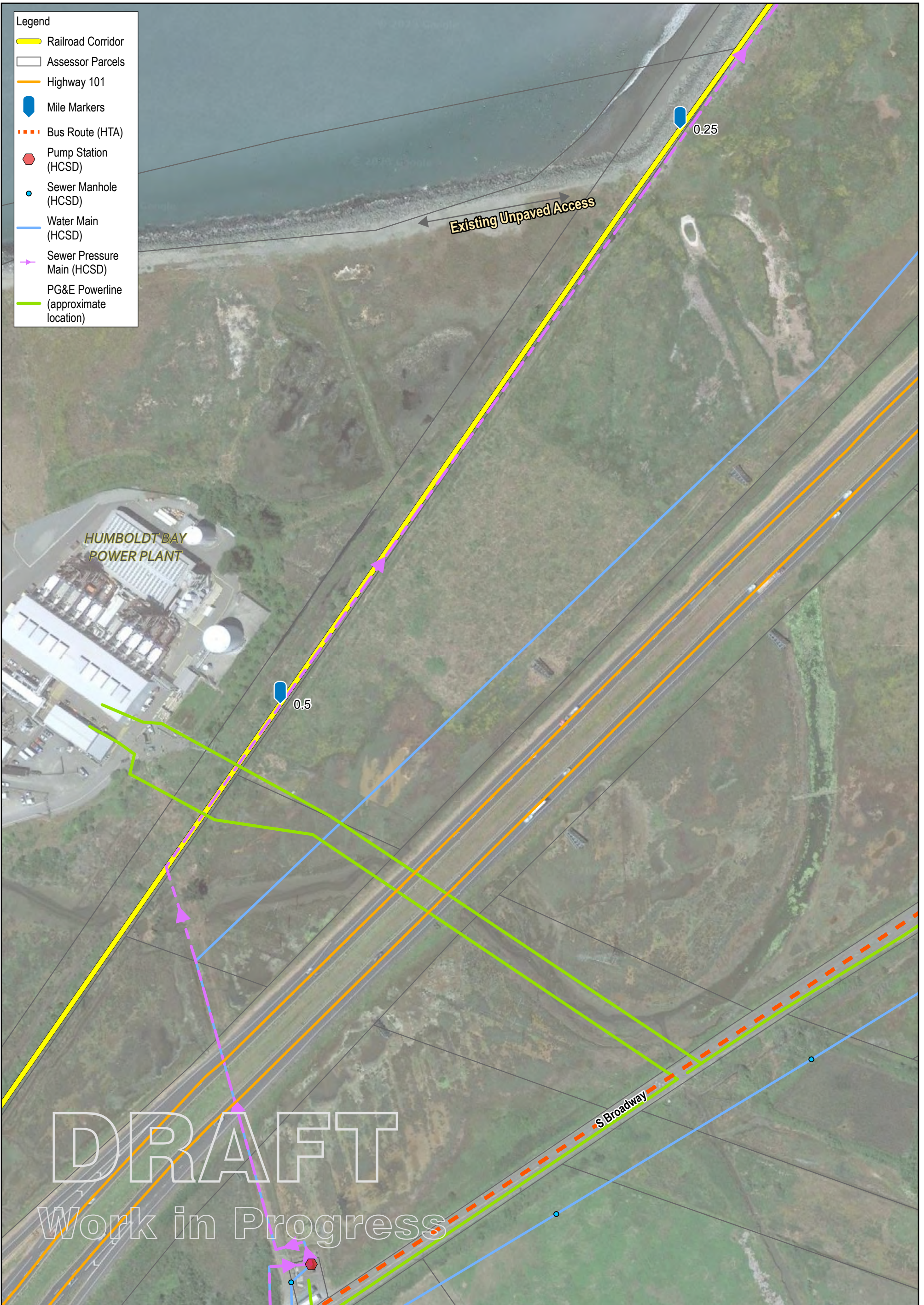
County of Humboldt
Humboldt Bay Trail-Eureka to College
of the Redwoods

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Project Overview
Map Series

FIGURE 2-1

- Legend**
-  Railroad Corridor
 -  Assessor Parcels
 -  Highway 101
 -  Mile Markers
 -  Bus Route (HTA)
 -  Pump Station (HCSD)
 -  Sewer Manhole (HCSD)
 -  Water Main (HCSD)
 -  Sewer Pressure Main (HCSD)
 -  PG&E Powerline (approximate location)



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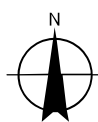
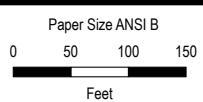
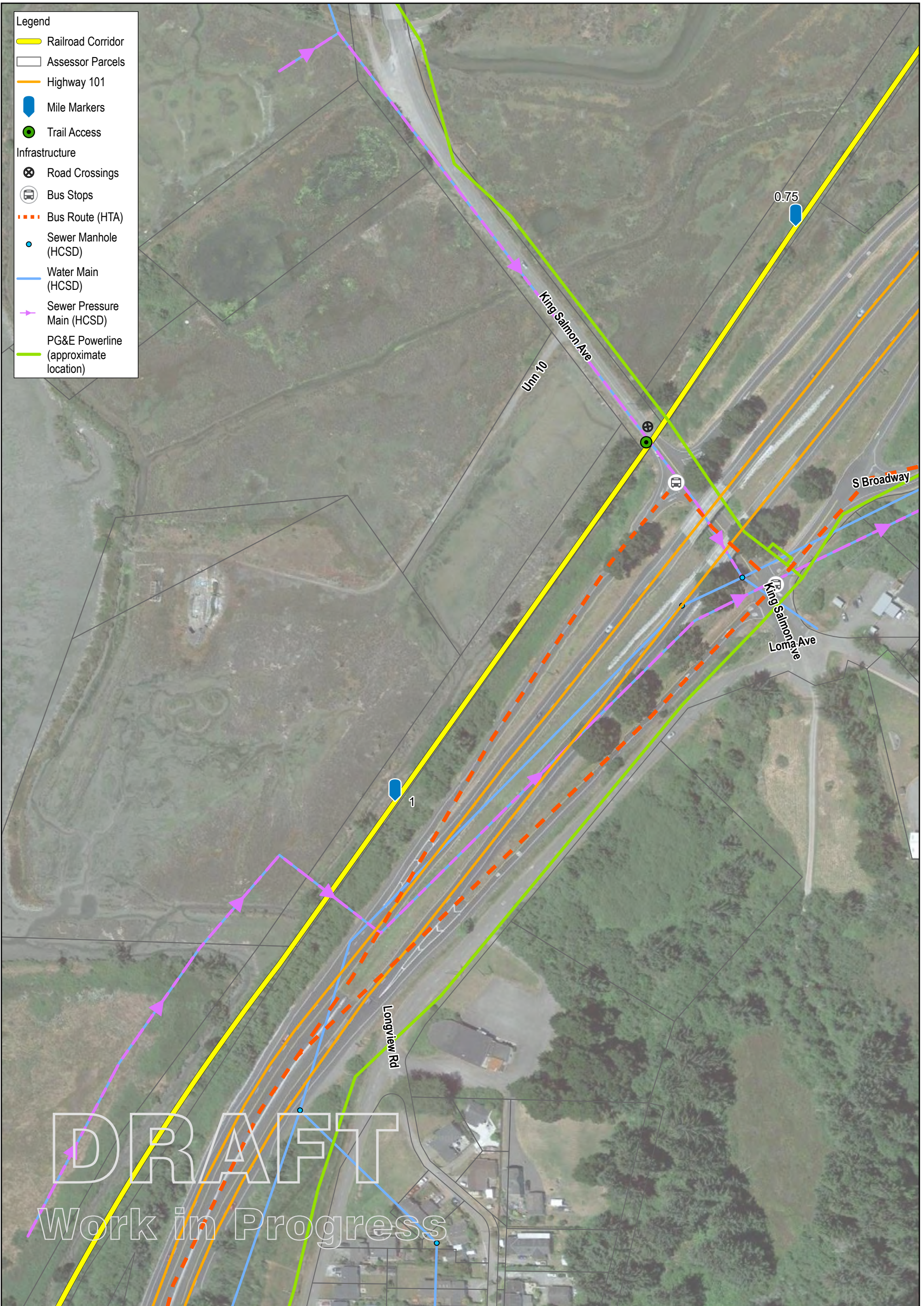
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County of Humboldt
 Humboldt Bay Trail-Eureka to College
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Project Overview
 Map Series

FIGURE 2-2



Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

County of Humboldt
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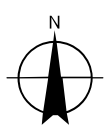
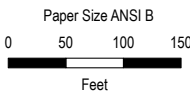
FIGURE 2-3



- Legend**
- Railroad Corridor
 - Assessor Parcels
 - Highway 101
 - Mile Markers
 - Trail Access
- Infrastructure**
- ⊗ Road Crossings
 - - - Bus Route (HTA)
 - Sewer Manhole (HCSD)
 - Water Main (HCSD)
 - PG&E Powerline (approximate location)

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Work in Progress












Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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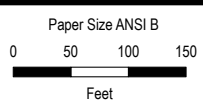
**Project Overview
 Map Series**

FIGURE 2- 4

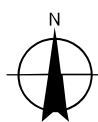
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County of Humboldt
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Map Series

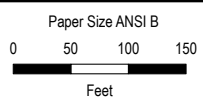
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FIGURE 2-5

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Work in Progress



Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

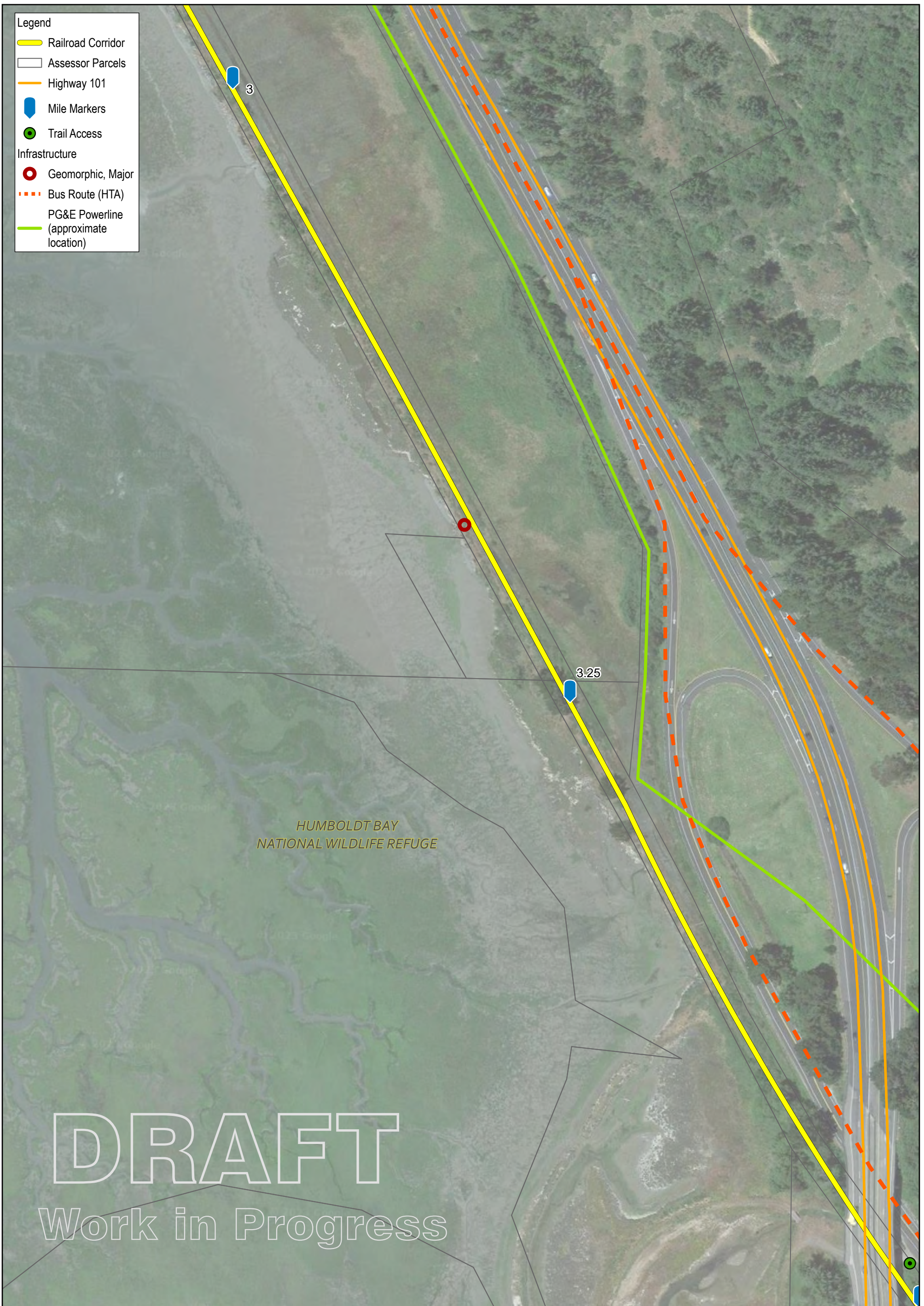


County of Humboldt
Humboldt Bay Trail-Eureka to College
of the Redwoods

Project Overview
Map Series

Project No. 12609240
Revision No. -
Date September 2023

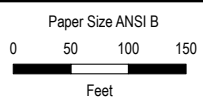
FIGURE 2- 6



- Legend**
- Railroad Corridor
 - Assessor Parcels
 - Highway 101
 - Mile Markers
 - Trail Access
- Infrastructure**
- Geomorphic, Major
 - Bus Route (HTA)
 - PG&E Powerline (approximate location)

HUMBOLDT BAY
NATIONAL WILDLIFE REFUGE

DRAFT
Work in Progress



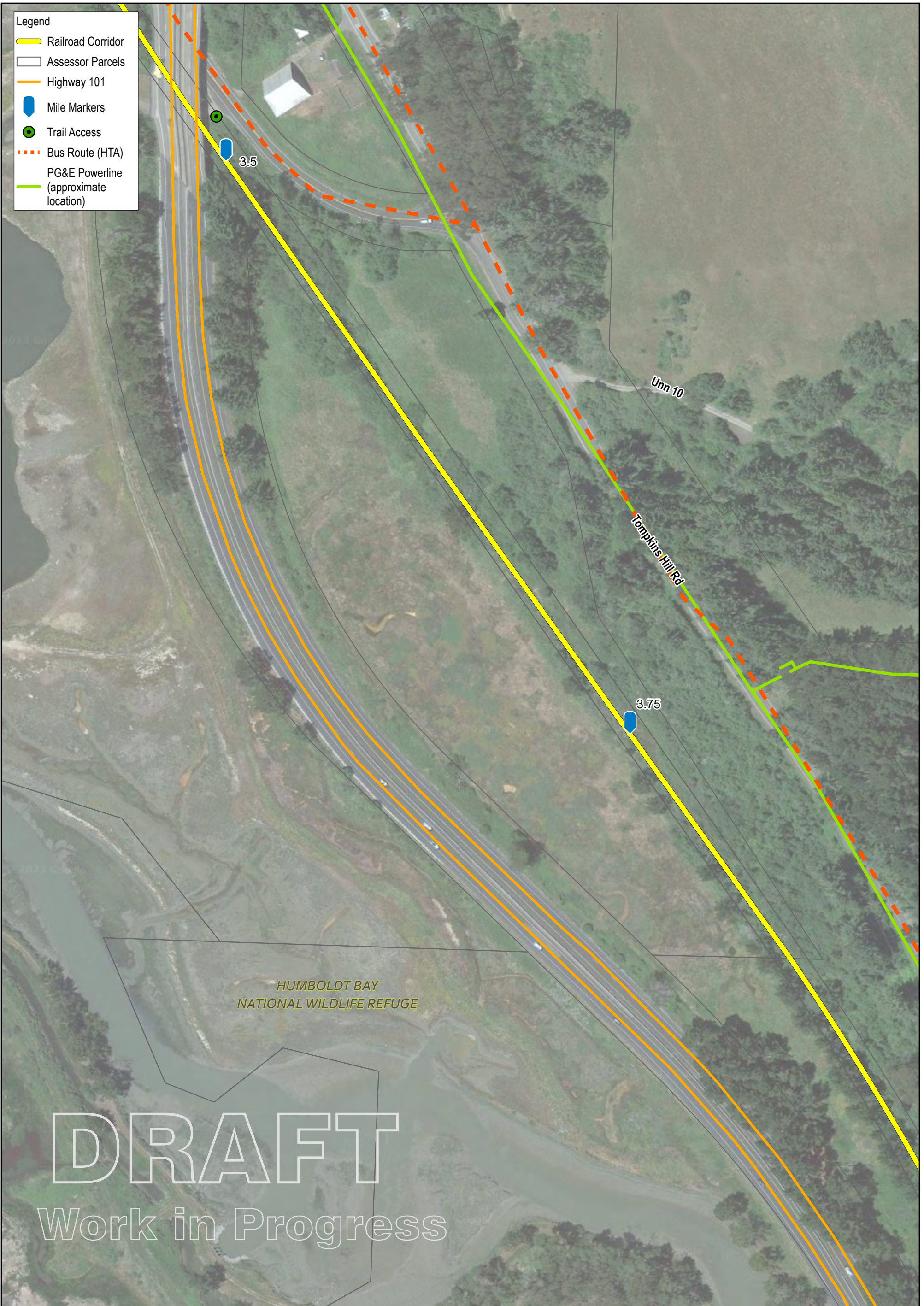
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

County of Humboldt
Humboldt Bay Trail-Eureka to College
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**Project Overview
Map Series**

FIGURE 2-7

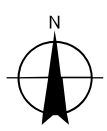
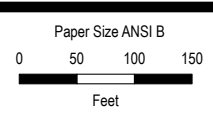


Legend

- Railroad Corridor
- Assessor Parcels
- Highway 101
- Mile Markers
- Trail Access
- Bus Route (HTA)
- PG&E Powerline (approximate location)

HUMBOLDT BAY
NATIONAL WILDLIFE REFUGE

DRAFT
Work in Progress



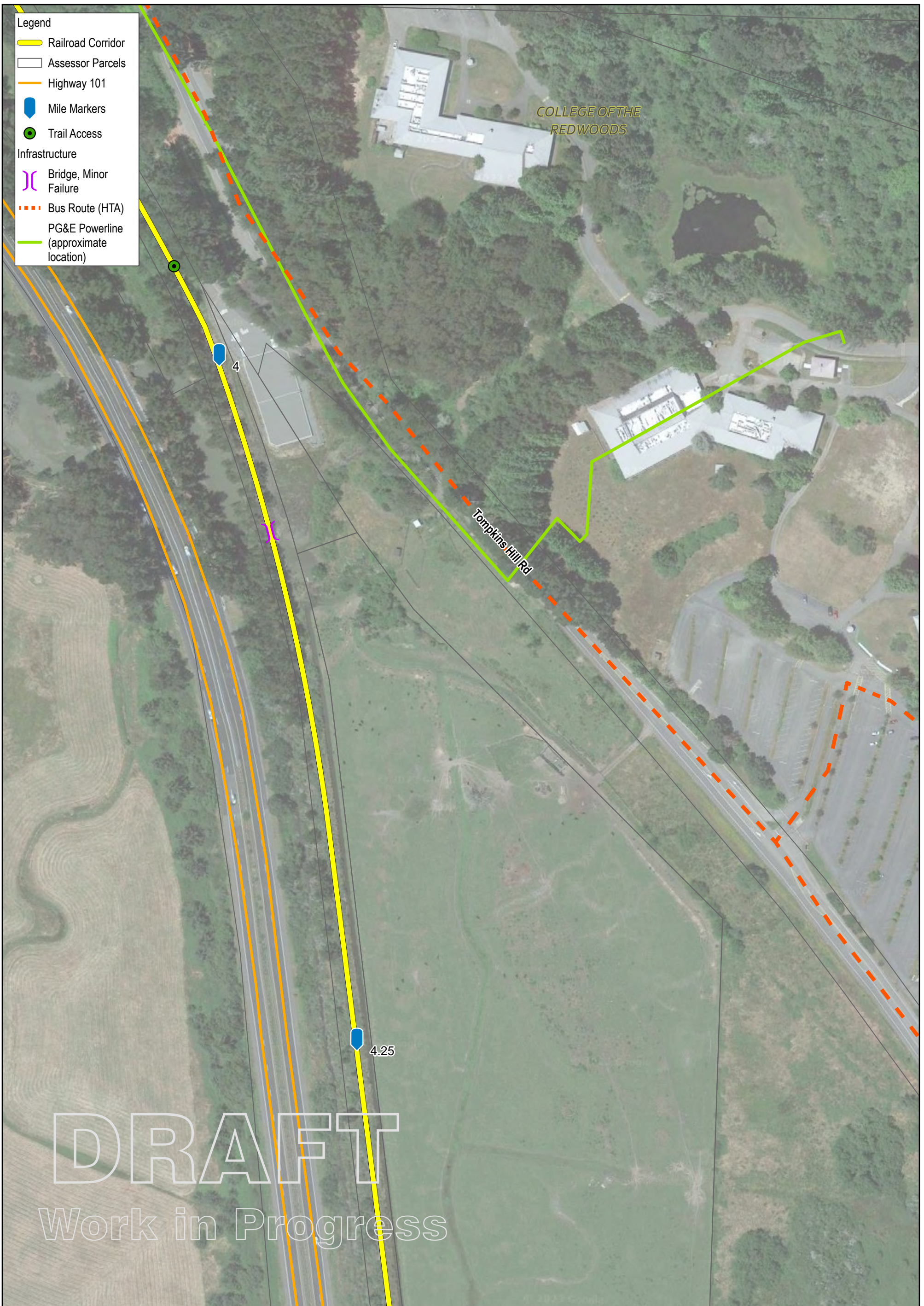
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

County of Humboldt
Humboldt Bay Trail-Eureka to College
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Map Series

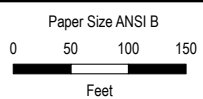
FIGURE 2- 8



- Legend**
- Railroad Corridor
 - Assessor Parcels
 - Highway 101
 - Mile Markers
 - Trail Access
 - Infrastructure**
 - Bridge, Minor Failure
 - Bus Route (HTA)
 - PG&E Powerline (approximate location)

DRAFT

Work in Progress



Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

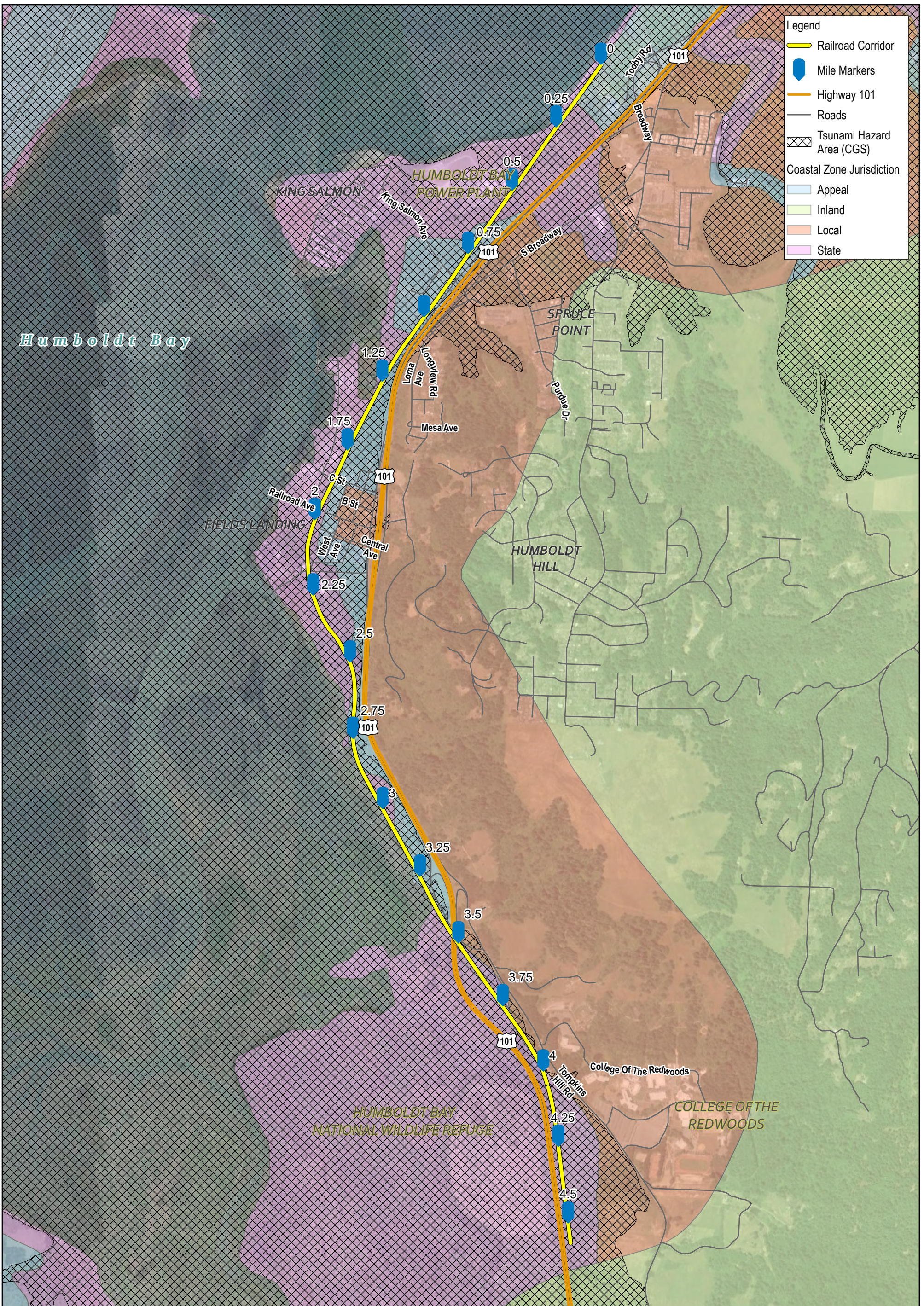


County of Humboldt
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of the Redwoods

Project Overview
Map Series

Project No. **12609240**
 Revision No. -
 Date **September 2023**

FIGURE 2-9

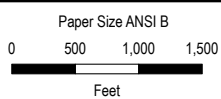


Legend

- Railroad Corridor
- Mile Markers
- Highway 101
- Roads
- Tsunami Hazard Area (CGS)

Coastal Zone Jurisdiction

- Appeal
- Inland
- Local
- State



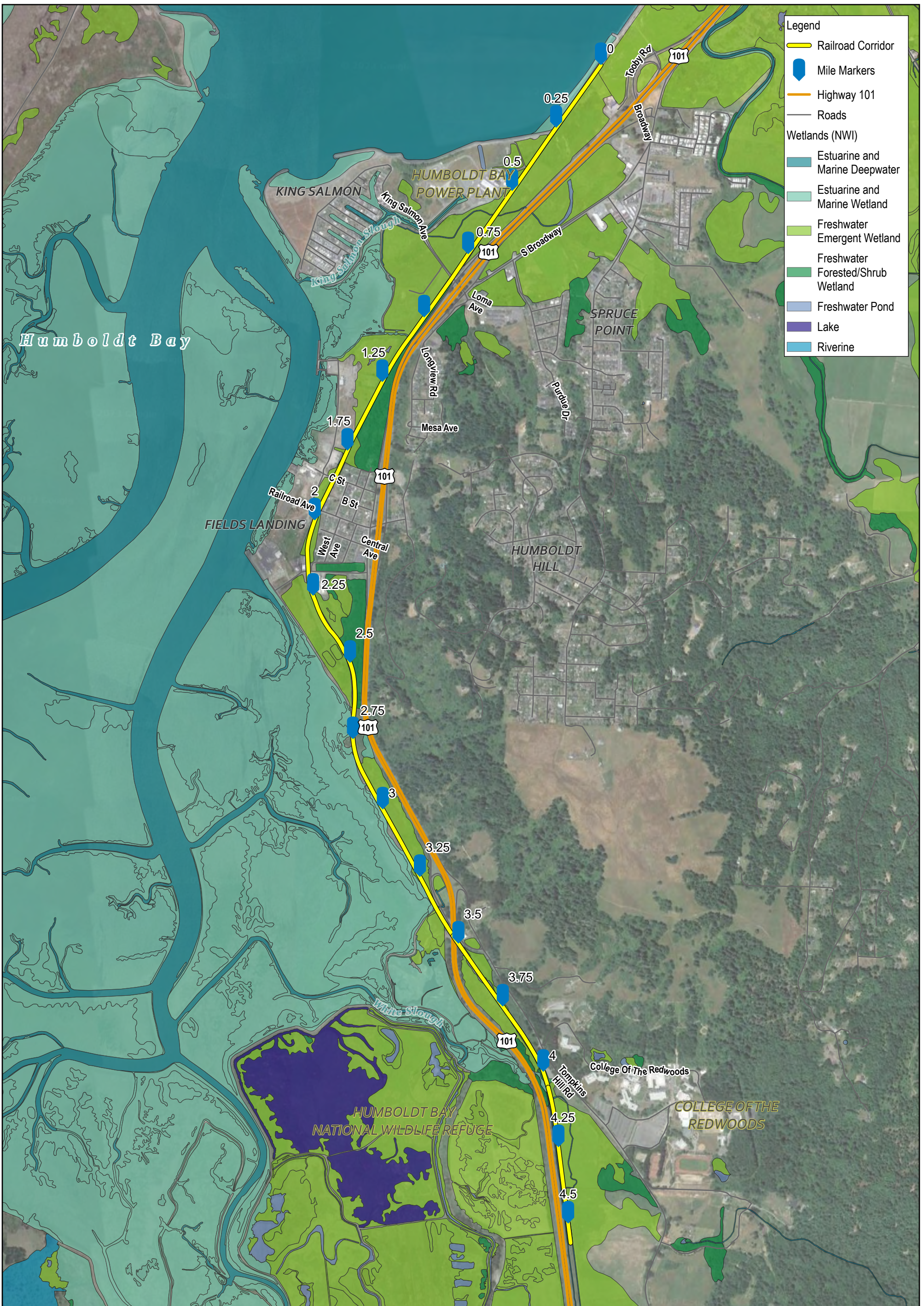
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Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

County of Humboldt
Humboldt Bay Trail-Eureka to College
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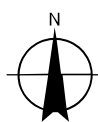
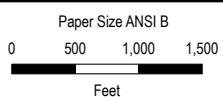
**Coastal Zone Jurisdiction &
Tsunami Hazard Areas**

FIGURE 3



Legend

- Railroad Corridor
- Mile Markers
- Highway 101
- Roads
- Wetlands (NWI)**
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine



Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

County of Humboldt
Humboldt Bay Trail-Eureka to College
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National Wetlands Inventory

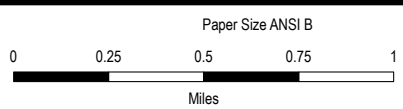
FIGURE 4

Data Disclaimer

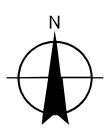
CNDDDB version 09/2023. Please Note: The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area



Legend		Plants- Common Names		
	1 mile Radius	Coho Salmon - southern Oregon / northern California ESU	Northern Red-legged Frog	beach layia
	Railroad Corridor	Eulachon	Obscure Bumble Bee	bristle-stalked sedge
Animals- Common Names		Foothill Yellow-legged Frog - north coast DPS	Osprey	coast checkerbloom
	American Peregrine Falcon	Green Sturgeon - southern DPS	Steelhead - northern California DPS winter-run	dark-eyed gilia
	California Floater	Longfin Smelt	Tidewater Goby	marsh pea
	North American Porcupine	Mountain Plover	Western Bumble Bee	pink sand-verbena
	Pacific Lamprey		Western Snowy Plover	seaside pea
	Coast Cutthroat Trout		Spotted Owl	short-leaved evax
				western lily
				western sand-spurrey



Paper Size ANSI B
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



County of Humboldt
Humboldt Bay Trail-Eureka to College of the Redwoods

CNDDDB Species Known to Occur Within a 1-mile Radius

Project No. 12609240
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FIGURE 5

Appendix B

**CNDDDB, CNPS, IPaC, NOAA Critical
Habitat, NOAA Fisheries Species List**

Element_Type	Scientific_Name	Common_Name	Element_Code	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank	Quad_Code	Quad_Name	Data_Status	Taxonomic_S
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012453	FERNDALE	Mapped	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012452	FORTUNA	Mapped	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	4012452	FORTUNA	Mapped and Unprocessed	Animals - Amphibians -

											Ranidae - Rana boylii pop. 1
Animals - Amphibians	Rana boylii pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped	Animals - Amphibians - Ranidae - Rana boylii pop. 1
Animals - Amphibians	Rana boylii pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Amphibians - Ranidae - Rana boylii pop. 1
Animals - Amphibians	Rana boylii pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Amphibians - Ranidae - Rana boylii pop. 1
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Birds	Accipiter cooperii	Coopers hawk	ABNKC12040	None	None	WL	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Coopers hawk	ABNKC12040	None	None	WL	-	4012472	EUREKA	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Coopers hawk	ABNKC12040	None	None	WL	-	4012461	MCWHINNEY CREEK	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Coopers hawk	ABNKC12040	None	None	WL	-	4012462	FIELDS LANDING	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter cooperii	Coopers hawk	ABNKC12040	None	None	WL	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter striatus	sharp-shinned hawk	ABNKC12020	None	None	WL	-	4012451	HYDESVILLE	Mapped	Animals - Birds - Accipitridae - Accipiter striatus
Animals - Birds	Accipiter striatus	sharp-shinned hawk	ABNKC12020	None	None	WL	-	4012462	FIELDS LANDING	Mapped	Animals - Birds - Accipitridae - Accipiter striatus
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius

Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds Accipitridae - Elanus leucuru
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	4012472	EUREKA	Mapped	Animals - Birds Accipitridae - Elanus leucuru
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Birds Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	4012451	HYDESVILLE	Unprocessed	Animals - Birds Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Birds Alcidae - Brachyramphu: marmoratus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Birds Alcidae - Brachyramphu: marmoratus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4012472	EUREKA	Unprocessed	Animals - Birds Alcidae - Brachyramphu: marmoratus
Animals - Birds	Chaetura vauxi	Vauxs swift	ABNUA03020	None	None	SSC	-	4012472	EUREKA	Unprocessed	Animals - Birds Apodidae - Chaetura vauxi
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Ardeidae - Arde alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	4012453	FERNDALE	Mapped	Animals - Birds Ardeidae - Arde alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Ardeidae - Arde alba
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Birds Ardeidae - Arde alba
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Birds Ardeidae - Arde herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Ardeidae - Arde herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012453	FERNDALE	Mapped	Animals - Birds Ardeidae - Arde herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Ardeidae - Arde

											herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Birds Ardeidae - Arde herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012451	HYDEVILLE	Mapped	Animals - Birds Ardeidae - Arde herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012452	FORTUNA	Mapped	Animals - Birds Ardeidae - Arde herodias
Animals - Birds	Botaurus lentiginosus	American bittern	ABNGA01020	None	None	-	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds Ardeidae - Botaurus lentiginosus
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Ardeidae - Egretta thula
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Ardeidae - Egretta thula
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Birds Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Birds Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Birds Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012452	FORTUNA	Mapped	Animals - Birds Ardeidae - Nycticorax nycticorax
Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped	Animals - Birds Charadriidae - Charadrius montanus
Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Charadriidae - Charadrius montanus
Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Birds Charadriidae - Charadrius montanus

Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Birds Charadriidae - Charadrius montanus
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Charadriidae - Charadrius nivosus nivosu:
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Birds Charadriidae - Charadrius nivosus nivosu:
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012453	FERNDALE	Unprocessed	Animals - Birds Charadriidae - Charadrius nivosus nivosu:
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Charadriidae - Charadrius nivosus nivosu:
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Birds Charadriidae - Charadrius nivosus nivosu:
Animals - Birds	Coccyzus americanus occidentalis	western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	-	-	4012453	FERNDALE	Mapped	Animals - Birds Cuculidae - Coccyzus americanus occidentalis
Animals - Birds	Falco columbarius	merlin	ABNKD06030	None	None	WL	-	4012472	EUREKA	Unprocessed	Animals - Birds Falconidae - Falco columbarius
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	-	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Birds Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Birds Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	-	-	4012452	FORTUNA	Unprocessed	Animals - Birds Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	-	-	4012451	HYDEVILLE	Mapped and Unprocessed	Animals - Birds Falconidae - Falco peregrinus anatum

Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Birds Hirundinidae - Progne subis
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012452	FORTUNA	Mapped	Animals - Birds Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012451	HYDESVILLE	Mapped	Animals - Birds Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012453	FERNDALE	Mapped	Animals - Birds Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012472	EUREKA	Mapped	Animals - Birds Hirundinidae - Riparia riparia
Animals - Birds	Agelaius tricolor	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	4012452	FORTUNA	Mapped and Unprocessed	Animals - Birds Icteridae - Agelaius tricolc
Animals - Birds	Icteria virens	yellow-breasted chat	ABPBX24010	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Birds Icteriidae - Icte virens
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012452	FORTUNA	Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Birds Pandionidae - Pandion haliae
Animals - Birds	Poecile atricapillus	black-capped chickadee	ABPAW01010	None	None	WL	-	4012453	FERNDALE	Unprocessed	Animals - Birds Paridae - Poec atricapillus
Animals - Birds	Poecile atricapillus	black-capped chickadee	ABPAW01010	None	None	WL	-	4012472	EUREKA	Unprocessed	Animals - Birds Paridae - Poec atricapillus
Animals - Birds	Poecile atricapillus	black-capped chickadee	ABPAW01010	None	None	WL	-	4012452	FORTUNA	Unprocessed	Animals - Birds Paridae - Poec atricapillus
Animals - Birds	Setophaga petechia	yellow warbler	ABPBX03010	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Birds Parulidae - Setophaga petechia

Animals - Birds	Setophaga petechia	yellow warbler	ABPBX03010	None	None	SSC	-	4012453	FERNDALE	Unprocessed	Animals - Birds Parulidae - Setophaga petechia
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	4012452	FORTUNA	Mapped	Animals - Birds Passerellidae - Ammodramus savannarum
Animals - Birds	Passerculus sandwichensis alaudinus	Bryants savannah sparrow	ABPBX99011	None	None	SSC	-	4012472	EUREKA	Unprocessed	Animals - Birds Passerellidae - Passerculus sandwichensis alaudinus
Animals - Birds	Passerculus sandwichensis alaudinus	Bryants savannah sparrow	ABPBX99011	None	None	SSC	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds Passerellidae - Passerculus sandwichensis alaudinus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	-	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds Pelecanidae - Pelecanus occidentalis californicus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	-	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Birds Pelecanidae - Pelecanus occidentalis californicus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	-	-	4012472	EUREKA	Unprocessed	Animals - Birds Pelecanidae - Pelecanus occidentalis californicus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	-	-	4012453	FERNDALE	Unprocessed	Animals - Birds Pelecanidae - Pelecanus occidentalis californicus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	-	-	4012462	FIELDS LANDING	Unprocessed	Animals - Birds Pelecanidae - Pelecanus occidentalis californicus
Animals - Birds	Nannopterum auritum	double-crested cormorant	ABNFD01020	None	None	WL	-	4012462	FIELDS LANDING	Unprocessed	Animals - Birds Phalacrocoraci - Nannopterum auritum
Animals - Birds	Nannopterum auritum	double-crested cormorant	ABNFD01020	None	None	WL	-	4012472	EUREKA	Unprocessed	Animals - Birds Phalacrocoraci - Nannopterum auritum
Animals - Birds	Nannopterum auritum	double-crested cormorant	ABNFD01020	None	None	WL	-	4012471	ARCATA SOUTH	Mapped	Animals - Birds Phalacrocoraci - Nannopterum auritum
Animals - Birds	Sphyrapicus ruber	red-breasted sapsucker	ABNYF05020	None	None	-	-	4012472	EUREKA	Unprocessed	Animals - Birds Picidae - Sphyrapicus ru

Animals - Birds	Coturnicops noveboracensis	yellow rail	ABNME01010	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Rallidae - Coturnicops noveboracensis
Animals - Birds	Coturnicops noveboracensis	yellow rail	ABNME01010	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Birds Rallidae - Coturnicops noveboracensis
Animals - Birds	Coturnicops noveboracensis	yellow rail	ABNME01010	None	None	SSC	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Birds Rallidae - Coturnicops noveboracensis
Animals - Birds	Rallus obsoletus obsoletus	California Ridgways rail	ABNME05011	Endangered	Endangered	FP	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Birds Rallidae - Rallus obsoletus obsoletus
Animals - Birds	Numenius americanus	long-billed curlew	ABNNF07070	None	None	WL	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds Scolopacidae - Numenius americanus
Animals - Birds	Asio flammeus	short-eared owl	ABNSB13040	None	None	SSC	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Birds Strigidae - Asio flammeus
Animals - Birds	Asio flammeus	short-eared owl	ABNSB13040	None	None	SSC	-	4012472	EUREKA	Unprocessed	Animals - Birds Strigidae - Asio flammeus
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012451	HYDEVILLE	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012452	FORTUNA	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012453	FERNDALE	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012462	FIELDS LANDING	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012472	EUREKA	Mapped	Animals - Birds Strigidae - Strix occidentalis caurina
Animals - Birds	Empidonax traillii	willow flycatcher	ABPAE33040	None	Endangered	-	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Birds Tyrannidae - Empidonax traillii

Animals - Birds	Empidonax traillii	willow flycatcher	ABPAE33040	None	Endangered	-	-	4012453	FERNDALE	Unprocessed	Animals - Birds Tyrannidae - Empidonax traillii
Animals - Birds	Empidonax traillii	willow flycatcher	ABPAE33040	None	Endangered	-	-	4012452	FORTUNA	Unprocessed	Animals - Birds Tyrannidae - Empidonax traillii
Animals - Fish	Acipenser medirostris pop. 1	green sturgeon - southern DPS	AFCAA01031	Threatened	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Fish Acipenseridae Acipenser medirostris pop. 1
Animals - Fish	Acipenser medirostris pop. 1	green sturgeon - southern DPS	AFCAA01031	Threatened	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Acipenseridae Acipenser medirostris pop. 1
Animals - Fish	Acipenser medirostris pop. 1	green sturgeon - southern DPS	AFCAA01031	Threatened	None	-	-	4012472	EUREKA	Mapped	Animals - Fish Acipenseridae Acipenser medirostris pop. 1
Animals - Fish	Acipenser medirostris pop. 1	green sturgeon - southern DPS	AFCAA01031	Threatened	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Fish Acipenseridae Acipenser medirostris pop. 1
Animals - Fish	Acipenser medirostris pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4012472	EUREKA	Unprocessed	Animals - Fish Acipenseridae Acipenser medirostris pop. 2
Animals - Fish	Acipenser medirostris pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4012462	FIELDS LANDING	Unprocessed	Animals - Fish Acipenseridae Acipenser medirostris pop. 2
Animals - Fish	Acipenser medirostris pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Fish Acipenseridae Acipenser medirostris pop. 2
Animals - Fish	Acipenser medirostris pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Fish Acipenseridae Acipenser medirostris pop. 2
Animals - Fish	Acipenser medirostris pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4012451	HYDEVILLE	Unprocessed	Animals - Fish Acipenseridae Acipenser medirostris pop. 2
Animals - Fish	Acipenser transmontanus	white sturgeon	AFCAA01050	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Fish Acipenseridae Acipenser transmontanus
Animals - Fish	Acipenser transmontanus	white sturgeon	AFCAA01050	None	None	SSC	-	4012472	EUREKA	Unprocessed	Animals - Fish Acipenseridae Acipenser transmontanus
Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Fish Gobiidae - Eucyclogobius newberryi
Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Fish Gobiidae - Eucyclogobius newberryi

											Eucyclogobius newberryi
Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Fish Gobiidae - Eucyclogobius newberryi
Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Gobiidae - Eucyclogobius newberryi
Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4012453	FERNDALE	Mapped	Animals - Fish Gobiidae - Eucyclogobius newberryi
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Fish Osmeridae - Spirinchus thaleichthys
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Fish Osmeridae - Spirinchus thaleichthys
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Fish Osmeridae - Spirinchus thaleichthys
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Fish Osmeridae - Spirinchus thaleichthys
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012452	FORTUNA	Mapped and Unprocessed	Animals - Fish Osmeridae - Spirinchus thaleichthys
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Fish Osmeridae - Spirinchus thaleichthys
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4012472	EUREKA	Mapped	Animals - Fish Osmeridae - Thaleichthys pacificus
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Fish Osmeridae - Thaleichthys pacificus
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Osmeridae - Thaleichthys pacificus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Petromyzontidae Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Fish Petromyzontidae

											Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Fish Petromyzontidae Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Fish Petromyzontidae Entosphenus tridentatus
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Fish Petromyzontidae Lampetra richardsoni
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped	Animals - Fish Petromyzontidae Lampetra richardsoni
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Fish Petromyzontidae Lampetra richardsoni
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Petromyzontidae Lampetra richardsoni
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012452	FORTUNA	Mapped	Animals - Fish Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012451	HYDESVILLE	Mapped	Animals - Fish Salmonidae -

											Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012451	HYDESVILLE	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012452	FORTUNA	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012453	FERNDALE	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Fish Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	AFCHA0213P	Threatened	Endangered	-	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 48
Animals - Fish	Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	AFCHA0213P	Threatened	Endangered	-	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 48
Animals - Fish	Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	AFCHA0213P	Threatened	Endangered	-	-	4012453	FERNDALE	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 48
Animals - Fish	Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	AFCHA0213P	Threatened	Endangered	-	-	4012452	FORTUNA	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 48
Animals - Fish	Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	AFCHA0213P	Threatened	Endangered	-	-	4012451	HYDESVILLE	Mapped	Animals - Fish Salmonidae - Oncorhynchus

											mykiss irideus pop. 48
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012451	HYDEVILLE	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012452	FORTUNA	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012453	FERNDALE	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	-	-	4012472	EUREKA	Mapped	Animals - Fish Salmonidae - Oncorhynchus mykiss irideus pop. 49
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012472	EUREKA	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha pc 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha pc 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012462	FIELDS LANDING	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha pc 17

Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012461	MCWHINNEY CREEK	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha pc 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012452	FORTUNA	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha pc 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012451	HYDESVILLE	Unprocessed	Animals - Fish Salmonidae - Oncorhynchus tshawytscha pc 17
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012452	FORTUNA	Mapped	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Insect Apidae - Bomb caliginosus
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Insect Apidae - Bomb occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Insect Apidae - Bomb occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Insect Apidae - Bomb occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Insect Apidae - Bomb occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Insect Apidae - Bomb occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012452	FORTUNA	Mapped and Unprocessed	Animals - Insect Apidae - Bomb occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24252	None	Candidate Endangered	-	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Insect Apidae - Bomb

											occidentalis
Animals - Insects	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Insect Carabidae - Cicindela hirticollis gravida
Animals - Insects	Cicindela hirticollis gravida	sandy beach tiger beetle	IICOL02101	None	None	-	-	4012472	EUREKA	Mapped	Animals - Insect Carabidae - Cicindela hirticollis gravida
Animals - Insects	Scaphinotus behrensi	Behrens snail-eating beetle	IICOL4L070	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Insect Carabidae - Scaphinotus behrensi
Animals - Insects	Limnephilus atercus	Fort Dick limnephilus caddisfly	IITRI15020	None	None	-	-	4012453	FERNDALE	Unprocessed	Animals - Insect Limnephilidae - Limnephilus atercus
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012451	HYDESVILLE	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012472	EUREKA	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Mammals -

											Cricetidae - Arborimus pom
Animals - Mammals	Arborimus poma	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pom
Animals - Mammals	Arborimus poma	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012452	FORTUNA	Mapped	Animals - Mammals - Cricetidae - Arborimus pom
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012452	FORTUNA	Mapped and Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012453	FERNDALE	Mapped and Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012451	HYDESVILLE	Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012462	FIELDS LANDING	Mapped and Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Animals - Mammals - Erethizontidae Erethizon dorsatum
Animals - Mammals	Enhydra lutris nereis	southern sea otter	AMAJF09012	Threatened	None	FP	-	4012472	EUREKA	Unprocessed	Animals - Mammals - Mustelidae - Enhydra lutris nereis
Animals - Mammals	Martes caurina humboldtensis	Humboldt marten	AMAJF01012	Threatened	Endangered	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Mammals - Mustelidae -

											Martes caurina humboldtensis
Animals - Mammals	Martes caurina humboldtensis	Humboldt marten	AMAJF01012	Threatened	Endangered	SSC	-	4012451	HYDESVILLE	Mapped	Animals - Mammals - Mustelidae - Martes caurina humboldtensis
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4012451	HYDESVILLE	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Pekania penna
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Pekania penna
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	4012472	EUREKA	Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	4012452	FORTUNA	Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010	None	None	SSC	-	4012452	FORTUNA	Mapped	Animals - Mammals - Vespertilionida Antrozous palli
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010	None	None	SSC	-	4012453	FERNDALE	Mapped	Animals - Mammals - Vespertilionida Antrozous palli
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012451	HYDESVILLE	Mapped	Animals - Mammals - Vespertilionida Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped	Animals - Mammals - Vespertilionida Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Mammals - Vespertilionida Corynorhinus townsendii
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Mammals - Vespertilionida Corynorhinus townsendii
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	4012472	EUREKA	Unprocessed	Animals - Mammals - Vespertilionida Lasionycteris noctivagans
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05032	None	None	-	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Mammals -

											Vespertilionidae Lasiurus cinereus
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05032	None	None	-	-	4012453	FERNDALE	Mapped	Animals - Mammals - Vespertilionidae Lasiurus cinereus
Animals - Mammals	Lasiurus cinereus	hoary bat	AMACC05032	None	None	-	-	4012452	FORTUNA	Mapped	Animals - Mammals - Vespertilionidae Lasiurus cinereus
Animals - Mammals	Myotis evotis	long-eared myotis	AMACC01070	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Animals - Mammals - Vespertilionidae Myotis evotis
Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	4012472	EUREKA	Unprocessed	Animals - Mammals - Vespertilionidae Myotis yumanensis
Animals - Mollusks	Littorina subrotundata	Newcombs littorine snail	IMGASR3010	None	None	-	-	4012472	EUREKA	Unprocessed	Animals - Mollusks - Littorinidae - Littorina subrotundata
Animals - Mollusks	Littorina subrotundata	Newcombs littorine snail	IMGASR3010	None	None	-	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Mollusks - Littorinidae - Littorina subrotundata
Animals - Mollusks	Littorina subrotundata	Newcombs littorine snail	IMGASR3010	None	None	-	-	4012462	FIELDS LANDING	Unprocessed	Animals - Mollusks - Littorinidae - Littorina subrotundata
Animals - Mollusks	Littorina subrotundata	Newcombs littorine snail	IMGASR3010	None	None	-	-	4012463	CANNIBAL ISLAND	Unprocessed	Animals - Mollusks - Littorinidae - Littorina subrotundata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Mollusks - Margaritiferidae Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Mollusks - Margaritiferidae Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012471	ARCATA SOUTH	Unprocessed	Animals - Mollusks - Margaritiferidae Margaritifera falcata
Animals - Mollusks	Anodonta californiensis	California floater	IMBIV04220	None	None	-	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Mollusks - Unionidae -

											Anodonta californiensis
Animals - Mollusks	Anodonta californiensis	California floater	IMBIV04220	None	None	-	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Mollusks - Unionidae - Anodonta californiensis
Animals - Mollusks	Anodonta californiensis	California floater	IMBIV04220	None	None	-	-	4012462	FIELDS LANDING	Mapped	Animals - Mollusks - Unionidae - Anodonta californiensis
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012462	FIELDS LANDING	Mapped	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012463	CANNIBAL ISLAND	Mapped	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012461	MCWHINNEY CREEK	Mapped	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012472	EUREKA	Mapped and Unprocessed	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012471	ARCATA SOUTH	Mapped and Unprocessed	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012452	FORTUNA	Mapped	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012453	FERNDALE	Unprocessed	Animals - Rept - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012451	HYDEVILLE	Mapped and Unprocessed	Animals - Rept - Emydidae - Emys marmorata
Community - Terrestrial	Coastal Terrace Prairie	Coastal Terrace Prairie	CTT41100CA	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Community - Terrestrial - Coastal Terrace Prairie
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4012462	FIELDS LANDING	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4012471	ARCATA SOUTH	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4012472	EUREKA	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh

Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4012453	FERNDALE	Mapped	Community - Terrestrial - Northern Coast Salt Marsh
Community - Terrestrial	Sitka Spruce Forest	Sitka Spruce Forest	CTT82110CA	None	None	-	-	4012463	CANNIBAL ISLAND	Mapped	Community - Terrestrial - Sitt Spruce Forest
Plants - Bryophytes	Anomobryum julaceum	slender silver moss	NBMUS80010	None	None	-	4.2	4012453	FERNDALE	Mapped	Plants - Bryophytes - Bryaceae - Anomobryum julaceum
Plants - Bryophytes	Fissidens pauperculus	minute pocket moss	NBMUS2W0U0	None	None	-	1B.2	4012452	FORTUNA	Mapped	Plants - Bryophytes - Fissidentaceae Fissidens pauperculus
Plants - Bryophytes	Fissidens pauperculus	minute pocket moss	NBMUS2W0U0	None	None	-	1B.2	4012471	ARCATA SOUTH	Mapped	Plants - Bryophytes - Fissidentaceae Fissidens pauperculus
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Lichen Alectoriaceae - Sulcaria spiralif
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	4012471	ARCATA SOUTH	Mapped	Plants - Lichen Parmeliaceae - Usnea longissii
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Plants - Lichen Parmeliaceae - Usnea longissii
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	4012452	FORTUNA	Unprocessed	Plants - Lichen Parmeliaceae - Usnea longissii
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	4012453	FERNDALE	Unprocessed	Plants - Lichen Parmeliaceae - Usnea longissii
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	4012451	HYDESVILLE	Mapped and Unprocessed	Plants - Lichen Parmeliaceae - Usnea longissii
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012453	FERNDALE	Unprocessed	Plants - Vascul Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascul Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012463	CANNIBAL ISLAND	Unprocessed	Plants - Vascul Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascul Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012472	EUREKA	Unprocessed	Plants - Vascul Apiaceae - Angelica lucida
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4012472	EUREKA	Unprocessed	Plants - Vascul Apiaceae -

											Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4012463	CANNIBAL ISLAND	Unprocessed	Plants - Vascular Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4012453	FERNDALE	Unprocessed	Plants - Vascular Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Hemizonia congesta ssp. tracyi	Tracys tarplant	PDAST4R067	None	None	-	4.3	4012452	FORTUNA	Unprocessed	Plants - Vascular Asteraceae - Hemizonia congesta ssp. tracyi
Plants - Vascular	Hemizonia congesta ssp. tracyi	Tracys tarplant	PDAST4R067	None	None	-	4.3	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Asteraceae - Hemizonia congesta ssp. tracyi
Plants - Vascular	Hesperervax sparsiflora var. brevifolia	short-leaved evax	PDASTE5011	None	None	-	1B.2	4012453	FERNDALE	Mapped	Plants - Vascular Asteraceae - Hesperervax sparsiflora var. brevifolia
Plants - Vascular	Hesperervax sparsiflora var. brevifolia	short-leaved evax	PDASTE5011	None	None	-	1B.2	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Asteraceae - Hesperervax sparsiflora var. brevifolia
Plants - Vascular	Hesperervax sparsiflora var. brevifolia	short-leaved evax	PDASTE5011	None	None	-	1B.2	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Asteraceae - Hesperervax sparsiflora var. brevifolia
Plants - Vascular	Lasthenia californica ssp. macrantha	perennial goldfields	PDAST5L0C5	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Vascular Asteraceae - Lasthenia californica ssp. macrantha
Plants - Vascular	Layia carnosa	beach layia	PDAST5N010	Threatened	Endangered	-	1B.1	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Asteraceae - Layia carnosa
Plants - Vascular	Layia carnosa	beach layia	PDAST5N010	Threatened	Endangered	-	1B.1	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Plants - Vascular Asteraceae - Layia carnosa
Plants - Vascular	Layia carnosa	beach layia	PDAST5N010	Threatened	Endangered	-	1B.1	4012462	FIELDS LANDING	Mapped	Plants - Vascular Asteraceae - Layia carnosa
Plants - Vascular	Packera bolanderi var. bolanderi	seacoast ragwort	PDAST8H0H1	None	None	-	2B.2	4012451	HYDESVILLE	Mapped	Plants - Vascular Asteraceae - Packera bolanderi var. bolanderi

Plants - Vascular	Cardamine angulata	seaside bittercress	PDBRA0K010	None	None	-	2B.1	4012461	MCWHINNEY CREEK	Mapped	Plants - Vascular Brassicaceae - Cardamine angulata
Plants - Vascular	Cardamine angulata	seaside bittercress	PDBRA0K010	None	None	-	2B.1	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Brassicaceae - Cardamine angulata
Plants - Vascular	Erysimum menziesii	Menzies wallflower	PDBRA160R0	Endangered	Endangered	-	1B.1	4012472	EUREKA	Mapped	Plants - Vascular Brassicaceae - Erysimum menziesii
Plants - Vascular	Erysimum menziesii	Menzies wallflower	PDBRA160R0	Endangered	Endangered	-	1B.1	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Brassicaceae - Erysimum menziesii
Plants - Vascular	Downingia willamettensis	Cascade downingia	PDCAM060E0	None	None	-	2B.2	4012451	HYDEVILLE	Mapped	Plants - Vascular Campanulaceae Downingia willamettensis
Plants - Vascular	Downingia willamettensis	Cascade downingia	PDCAM060E0	None	None	-	2B.2	4012452	FORTUNA	Mapped	Plants - Vascular Campanulaceae Downingia willamettensis
Plants - Vascular	Silene scouleri ssp. scouleri	Scoulers catchfly	PDCAR0U1MC	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Caryophyllaceae Silene scouleri ssp. scouleri
Plants - Vascular	Spergularia canadensis var. occidentalis	western sand-spurrey	PDCAR0W032	None	None	-	2B.1	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Caryophyllaceae Spergularia canadensis var. occidentalis
Plants - Vascular	Spergularia canadensis var. occidentalis	western sand-spurrey	PDCAR0W032	None	None	-	2B.1	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Caryophyllaceae Spergularia canadensis var. occidentalis
Plants - Vascular	Spergularia canadensis var. occidentalis	western sand-spurrey	PDCAR0W032	None	None	-	2B.1	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Caryophyllaceae Spergularia canadensis var. occidentalis
Plants - Vascular	Spergularia canadensis var. occidentalis	western sand-spurrey	PDCAR0W032	None	None	-	2B.1	4012462	FIELDS LANDING	Mapped	Plants - Vascular Caryophyllaceae Spergularia canadensis var. occidentalis
Plants - Vascular	Carex arcta	northern clustered sedge	PMCYP030X0	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Cyperaceae - Carex arcta
Plants - Vascular	Carex leptalea	bristle-stalked sedge	PMCYP037E0	None	None	-	2B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascular Cyperaceae - Carex leptalea
Plants - Vascular	Carex lyngbyei	Lyngbyes sedge	PMCYP037Y0	None	None	-	2B.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Cyperaceae - Carex lyngbyei

Plants - Vascular	Carex lyngbyei	Lyngbyes sedge	PMCYP037Y0	None	None	-	2B.2	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Cyperaceae - Carex lyngbyei
Plants - Vascular	Carex lyngbyei	Lyngbyes sedge	PMCYP037Y0	None	None	-	2B.2	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Cyperaceae - Carex lyngbyei
Plants - Vascular	Carex lyngbyei	Lyngbyes sedge	PMCYP037Y0	None	None	-	2B.2	4012471	ARCATA SOUTH	Mapped and Unprocessed	Plants - Vascular Cyperaceae - Carex lyngbyei
Plants - Vascular	Carex lyngbyei	Lyngbyes sedge	PMCYP037Y0	None	None	-	2B.2	4012453	FERNDALE	Mapped	Plants - Vascular Cyperaceae - Carex lyngbyei
Plants - Vascular	Carex praticola	northern meadow sedge	PMCYP03B20	None	None	-	2B.2	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Cyperaceae - Carex praticola
Plants - Vascular	Carex praticola	northern meadow sedge	PMCYP03B20	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Cyperaceae - Carex praticola
Plants - Vascular	Eleocharis parvula	small spikerush	PMCYP091G0	None	None	-	4.3	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Cyperaceae - Eleocharis pan
Plants - Vascular	Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	PDFAB0F7B2	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Vascular Fabaceae - Astragalus pycnostachyus var. pycnostachyus
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4012472	EUREKA	Unprocessed	Plants - Vascular Fabaceae - Hosackia graci
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Fabaceae - Hosackia graci
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4012463	CANNIBAL ISLAND	Unprocessed	Plants - Vascular Fabaceae - Hosackia graci
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Fabaceae - Hosackia graci
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4012452	FORTUNA	Unprocessed	Plants - Vascular Fabaceae - Hosackia graci
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Fabaceae - Hosackia graci
Plants - Vascular	Lathyrus glandulosus	sticky pea	PDFAB251A0	None	None	-	4.3	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Fabaceae - Lathyrus glandulosus
Plants - Vascular	Lathyrus glandulosus	sticky pea	PDFAB251A0	None	None	-	4.3	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Fabaceae - Lathyrus glandulosus
Plants - Vascular	Lathyrus japonicus	seaside pea	PDFAB250C0	None	None	-	2B.1	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Fabaceae -

											Lathyrus japonicus
Plants - Vascular	Lathyrus japonicus	seaside pea	PDFAB250C0	None	None	-	2B.1	4012472	EUREKA	Mapped	Plants - Vascular Fabaceae - Lathyrus japonicus
Plants - Vascular	Lathyrus palustris	marsh pea	PDFAB250P0	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Fabaceae - Lathyrus palustris
Plants - Vascular	Ribes laxiflorum	trailing black currant	PDGRO020V0	None	None	-	4.3	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Grossulariaceae Ribes laxiflorum
Plants - Vascular	Ribes laxiflorum	trailing black currant	PDGRO020V0	None	None	-	4.3	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Grossulariaceae Ribes laxiflorum
Plants - Vascular	Ribes laxiflorum	trailing black currant	PDGRO020V0	None	None	-	4.3	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascular Grossulariaceae Ribes laxiflorum
Plants - Vascular	Erythronium revolutum	coast fawn lily	PMLIL0U0F0	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Liliaceae - Erythronium revolutum
Plants - Vascular	Lilium kelloggii	Kelloggs lily	PMLIL1A0A0	None	None	-	4.3	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Liliaceae - Lilium kelloggii
Plants - Vascular	Lilium kelloggii	Kelloggs lily	PMLIL1A0A0	None	None	-	4.3	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascular Liliaceae - Lilium kelloggii
Plants - Vascular	Lilium kelloggii	Kelloggs lily	PMLIL1A0A0	None	None	-	4.3	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Liliaceae - Lilium kelloggii
Plants - Vascular	Lilium occidentale	western lily	PMLIL1A0G0	Endangered	Endangered	-	1B.1	4012462	FIELDS LANDING	Mapped	Plants - Vascular Liliaceae - Lilium occidentale
Plants - Vascular	Lilium occidentale	western lily	PMLIL1A0G0	Endangered	Endangered	-	1B.1	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Liliaceae - Lilium occidentale
Plants - Vascular	Lilium occidentale	western lily	PMLIL1A0G0	Endangered	Endangered	-	1B.1	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Liliaceae - Lilium occidentale
Plants - Vascular	Lilium occidentale	western lily	PMLIL1A0G0	Endangered	Endangered	-	1B.1	4012472	EUREKA	Mapped	Plants - Vascular Liliaceae - Lilium occidentale
Plants - Vascular	Lilium rubescens	redwood lily	PMLIL1A0N0	None	None	-	4.2	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Liliaceae - Lilium rubescens
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012451	HYDESVILLE	Mapped and Unprocessed	Plants - Vascular Lycopodiaceae Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012472	EUREKA	Unprocessed	Plants - Vascular Lycopodiaceae Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012471	ARCATA SOUTH	Mapped and Unprocessed	Plants - Vascular Lycopodiaceae

											Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Lycopodiaceae Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Plants - Vascular Lycopodiaceae Lycopodium clavatum
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012462	FIELDS LANDING	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012471	ARCATA SOUTH	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012451	HYDESVILLE	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012453	FERNDALE	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4012453	FERNDALE	Mapped	Plants - Vascular Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4012452	FORTUNA	Mapped	Plants - Vascular Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4012451	HYDESVILLE	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Vascular Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascular Malvaceae - Sidalcea

											malviflora ssp. patula
Plants - Vascular	<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	PDMAL110K9	None	None	-	1B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascular Malvaceae - <i>Sidalcea oregana</i> ssp. <i>eximia</i>
Plants - Vascular	<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	PDMAL110K9	None	None	-	1B.2	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Malvaceae - <i>Sidalcea oregana</i> ssp. <i>eximia</i>
Plants - Vascular	<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	PDMAL110K9	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Vascular Malvaceae - <i>Sidalcea oregana</i> ssp. <i>eximia</i>
Plants - Vascular	<i>Monotropa uniflora</i>	ghost-pipe	PDMON03030	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Monotropaceae <i>Monotropa uniflora</i>
Plants - Vascular	<i>Monotropa uniflora</i>	ghost-pipe	PDMON03030	None	None	-	2B.2	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Monotropaceae <i>Monotropa uniflora</i>
Plants - Vascular	<i>Pityopus californicus</i>	California pinefoot	PDMON05010	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Monotropaceae <i>Pityopus californicus</i>
Plants - Vascular	<i>Pityopus californicus</i>	California pinefoot	PDMON05010	None	None	-	4.2	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascular Monotropaceae <i>Pityopus californicus</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012461	MCWHINNEY CREEK	Mapped and Unprocessed	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012462	FIELDS LANDING	Mapped and Unprocessed	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012451	HYDESVILLE	Mapped	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012452	FORTUNA	Mapped	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Montia howellii</i>	Howells montia	PDPOR05070	None	None	-	2B.2	4012453	FERNDALE	Mapped	Plants - Vascular Montiaceae - <i>Montia howellii</i>
Plants - Vascular	<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Nyctaginaceae <i>Abronia umbellata</i> var. <i>breviflora</i>
Plants - Vascular	<i>Abronia umbellata</i> var.	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4012462	FIELDS LANDING	Mapped and Unprocessed	Plants - Vascular Nyctaginaceae

	breviflora										Abronia umbell var. breviflora
Plants - Vascular	Clarkia amoena ssp. whitneyi	Whitneys farewell-to- spring	PDONA05025	None	None	-	1B.1	4012452	FORTUNA	Mapped	Plants - Vascul Onagraceae - Clarkia amoena ssp. whitneyi
Plants - Vascular	Oenothera wolffii	Wolfs evening- primrose	PDONA0C1K0	None	None	-	1B.1	4012472	EUREKA	Mapped	Plants - Vascul Onagraceae - Oenothera wolffii
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascul Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascul Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascul Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012452	FORTUNA	Unprocessed	Plants - Vascul Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012451	HYDESVILLE	Unprocessed	Plants - Vascul Orchidaceae - Listera cordata
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owls-clover	PDSCR0D402	None	None	-	1B.2	4012453	FERNDALE	Mapped	Plants - Vascul Orobanchaceae Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owls-clover	PDSCR0D402	None	None	-	1B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascul Orobanchaceae Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owls-clover	PDSCR0D402	None	None	-	1B.2	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Plants - Vascul Orobanchaceae Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owls-clover	PDSCR0D402	None	None	-	1B.2	4012471	ARCATA SOUTH	Mapped and Unprocessed	Plants - Vascul Orobanchaceae Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owls-clover	PDSCR0D402	None	None	-	1B.2	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascul Orobanchaceae Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascul Orobanchaceae Castilleja litoralis
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascul Orobanchaceae Castilleja litoralis
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascul Orobanchaceae

											Castilleja litoral
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4012453	FERNDALE	Mapped	Plants - Vascular Orobanchaceae Castilleja litoral
Plants - Vascular	Chloropyron maritimum ssp. palustre	Point Reyes salty birds-beak	PDSCR0J0C3	None	None	-	1B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascular Orobanchaceae Chloropyron maritimum ssp. palustre
Plants - Vascular	Chloropyron maritimum ssp. palustre	Point Reyes salty birds-beak	PDSCR0J0C3	None	None	-	1B.2	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Plants - Vascular Orobanchaceae Chloropyron maritimum ssp. palustre
Plants - Vascular	Chloropyron maritimum ssp. palustre	Point Reyes salty birds-beak	PDSCR0J0C3	None	None	-	1B.2	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Orobanchaceae Chloropyron maritimum ssp. palustre
Plants - Vascular	Chloropyron maritimum ssp. palustre	Point Reyes salty birds-beak	PDSCR0J0C3	None	None	-	1B.2	4012471	ARCATA SOUTH	Mapped	Plants - Vascular Orobanchaceae Chloropyron maritimum ssp. palustre
Plants - Vascular	Collinsia corymbosa	round-headed collinsia	PDSCR0H060	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Vascular Plantaginaceae Collinsia corymbosa
Plants - Vascular	Pleuropogon refractus	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012472	EUREKA	Unprocessed	Plants - Vascular Poaceae - Pleuropogon refractus
Plants - Vascular	Pleuropogon refractus	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Poaceae - Pleuropogon refractus
Plants - Vascular	Pleuropogon refractus	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Poaceae - Pleuropogon refractus
Plants - Vascular	Pleuropogon refractus	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascular Poaceae - Pleuropogon refractus
Plants - Vascular	Pleuropogon refractus	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012453	FERNDALE	Unprocessed	Plants - Vascular Poaceae - Pleuropogon refractus
Plants - Vascular	Pleuropogon refractus	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Poaceae - Pleuropogon refractus
Plants - Vascular	Puccinellia pumila	dwarf alkali grass	PMPOA531L0	None	None	-	2B.2	4012463	CANNIBAL ISLAND	Mapped	Plants - Vascular Poaceae - Puccinellia pun
Plants - Vascular	Collomia tracyi	Tracys collomia	PDPLM020B0	None	None	-	4.3	4012451	HYDESVILLE	Unprocessed	Plants - Vascular Polemoniaceae

											Collomia tracyi
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4012451	HYDEVILLE	Mapped	Plants - Vascular Polemoniaceae Gilia capitata ssp. pacifica
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4012453	FERNDALE	Mapped	Plants - Vascular Polemoniaceae Gilia capitata ssp. pacifica
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4012452	FORTUNA	Mapped	Plants - Vascular Polemoniaceae Gilia capitata ssp. pacifica
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4012472	EUREKA	Mapped	Plants - Vascular Polemoniaceae Gilia capitata ssp. pacifica
Plants - Vascular	Gilia millefoliata	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4012472	EUREKA	Mapped and Unprocessed	Plants - Vascular Polemoniaceae Gilia millefoliata
Plants - Vascular	Gilia millefoliata	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4012463	CANNIBAL ISLAND	Mapped and Unprocessed	Plants - Vascular Polemoniaceae Gilia millefoliata
Plants - Vascular	Gilia millefoliata	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4012462	FIELDS LANDING	Mapped	Plants - Vascular Polemoniaceae Gilia millefoliata
Plants - Vascular	Polemonium carneum	Oregon polemonium	PDPLM0E050	None	None	-	2B.2	4012452	FORTUNA	Mapped	Plants - Vascular Polemoniaceae Polemonium carneum
Plants - Vascular	Polemonium carneum	Oregon polemonium	PDPLM0E050	None	None	-	2B.2	4012453	FERNDALE	Mapped	Plants - Vascular Polemoniaceae Polemonium carneum
Plants - Vascular	Chrysosplenium glechomifolium	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4012462	FIELDS LANDING	Unprocessed	Plants - Vascular Saxifragaceae Chrysosplenium glechomifolium
Plants - Vascular	Chrysosplenium glechomifolium	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascular Saxifragaceae Chrysosplenium glechomifolium
Plants - Vascular	Chrysosplenium glechomifolium	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4012472	EUREKA	Unprocessed	Plants - Vascular Saxifragaceae Chrysosplenium glechomifolium
Plants - Vascular	Chrysosplenium glechomifolium	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4012471	ARCATA SOUTH	Unprocessed	Plants - Vascular Saxifragaceae Chrysosplenium glechomifolium
Plants - Vascular	Mitellastra caulescens	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012471	ARCATA SOUTH	Mapped and Unprocessed	Plants - Vascular Saxifragaceae Mitellastra caulescens
Plants - Vascular	Mitellastra caulescens	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012461	MCWHINNEY CREEK	Unprocessed	Plants - Vascular Saxifragaceae

											Mitellastra caulescens
Plants - Vascular	Mitellastra caulescens	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012462	FIELDS LANDING	Unprocessed	Plants - Vascul Saxifragaceae Mitellastra caulescens
Plants - Vascular	Mitellastra caulescens	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012451	HYDESVILLE	Unprocessed	Plants - Vascul Saxifragaceae Mitellastra caulescens
Plants - Vascular	Viola palustris	alpine marsh violet	PDVIO041G0	None	None	-	2B.2	4012471	ARCATA SOUTH	Mapped	Plants - Vascul Violaceae - Vio palustris
Plants - Vascular	Viola palustris	alpine marsh violet	PDVIO041G0	None	None	-	2B.2	4012472	EUREKA	Mapped	Plants - Vascul Violaceae - Vio palustris

Search Results

55 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [4012472:4012471:4012453:4012452:4012451:4012462:4012463:4012461]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE		DATE ADDED
									PLANT RANK	CA ENDEMIC	
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	Nyctaginaceae	annual herb	Jun-Oct	None	None	G4G5T2	S2	1B.1		1988-01-01
<i>Angelica lucida</i>	sea-watch	Apiaceae	perennial herb	Apr-Sep	None	None	G5	S3	4.2		2001-01-01
<i>Anomobryum julaceum</i>	slender silver moss	Bryaceae	moss		None	None	G5?	S2	4.2		2001-01-01
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>	coastal marsh milk-vetch	Fabaceae	perennial herb	(Apr)Jun-Oct	None	None	G2T2	S2	1B.2	Yes	2001-01-01
<i>Cardamine angulata</i>	seaside bittercress	Brassicaceae	perennial herb	(Jan)Mar-Jul	None	None	G4G5	S3	2B.2		2012-04-10
<i>Carex arcta</i>	northern clustered sedge	Cyperaceae	perennial herb	Jun-Sep	None	None	G5	S1	2B.2		2001-01-01
<i>Carex leptalea</i>	bristle-stalked sedge	Cyperaceae	perennial rhizomatous herb	Mar-Jul	None	None	G5	S1	2B.2		1994-01-01
<i>Carex lyngbyei</i>	Lyngbye's sedge	Cyperaceae	perennial rhizomatous herb	Apr-Aug	None	None	G5	S3	2B.2		2001-01-01
<i>Carex praticola</i>	northern meadow sedge	Cyperaceae	perennial herb	May-Jul	None	None	G5	S2	2B.2		1984-01-01
<i>Castilleja ambigua</i> var. <i>humboldtensis</i>	Humboldt Bay owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	Apr-Aug	None	None	G4T2	S2	1B.2	Yes	1974-01-01
<i>Castilleja litoralis</i>	Oregon coast paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Jun	None	None	G3	S3	2B.2		2001-01-01
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Oct	None	None	G4?T2	S2	1B.2		1974-01-01
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	Saxifragaceae	perennial herb	Feb-Jun	None	None	G5?	S3	4.3		2015-10-15
<i>Clarkia amoena</i> ssp. <i>whitneyi</i>	Whitney's farewell-to-spring	Onagraceae	annual herb	Jun-Aug	None	None	G5T1	S1	1B.1	Yes	1980-01-01
<i>Collinsia corymbosa</i>	round-headed collinsia	Plantaginaceae	annual herb	Apr-Jun	None	None	G1	S1	1B.2	Yes	1994-01-01
<i>Collomia tracyi</i>	Tracy's collomia	Polemoniaceae	annual herb	Jun-Jul	None	None	G4	S4	4.3	Yes	1974-01-01
<i>Downingia willamettensis</i>	Cascade downingia	Campanulaceae	annual herb	Jun-Jul(Sep)	None	None	G4	S2	2B.2		2018-09-20

<i>Eleocharis parvula</i>	small spikerush	Cyperaceae	perennial herb	(Apr)Jun-Aug(Sep)	None	None	G5	S3	4.3			1980-01-01
<i>Erysimum menziesii</i>	Menzies' wallflower	Brassicaceae	perennial herb	Mar-Sep	FE	CE	G1	S1	1B.1	Yes		1974-01-01
<i>Erythronium revolutum</i>	coast fawn lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	None	None	G4G5	S3	2B.2			2001-01-01
<i>Fissidens pauperculus</i>	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2			2001-01-01
<i>Gilia capitata ssp. pacifica</i>	Pacific gilia	Polemoniaceae	annual herb	Apr-Aug	None	None	G5T3	S2	1B.2			2001-01-01
<i>Gilia millefoliata</i>	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2			2001-01-01
<i>Glehnia littoralis ssp. leiocarpa</i>	American glehnia	Apiaceae	perennial herb	May-Aug	None	None	G5T5	S2S3	4.2			2001-01-01
<i>Hemizonia congesta ssp. tracyi</i>	Tracy's tarplant	Asteraceae	annual herb	(Mar-Apr)May-Oct	None	None	G5T4	S4	4.3	Yes		1974-01-01
<i>Hesperevax sparsiflora var. brevifolia</i>	short-leaved evax	Asteraceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2			1994-01-01
<i>Hosackia gracilis</i>	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2			2004-01-01
<i>Lasthenia californica ssp. macrantha</i>	perennial goldfields	Asteraceae	perennial herb	Jan-Nov	None	None	G3T2	S2	1B.2	Yes		2001-01-01
<i>Lathyrus glandulosus</i>	sticky pea	Fabaceae	perennial rhizomatous herb	Apr-Jun	None	None	G3	S3	4.3	Yes		1988-01-01
<i>Lathyrus japonicus</i>	seaside pea	Fabaceae	perennial rhizomatous herb	May-Aug	None	None	G5	S2	2B.1			2001-01-01
<i>Lathyrus palustris</i>	marsh pea	Fabaceae	perennial herb	Mar-Aug	None	None	G5	S2	2B.2			1994-01-01
<i>Layia carnosa</i>	beach layia	Asteraceae	annual herb	Mar-Jul	FT	CE	G2	S2	1B.1			1988-01-01
<i>Lilium kelloggii</i>	Kellogg's lily	Liliaceae	perennial bulbiferous herb	(Feb)May-Aug	None	None	G3	S3	4.3			1974-01-01
<i>Lilium occidentale</i>	western lily	Liliaceae	perennial bulbiferous herb	Jun-Jul	FE	CE	G1G2	S1	1B.1			1974-01-01
<i>Lilium rubescens</i>	redwood lily	Liliaceae	perennial bulbiferous herb	(Mar)Apr-Aug(Sep)	None	None	G3	S3	4.2	Yes		1974-01-01
<i>Listera cordata</i>	heart-leaved twayblade	Orchidaceae	perennial herb	Feb-Jul	None	None	G5	S4	4.2			1974-01-01
<i>Lycopodium clavatum</i>	running-pine	Lycopodiaceae	perennial rhizomatous herb	Jun-Aug(Sep)	None	None	G5	S3	4.1			1974-01-01
<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	Saxifragaceae	perennial rhizomatous herb	(Mar)Apr-Oct	None	None	G5	S4	4.2			2001-01-01
<i>Monotropa uniflora</i>	ghost-pipe	Ericaceae	perennial herb (achlorophyllous)	Jun-Aug(Sep)	None	None	G5	S2	2B.2			1974-01-01

<i>Montia howellii</i>	Howell's montia	Montiaceae	annual herb	(Feb)Mar-May	None	None	G3G4	S2	2B.2		1994-01-01
<i>Oenothera wolffii</i>	Wolf's evening-primrose	Onagraceae	perennial herb	May-Oct	None	None	G2	S1	1B.1		1980-01-01
<i>Packera bolanderi</i> <i>var. bolanderi</i>	seacoast ragwort	Asteraceae	perennial rhizomatous herb	(Jan-Apr)May-Jul(Aug)	None	None	G4T4	S2S3	2B.2		2001-01-01
<i>Pityopus californicus</i>	California pinefoot	Ericaceae	perennial herb (achlorophyllous)	(Mar-Apr)May-Aug	None	None	G4G5	S4	4.2		1974-01-01
<i>Pleuropogon refractus</i>	nodding semaphore grass	Poaceae	perennial rhizomatous herb	(Feb-Mar)Apr-Aug	None	None	G4	S4	4.2		1974-01-01
<i>Polemonium carneum</i>	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	None	None	G3G4	S2	2B.2		2008-11-03
<i>Puccinellia pumila</i>	dwarf alkali grass	Poaceae	perennial herb	Jul	None	None	G5	SH	2B.2		1988-01-01
<i>Ribes laxiflorum</i>	trailing black currant	Grossulariaceae	perennial deciduous shrub	Mar-Jul(Aug)	None	None	G5?	S3	4.3		1974-01-01
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	Malvaceae	perennial herb	(Mar)Apr-Aug	None	None	G3	S3	4.2		1994-01-01
<i>Sidalcea malviflora</i> <i>ssp. patula</i>	Siskiyou checkerbloom	Malvaceae	perennial rhizomatous herb	(Mar)May-Aug	None	None	G4G5T2	S2	1B.2		1994-01-01
<i>Sidalcea oregana</i> <i>ssp. eximia</i>	coast checkerbloom	Malvaceae	perennial herb	Jun-Aug	None	None	G5T1	S1	1B.2	Yes	1994-01-01
<i>Silene scouleri</i> <i>ssp. scouleri</i>	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	None	None	G5T4T5	S2S3	2B.2		2017-12-13
<i>Spergularia canadensis</i> <i>var. occidentalis</i>	western sand-spurrey	Caryophyllaceae	annual herb	Jun-Aug	None	None	G5T4	S1	2B.1		2001-01-01
<i>Sulcaria spiralifera</i>	twisted horsehair lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G3G4	S2	1B.2		2014-03-01
<i>Usnea longissima</i>	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2		2014-03-01
<i>Viola palustris</i>	alpine marsh violet	Violaceae	perennial rhizomatous herb	Mar-Aug	None	None	G5	S1S2	2B.2		1994-01-01

Showing 1 to 55 of 55 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 13 September 2023].



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
Phone: (707) 822-7201 Fax: (707) 822-8411

In Reply Refer To:
Project Code: 2023-0128392
Project Name: Humboldt Bay Trail - Eureka to CR

September 13, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arcata Fish And Wildlife Office

1655 Heindon Road

Arcata, CA 95521-4573

(707) 822-7201

PROJECT SUMMARY

Project Code: 2023-0128392
Project Name: Humboldt Bay Trail - Eureka to CR
Project Type: Recreation - New Construction
Project Description: The Project is a continuation of the Humboldt Bay Trail from the Elk River Estuary to the College of the Redwoods. Project area is approximate.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.722477850000004,-124.21886914294149,14z>



Counties: Humboldt County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Pacific Marten, Coastal Distinct Population Segment <i>Martes caurina</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9081	Threatened

BIRDS

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

REPTILES

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

FISHES

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

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

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

FACILITY NAME	ACRES
HUMBOLDT BAY NATIONAL WILDLIFE REFUGE https://www.fws.gov/our-facilities?keywords=%5C%22HUMBOLDT+BAY+NATIONAL+WILDLIFE+REFUGE%5C%22	3,697.764

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE

SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Allen's Hummingbird <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637</p>	Breeds Feb 1 to Jul 15
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Jan 1 to Sep 30
<p>Black Oystercatcher <i>Haematopus bachmani</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591</p>	Breeds Apr 15 to Oct 31
<p>Black Swift <i>Cypseloides niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878</p>	Breeds Jun 15 to Sep 10
<p>Black Turnstone <i>Arenaria melanocephala</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p>California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 1 to Jul 31
<p>Cassin's Auklet <i>Ptychoramphus aleuticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6967</p>	Breeds Mar 21 to Sep 21
<p>Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jun 1 to Aug 31
<p>Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 15 to Aug 10
<p>Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31

NAME	BREEDING SEASON
<p>Lesser Yellowlegs <i>Tringa flavipes</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Marbled Godwit <i>Limosa fedoa</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9481</p>	Breeds elsewhere
<p>Olive-sided Flycatcher <i>Contopus cooperi</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/3914</p>	Breeds May 20 to Aug 31
<p>Rufous Hummingbird <i>selasphorus rufus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/8002</p>	Breeds Apr 15 to Jul 15
<p>Short-billed Dowitcher <i>Limnodromus griseus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/9480</p>	Breeds Jun 1 to Aug 10
<p>Western Grebe <i>aechmophorus occidentalis</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p>https://ecos.fws.gov/ecp/species/6743</p>	Breeds Jun 1 to Aug 31
<p>Willet <i>Tringa semipalmata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p>Wrentit <i>Chamaea fasciata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 10

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week

months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

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

Breeding Season (■)

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

Survey Effort (|)

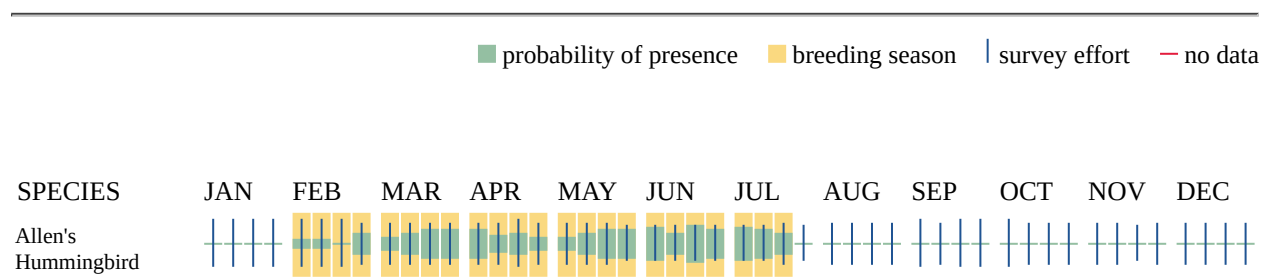
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

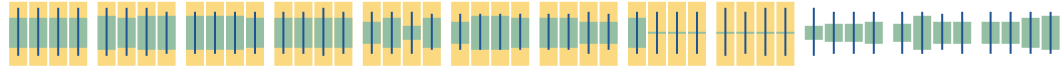
Survey Timeframe

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



BCC Rangewide
(CON)

Bald Eagle
Non-BCC
Vulnerable



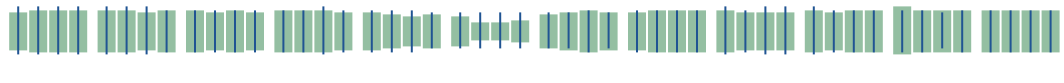
Black Oystercatcher
BCC Rangewide
(CON)



Black Swift
BCC Rangewide
(CON)



Black Turnstone
BCC Rangewide
(CON)



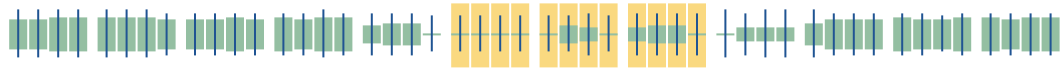
California Gull
BCC Rangewide
(CON)



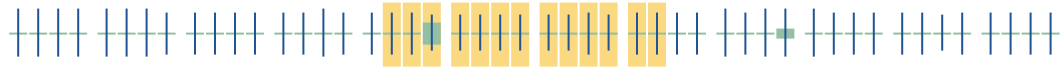
Cassin's Auklet
BCC - BCR



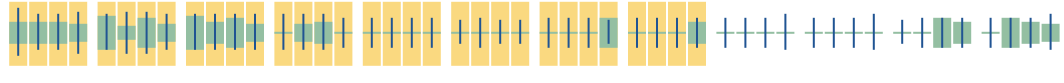
Clark's Grebe
BCC Rangewide
(CON)



Evening Grosbeak
BCC Rangewide
(CON)



Golden Eagle
Non-BCC
Vulnerable



Lesser Yellowlegs
BCC Rangewide
(CON)



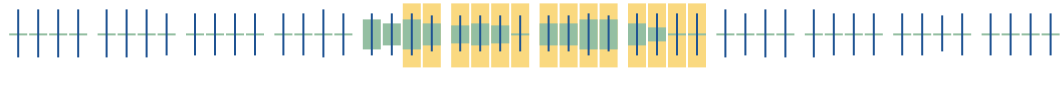
Marbled Godwit
BCC Rangewide
(CON)



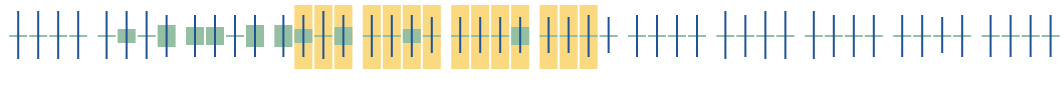
SPECIES

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

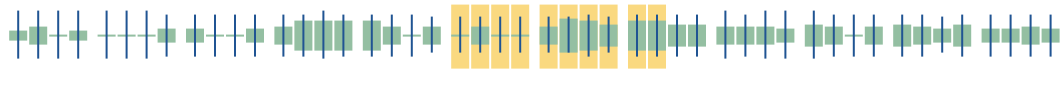
Olive-sided
Flycatcher
BCC Rangewide
(CON)

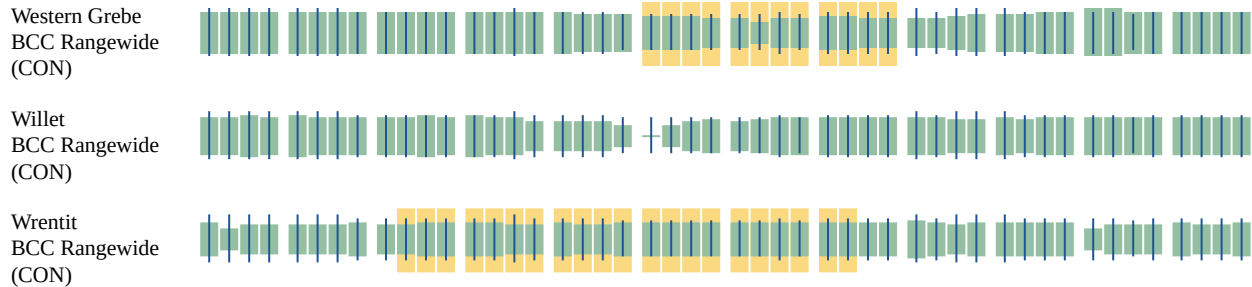


Rufous
Hummingbird
BCC Rangewide
(CON)



Short-billed
Dowitcher
BCC Rangewide
(CON)





Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

MIGRATORY BIRDS FAQ

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

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

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

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

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list

of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

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

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

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

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

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

WETLANDS

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- [PEM1Cd](#)
 - [PEM1Ad](#)
-

- [PEM1A](#)
- [PEM1F](#)
- [PEM1C](#)
- [PEM1B](#)
- [PEM1Fh](#)
- [PEM1Fx](#)

RIVERINE

- [R4SBC](#)
- [R4SBCx](#)
- [R3UBF](#)

FRESHWATER FORESTED/SHRUB WETLAND

- [PFO1C](#)
- [PSS1C](#)

ESTUARINE AND MARINE WETLAND

- [E2EM1P](#)
- [E2AB3M](#)
- [E2US2N](#)
- [E2EM1N](#)

FRESHWATER POND

- [PUBF](#)
-

IPAC USER CONTACT INFORMATION

Agency: GHD

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Address: 718 Third Street

City: Eureka

State: CA

Zip: 95501

Email: jane.cipra@ghd.com

Phone: 7072672206



Humboldt Bay Trail Eureka to CR Critical Habitat Report

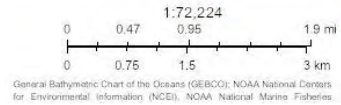
Area of Interest (AOI) Information

Length : 4.47 mi

Sep 13 2023 9:32:10 Pacific Daylight Time



- All_critical_habitat_line_20220404
- All_critical_habitat_poly_20230502



Project alignment is approximate. Query returned critical habitat for one species: Green Sturgeon.

Summary

Name	Count	Area(acres)	Length(mi)
All Critical Habitat Polyline	0	N/A	N/A
All Critical Habitat Polygon	1	N/A	N/A

All Critical Habitat Polygon

#	Scientific Name	Common Name	Listed Entity	Area(acres)
1	Acipenser medirostris	Sturgeon, green	Sturgeon, green [Southern DPS]	N/A

Quad Name **Fields Landing**

Quad Number **40124-F2**

ESA Anadromous Fish

SONCC Coho ESU (T) - **X**
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) - **X**
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) - **X**
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat - **X**
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat - **X**
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat - **X**
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - **X**

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

- East Pacific Green Sea Turtle (T) - X
- Olive Ridley Sea Turtle (T/E) - X
- Leatherback Sea Turtle (E) - X
- North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

- Blue Whale (E) - X
- Fin Whale (E) - X
- Humpback Whale (E) - X
- Southern Resident Killer Whale (E) - X
- North Pacific Right Whale (E) - X
- Sei Whale (E) - X
- Sperm Whale (E) - X

ESA Pinnipeds

- Guadalupe Fur Seal (T) -
- Steller Sea Lion Critical Habitat -

Essential Fish Habitat

- Coho EFH - X
- Chinook Salmon EFH - X
- Groundfish EFH - X
- Coastal Pelagics EFH - X
- Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
562-980-4000**

- MMPA Cetaceans - X
- MMPA Pinnipeds - X

Appendix C

Photographs



☀ 226°SW (T) ● 40°44'48"N, 124°12'6"W ±13ft ▲ 22ft



Photo 1. Southwest corner of Elk River segment of the Humboldt Bay Trail. Potential alignment would continue southwest (approximate direction of red arrow) near the existing field and potential wetlands.



Photo 2. Southwest corner of Elk River segment of the Humboldt Bay Trail. Potential alignment would head toward the railroad, which may be proximal to wetlands.

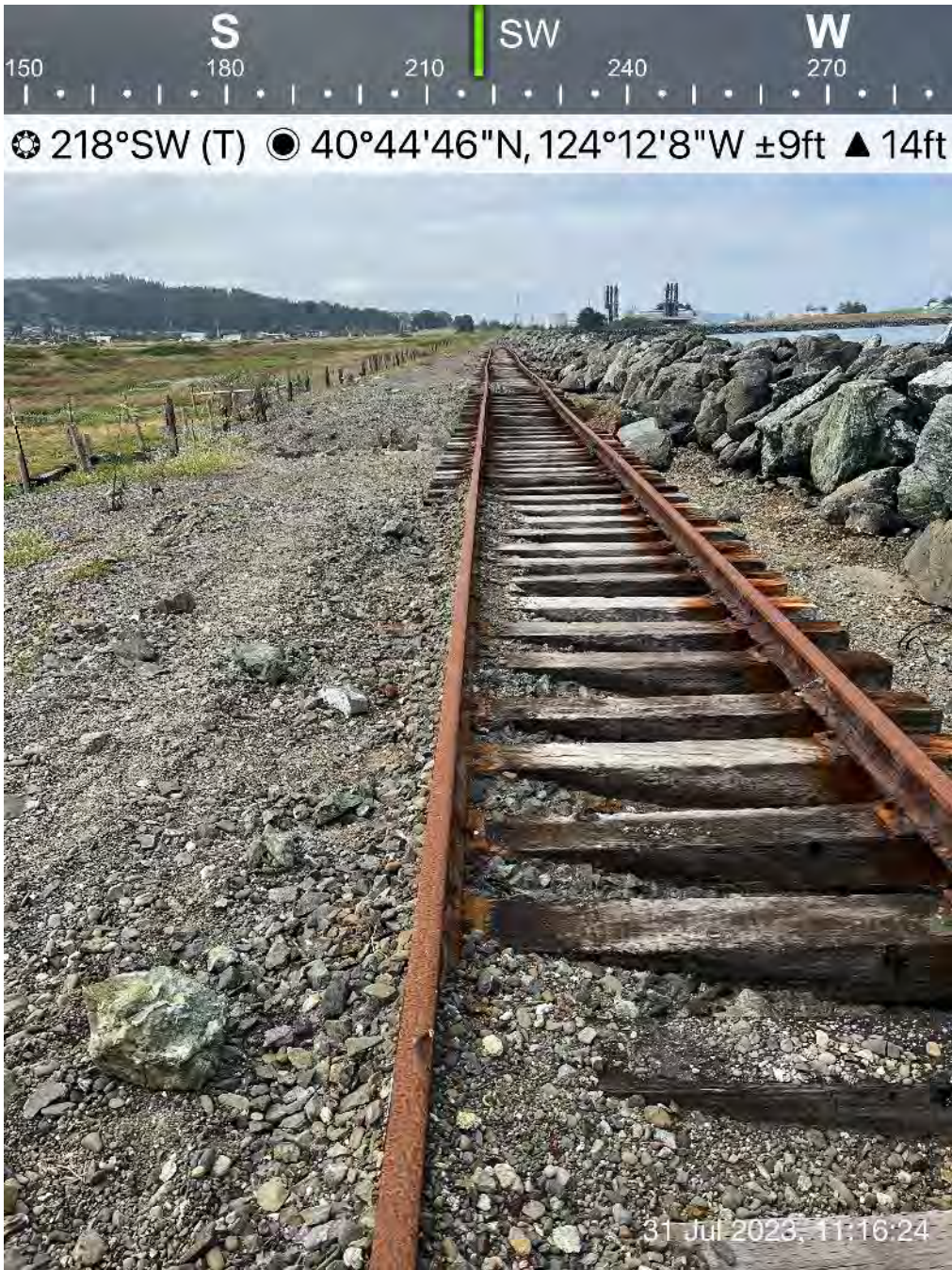


Photo 3. View southwest of the railroad corridor adjacent to the seawall. Habitat to the left of the fence is potential wetland.



Photo 4. PG&E access corridor north of the Humboldt Bay Power Station, adjacent to the seawall.

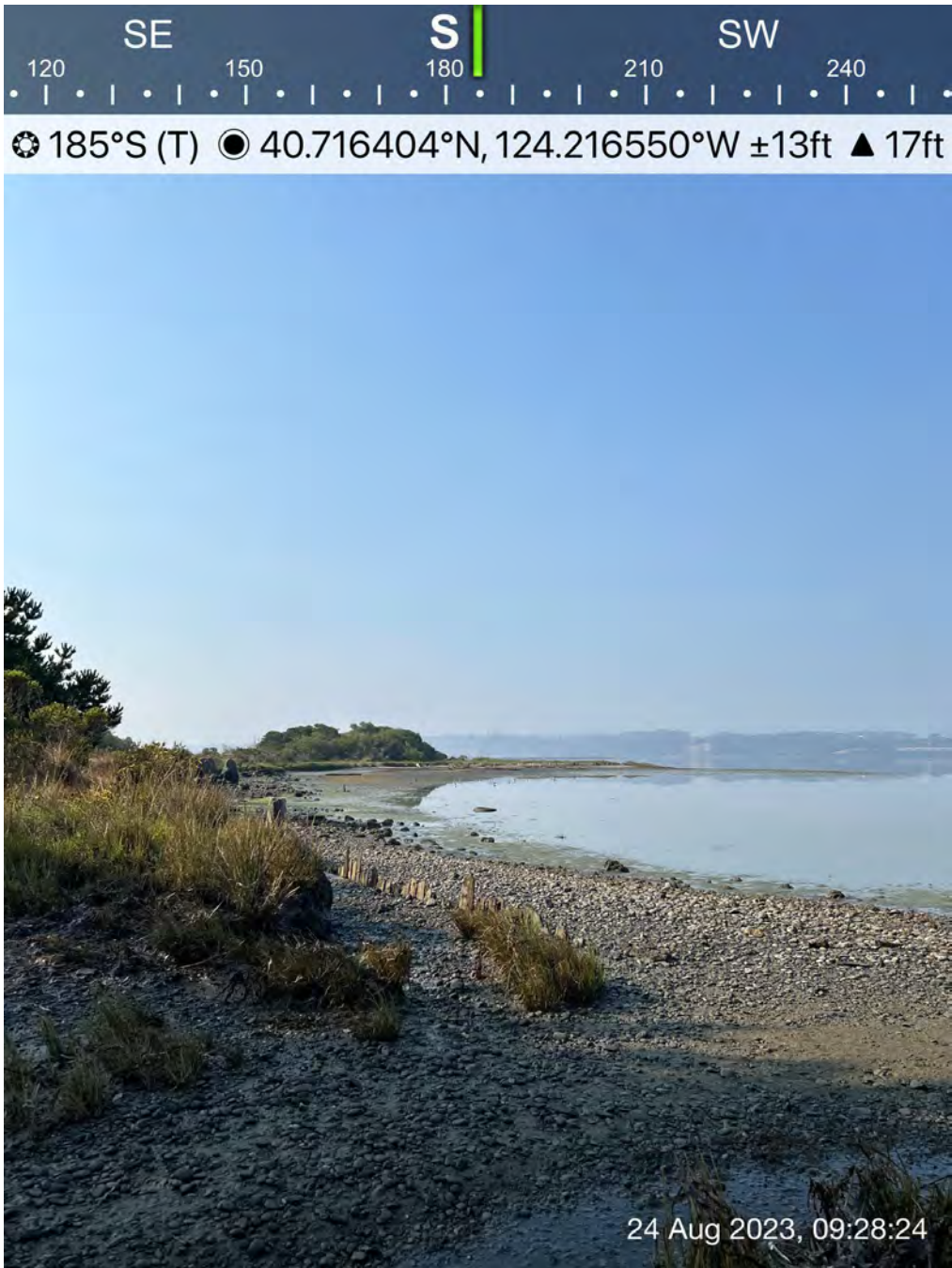


Photo 5. View from railroad corridor showing adjacent tidal marine wetland south of Fields Landing.

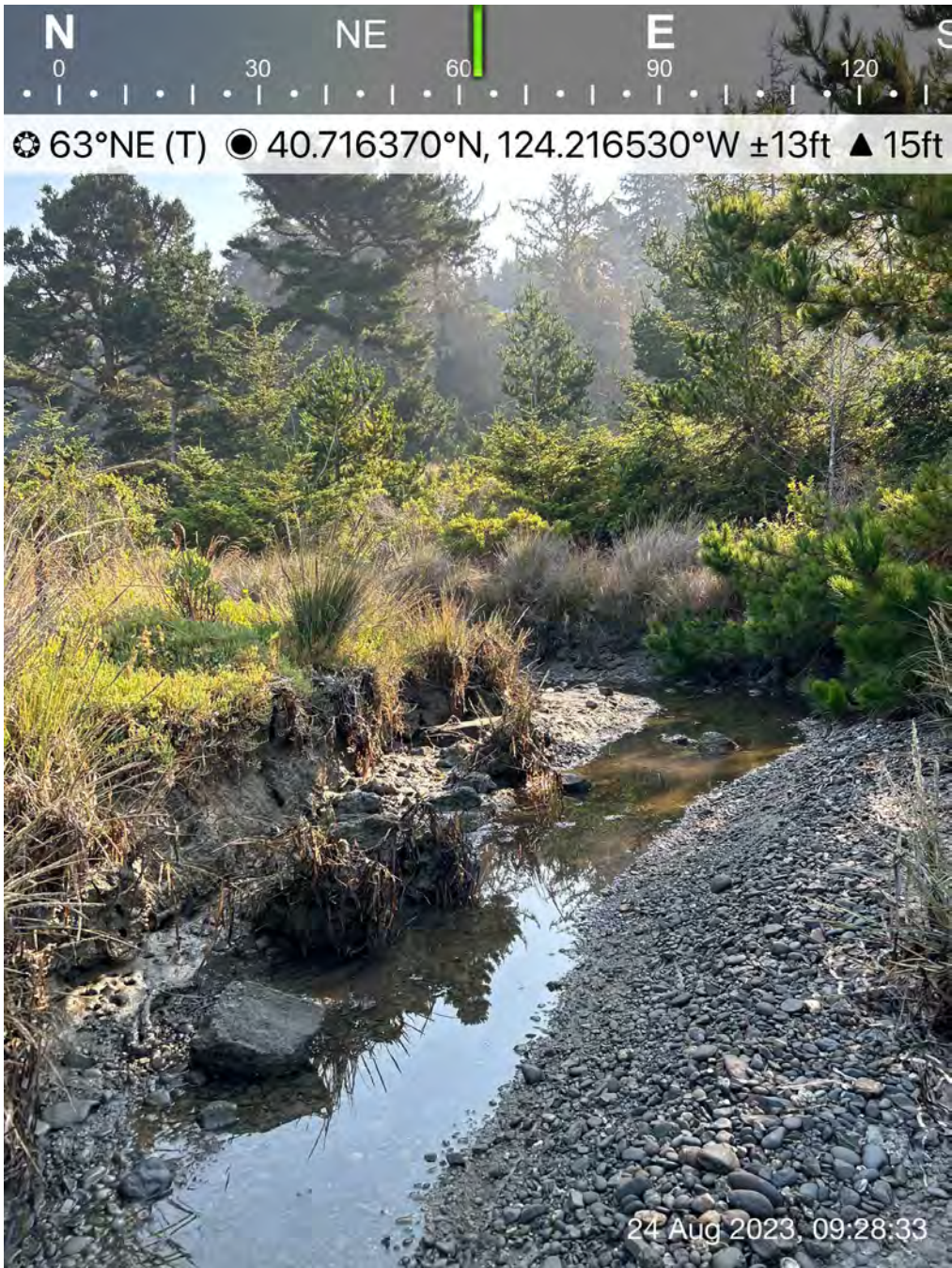


Photo 6. View northeast of unmapped tidal inlet south of Fields Landing proximal to the railroad prism.



Photo 7. Concrete riprap on the shore of Humboldt Bay south of Fields Landing.

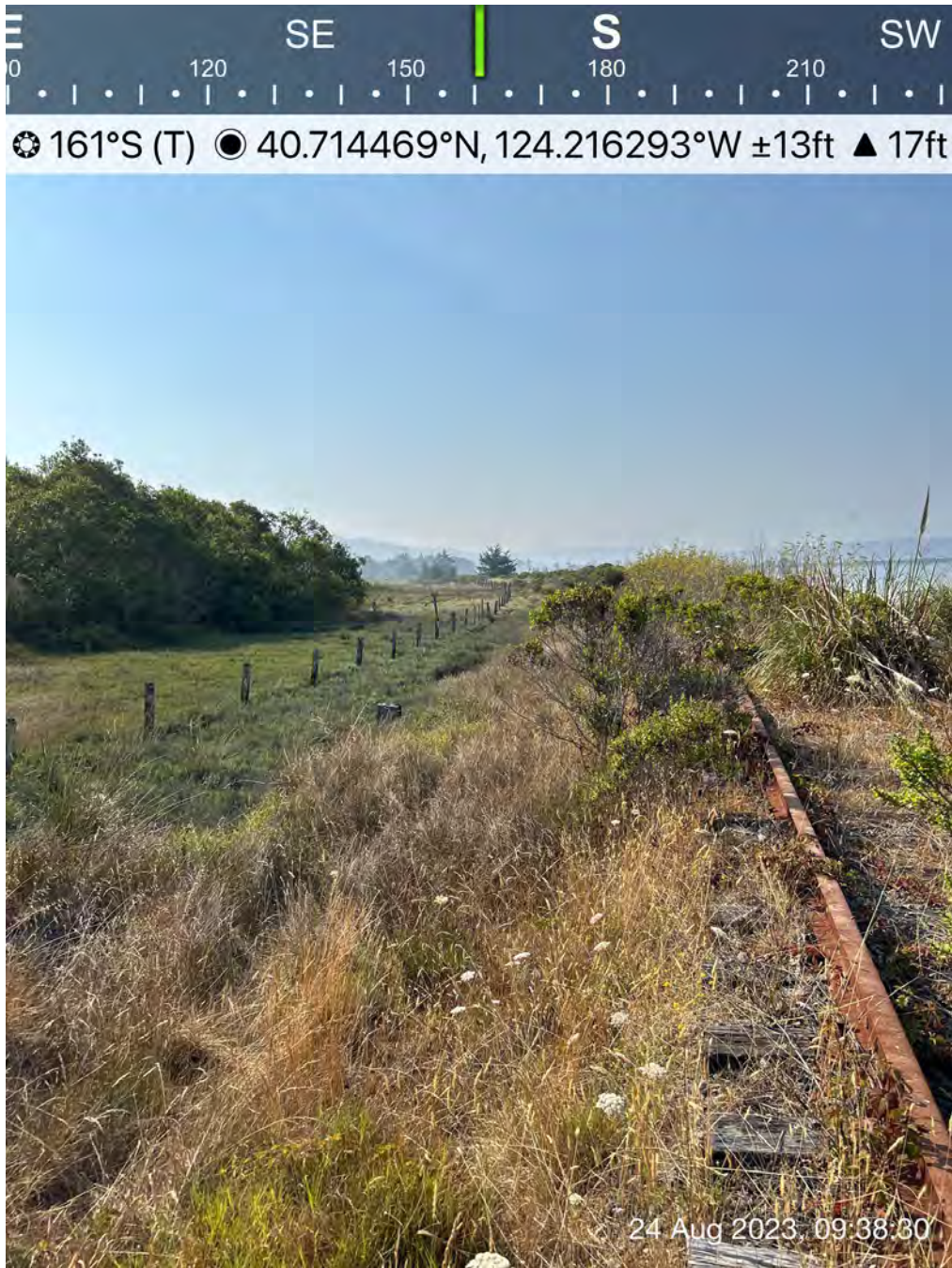


Photo 8. Raised railroad prism west of palustrine emergent wetlands south of Fields Landing.

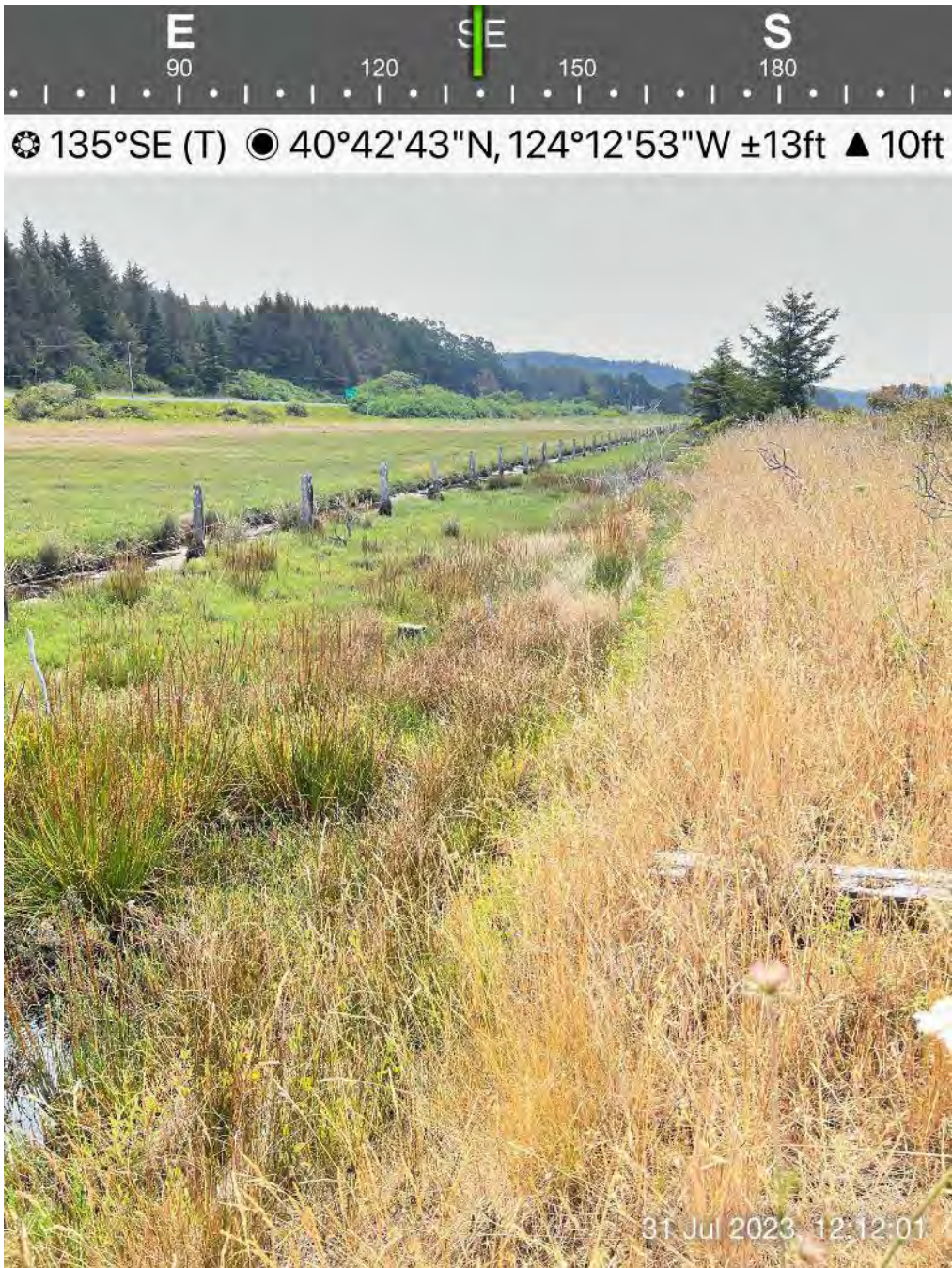




Photo 10. Otter scat and potential den (under shrub) between the railroad tracks and Humboldt Bay. Concrete riprap is visible on the shore of Humboldt Bay.



Photo 11. View of Humboldt Bay and the Humboldt Bay National Wildlife Refuge from the railroad corridor where the potential alignment would continue inland and to the southeast.

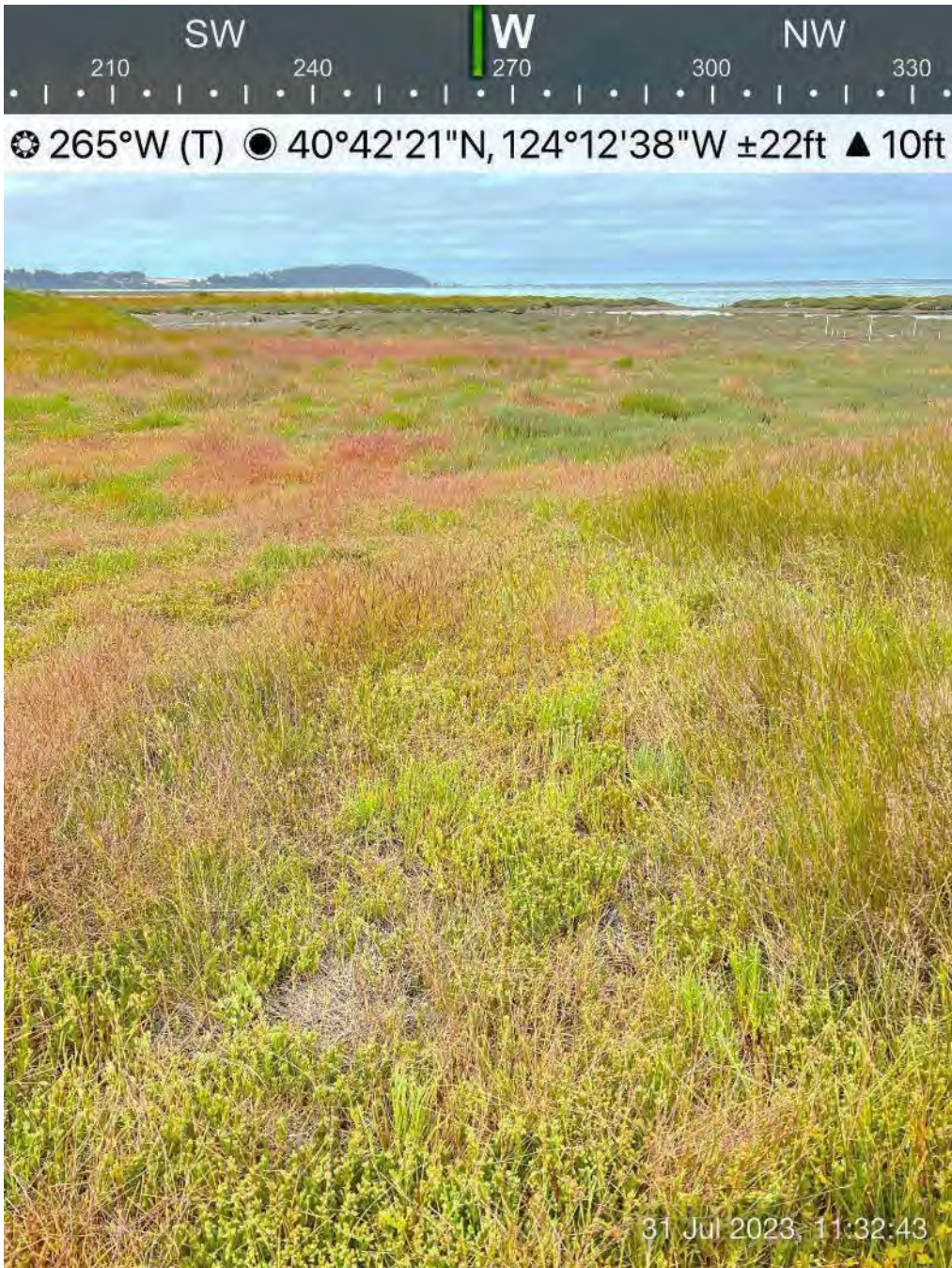


Photo 12. Salt marsh with Pickleweed SNC near the tributary to White Slough.



Photo 13. Existing wooden bridge over a tributary of White Slough. Note the wooden bridge is not atop the former railroad alignment.



Photo 14. Habitat conditions along a potential alignment (red arrow) for the trail to leave the railroad corridor to go east to College of the Redwoods via an existing upland levee.

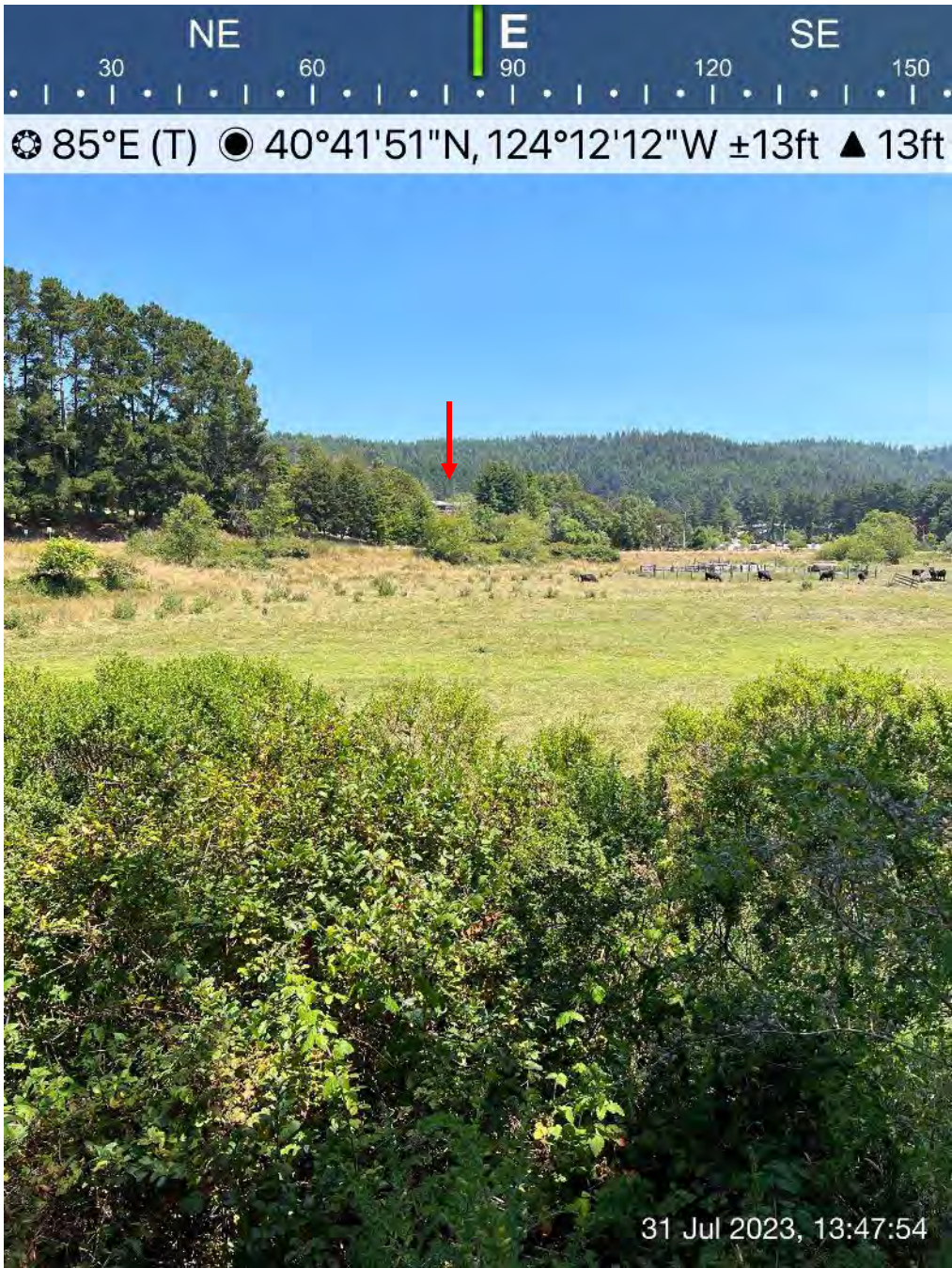


Photo 15. View east of grazed pasture between the railroad corridor and College of the Redwoods (shown in the distance, indicated by the red arrow).



Photo 16. Monterey pine X knobcone pine hybrid trees growing in railroad tracks with invasive Scotch broom shrubs.



Photo 17. Potential Salal-berry brambles SNC (right).



Photo 18. Google Street view of potential Coastal willow thicket SNC in the railroad prism at the King Salmon Avenue southbound Highway 101 onramp.



Photo 19. Google Street view of potential Beach pine SNC at the crossing at King Salmon Avenue.



Photo 20. Google Street view of potential Red alder SNC in the railroad prism near the Highway 101 overpass.



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