



Trinidad Water Storage Tank and Pipeline Replacement Project

Final Initial Study & Proposed Mitigated Negative Declaration
– SCH No. 2023010468

City of Trinidad

March 03, 2023

→ The Power of Commitment



Final Initial Study & Proposed Mitigated Negative Declaration

Trinidad Water Storage Tank and Pipeline Replacement Project

SCH No. 2023010468

Prepared for:



The City of Trinidad

P.O. Box 390

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Appendix A Biological Resources Report

1. Purpose of the Final IS/MND

This Final Initial Study/Mitigated Negative Declaration (IS/MND) for the Trinidad Water Storage Tank and Pipeline Replacement Project consists of the Public Circulation Initial Study/Mitigated Negative Declaration, comments received during public circulation, the City of Trinidad's (City; Lead Agency) responses to comments, and minor revisions to the IS/MND via errata and appendices. The Public Circulation IS/MND identified the likely environmental consequences associated with the Project, and recommended mitigation measures to reduce potentially significant impacts.

2. Environmental Review Process

The City, serving as the California Environmental Quality Act (CEQA) Lead Agency, prepared an IS/MND for the Trinidad Water Storage Tank and Pipeline Replacement Project (hereafter referred to as the Project). The IS/MND was circulated for 30 days between January 24, 2023, and February 23, 2023, to allow agencies and the public the opportunity to review and comment on the document. The IS/MND was submitted to the State Clearinghouse for review by state agencies, and to agencies with jurisdiction by law over resources affected by the Project.

In accordance with the requirements of CEQA, the City provided a Notice of Intent to Adopt a Mitigated Negative Declaration to the public, responsible agencies, trustee agencies, Humboldt County Clerk, and State Clearinghouse. The Notice of Intent to Adopt was filed with the Humboldt County Clerk Recorder on January 24, 2023. Pursuant to CEQA Guidelines Section 15072 (b) (2), the Notice of Intent to Adopt was publicly posted at Trinidad Post Office (Located at 357 Main St, Trinidad, CA 95570), Trinidad City Hall (Located at 409 Trinity St, Trinidad, CA 95570), and the Murphy's Market (Located at 1 Main St, Trinidad, CA 95570). The City posted the IS/MND on its website at <https://trinidad.ca.gov> and made a hardcopy available for public review at the Trinidad City Clerk's Office at 409 Trinity St, Trinidad, CA.

As included in the Notice of Intent to Adopt, the Trinidad Planning Commission will hold a meeting in Trinidad City Hall on Wednesday March 15, 2023, at 6:00 p.m., to consider adoption of the IS/MND and approval of the Project. Noticing and review periods required by CEQA have been satisfied. The IS/MND was completed under the direction and supervision of the City with support from their consultant team and reflects the City's independent judgement and analysis of the potential environmental effects of the Project.

The contact person for the City is:

Eli Naffah, City Manager
City of Trinidad
PO Box 390, Trinidad, CA 95570
Phone: (707) 677-3876
Email: citymanager@trinidad.ca.gov

3. Comments and Responses

During the public comment period for the Draft IS/MND, the City received formal comments from the State Water Resources Control Board (SWRCB) on February 21, 2023, and Caltrans on February 24, 2023. These comments are attached and summarized in Table 3-1. The City received no other formal comments from the public or other agencies.



State Water Resources Control Board

February 21, 2023

City of Trinidad
Attn: Mr. Eli Naffah
409 Trinity Steet, PO Box 390
Trinidad, CA 95570

CITY OF TRINIDAD (CITY), MITIGATED NEGATIVE DECLARATION (MND) FOR THE TRINIDAD WATER STORAGE TANK AND PIPELINE REPLACEMENT PROJECT (PROJECT); STATE CLEARINGHOUSE # 2023010468

Dear Mr. Eli Naffah:

Thank you for the opportunity to review the MND for the proposed Project. The State Water Resources Control Board, Division of Drinking Water (State Water Board, DDW) is responsible for issuing water supply permits pursuant to the Safe Drinking Water Act. The Project is within the jurisdiction of the DDW Klamath District. DDW Klamath District issues domestic water supply permit amendments to the public water systems serviced with a new or modified source of domestic water supply or new domestic water system components pursuant to Waterworks Standards (Title 22 CCR chapter 16 et. seq.). A public water system requires a new water supply permit amendment for changes to a water supply source, storage, or treatment and for the operation of new water system components including new distribution tanks equal to or over 100,000 gallons, new wells, and treatment systems. The City will need to apply for a water supply permit amendment after the tank has been constructed.

The State Water Board, DDW, as a responsible agency under CEQA, has the following comments on the City's MND:

- The State Water Resources Control Board, Division of Drinking Water, Domestic Water Supply Permit Amendment should be included in Section 2.3 Regulatory Permits for the operation of the new water storage and treatment system components.

When the CEQA review process is completed, please forward the following items with your permit application to the State Water Board, DDW Klamath District Office at DWPRedding@waterboards.ca.gov:

- Copy of the draft and final MND with any comment letters received and the lead agency responses as appropriate.
- Copy of the Resolution or Board Minutes adopting the MND, and

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

- Copy of the date stamped Notice of Determination filed at the Humboldt County Clerk's Office and the Governor's Office of Planning and Research, State Clearinghouse.

Please contact Lori Schmitz of the State Water Board at (916) 449-5285 or Lori.Schmitz@waterboards.ca.gov, if you have any questions regarding this comment letter.

Sincerely,

Lori Schmitz
Environmental Scientist
Division of Financial Assistance
Special Project Review Unit
1001 I Street, 16th floor
Sacramento, CA 95814

Cc:

Office of Planning and Research, State Clearinghouse

Scott Gilbreath
Water Resources Control Engineer
Klamath District

Barry Sutter
District Engineer
Klamath District

California Department of Transportation

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P.O. BOX 3700 | EUREKA, CA 95502-3700
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Governor's Office of Planning & Research

February 23, 2023

FEB 24 2023

STATE CLEARING HOUSE

1-HUM-101- 99.156

Trinidad Water Storage Tank and
Pipeline Replacement Project

SCH# 2023010468

Mr. Eli Naffah, City Manager
City of Trinidad
P.O. Box 390
Trinidad, CA 95570

Dear Mr. Naffah:

Thank you for giving Caltrans the opportunity to review and comment on the Mitigated Negative Declaration for the proposed Trinidad Water Storage Tank and Pipeline Replacement Project. The City of Trinidad proposes to replace 1.4 miles of pipeline and construct a 300,000-gallon storage tank and chlorination booster system for the City of Trinidad to improve water availability during drought conditions. The project is located on either side of a freeway segment of US Route 101, in both City jurisdiction and County jurisdiction. We offer the following comments:

Caltrans District Encroachment Permit staff have met with City representatives in the field and noted that the proposed project will employ directional drilling to avoid direct, physical impacts to US Route 101. Although some of the work will occur on State right of way, traffic control at the northbound stop-controlled off ramp should be sufficient to complete the work. It is not anticipated that any ramp closures will be required. The portion of the work within State right-of-way will require an encroachment permit prior to construction.

Applications for Encroachment Permits are reviewed for consistency with State standards and are subject to Department approval. To streamline the process, we require the applicant arrange and participate in a pre-submittal meeting with the Caltrans encroachment permits staff in Eureka, prior to submitting a permit application. Please contact the Eureka Permits office at (707) 498-5684 to schedule. Requests for permit applications can be sent to: Caltrans District 1 Permits Office, P.O. Box 3700, Eureka, CA 95502-3700, or requested by phone at (707) 463-4743. For additional information, the Caltrans Encroachment Permit Manual and Standard Application are available online: <<https://dot.ca.gov/programs/traffic-operations/ep>>.

Mr. Eli Naffah, City Manager
2/23/2023
Page 2

Please contact me with questions or for further assistance with the content of this letter at (707) 684-6879, or by email at: <jesse.robertson@dot.ca.gov>.

Sincerely,

Jesse G. Robertson

Jesse Robertson
Transportation Planning
Caltrans District 1

e-copy: Heidi Quintrell, Chief, Caltrans District 1 Encroachment Permits

Table 3-1 Comments Received During Public Outreach

Comment Received	City Response
The portion of the work within State right-of-way will require an encroachment permit prior to construction	This has been incorporated within the Final IS/MND via errata. The City will work with Caltrans to complete the required encroachment permit process for any work within the Caltrans right-of-way.
The State Water Resources Control Board, Division of Drinking Water, Domestic Water Supply Permit Amendment should be included in Section 2.3 Regulatory Permits for the operation of the new water storage and treatment system components.	This has been incorporated within the Final IS/MND via errata. The City will work with the State Board to obtain the permitting approval.

4. Errata

The purpose of this errata is to document revisions to the IS/MND that are intended to clarify project details since it was submitted to the Office of Planning and Research State Clearinghouse on January 24, 2023, and publicly circulated between January 24, 2023, and February 23, 2023.

The errata include excerpts of text from the IS/MND that are proposed for modification and does not include the entire IS/MND. Specifically, the entire subsection that contains the text proposed for modification is copied into the errata, and newly proposed text in the errata is **underlined and bolded**, deleted text from the original IS/MND is stricken with ~~single strikethrough~~, and unchanged text remains in normal font. Only the subsections of the original IS/MND that are proposed for modification are copied into the errata.

Biological Resources Report Appendices

A Biological Resources Report was appended to the IS/MND as Appendix A. However, some of the figures and appendices to the Biological Resources Report were inadvertently omitted. The full Biological Resources Report is included as Appendix A.

Section 2.3 Regulatory Permits, CEQA, and NEPA

The City is the CEQA lead agency for the Project. An Initial Study/Proposed Mitigated Negative Declaration is the proposed CEQA pathway.

Project activities would require coverage under a Coastal Development Permit. The Project is located in the Local Coastal Program jurisdiction of the City and County. Thus, Coastal Development Permits would be required from both the Humboldt County Planning Department and the City of Trinidad. Portions of the Project Area are in the appeal jurisdiction of the Coastal Zone and thus appealable to the California Coastal Commission.

A grading permit would be required from the City per Section 15.16.040 of the City of Trinidad Municipal Code.

An encroachment permit would be required from Caltrans District 1 for work within Caltrans right-of-way.

A domestic water supply permit amendment would be required from the State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW). The Project is within the jurisdiction of the DDW Klamath District.

A wetland delineation has been completed for the Project (Appendix E). The Project has been determined to impact three-parameter wetlands, so permits from the U.S. Army Corps of Engineering (USACE) under Section 404 of the Clean Water Act (CWA), and a corresponding Water Quality Certification from the North Coast Regional Water Quality Control Board (Region Board) Under Section 401 of the CWA would be required. Impact analysis specific to one- and

three-parameter wetlands can be found in the Biological Resources section (5.4) of this CEQA IS/MND prepared for the Project.

The Project does not involve any waterways or riparian habitat; thus, a Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife would not be required. Similarly, the Project is not expected to require consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service/NOAA Fisheries, as potential impacts to federal special status plants, fish, or wildlife species are not anticipated, pending the outcome of seasonally appropriate pre-construction rare plant surveys.

Appendices

Appendix A Biological Resources Report

Appendix A

Biological Resources Report



Biological Resources Report

Trinidad Water Storage Tank and Pipeline Replacement Project

City of Trinidad

December 22, 2022



Biological Resources Report: REV1 Trinidad Water Storage Tank and Pipeline Replacement Project

This document has been prepared for:



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By:



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December 22, 2022

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Acronyms and Abbreviations

BRR	Biological Resources Report
BGEPA	Bald and Golden Eagle Protection Act
BSA	Biological Study Area
CCC or Commission	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CNDDB	California Natural Diversity Database
CRPR	California Rare Plant Ranking
CWA	Clean Water Act
DPS	Distinct Population Segment
EFH	Essential Fish Habitat
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Area
ESU	Ecologically Significant Unit
FGC	Fish and Game Code
FMP	Fisheries Management Plan
FP	Fully Protected
HCP	Habitat Conservation Plan
HCLCP	Humboldt County Local Coastal Program
IPaC	Information for Planning and Conservation
LCP	Local Coastal Plan
MBTA	Migratory Bird Treaty Act
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
NCCP	Natural Community Conservation Planning
NCRWQCB	North Coast Regional Water Quality Control Board
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPPA	Native Plant Protection Act
Other Waters	Other Waters of the United States and or State of California

PFMC	Pacific Fisheries Management Council
PSB	Project Study Boundary
RWQCB	Regional Water Quality Control Board
SAL	Special Animals List
SC	State Candidate
SE	State Endangered
SERP	Statutory Exemption for Restoration Project
SR	State Rare
SSC	Species of Special Concern
ST	State Threatened
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WL	Watch List

1. Introduction

The purpose of this Biological Resources Report (BRR) is to identify sensitive biological resources, including plant and wildlife species and their habitat, that may occur in the footprint or in the vicinity of the Trinidad Water Storage Tank and Pipeline Replacement Project (hereafter Project, described below). Sensitive Natural Communities (SNCs), Environmentally Sensitive Habitat Areas (ESHAs), species listed as endangered or threatened under the federal or state Endangered Species Act (ESA and California ESA respectively) or their designated critical habitat, as well as California special-status species and habitats, are the focus of this BRR. Common species without special protections are not considered in this BRR. The purpose of the BRR is to inform California Environmental Quality Act (CEQA) analysis and Project permit applications.

1.1 Project Summary

The purpose of this Project is to replace 1.4 miles of vulnerable pipelines and construct a 300,000-gallon storage tank and chlorination booster system for the City of Trinidad.

Key Project elements include:

- Replace approximately 6,400 feet of eight-inch water feed supply main along Westhaven Drive between the Water Treatment Plant and the water storage tanks. This section will be replaced with dual lines (to/from) to include approximately 1,500 feet of 10-inch distribution line and approximately 5,250 feet of six-inch distribution lines in parallel with the supply main.
- Replace an existing 150,000-gallon redwood storage tank with a 300,000-gallon steel water storage tank, additional valving, telemetry, and chlorine booster system for the distribution system and improving maintenance access and defensible space around the tanks.
- Replace approximately 800 feet of eight-inch and 300 feet of six-inch water main along eastern Van Wycke and Edwards Street from Hector to Galindo with cluster valves, pressure regulating valve, fire hydrant, and blowoff valves near the end of eastern Van Wycke Trail, also removing the existing temporary line.

1.2 Project Location

The Project is located in the City of Trinidad and in the community of Westhaven in Humboldt County, California (**Appendix A, Figure 1**). Two areas of activity are included in the Project Study Boundary (PSB). One Project Area is in the City of Trinidad along Edwards Street, Van Wycke Street, and Hector Street (**Appendix A, Figure 2-1**). The other Project Area is in the community of Westhaven along Westhaven Drive and approximately 830 feet east to the water tank location (**Appendix A, Figure 2-2**). The water tank property and the water treatment plant have both been annexed into City of Trinidad City limits. The Project is entirely within the Coastal Zone, within the Appeal and Local Jurisdiction which is regulated by the City of Trinidad Local Coastal Program (LCP) in the area of Edwards and Van Wycke Street as well as the water tanks and water treatment plant (CoT 1978). The area of Westhaven Drive outside of the water tank and water treatment plant properties are regulated by the Humboldt County LCP (HCPD 2014).

1.3 Definition of the Project Study Boundary

The Project Study Boundary (PSB) is considered the area of ground disturbance necessary to implement the Project and is approximately 5.7 acres. For the purposes of this BRR, the Biological Study Area (BSA) includes the PSB and a buffer of 100 feet (radius) outside the PSB specific to considerations for wildlife species (**Appendix A, Figures 2-1 and 2-2**). Special status wildlife species were evaluated at the level of the BSA. This buffer around the PSB is designed to account for any auditory and visual disturbance to wildlife or other resources, as well as other potential impacts such as increased sedimentation and turbidity from construction or increased dust.

1.4 Construction Schedule

Construction would occur within a single construction season in 2023. If feasible, vegetation clearing would occur outside of the nesting bird season, before March 15 or after August 15.

1.5 Other Public Agencies Whose Approval is Required

The following regulatory documentation is expected to be required for the Project:

- CEQA - Initial Study/Proposed Mitigated Negative Declaration, with the City of Trinidad as the lead agency
- Section 404 of the Clean Water Act (CWA) permit from the U.S. Army Corps of Engineers (USACE) for impacts to regulated Waters, including wetlands
- Section 401 of the CWA Water Quality Certification from the North Coast Regional Water Quality Control Board for impacts to regulated Waters, including wetlands
- Coastal Development Permits under the City of Trinidad Local Coastal Program and the Humboldt County Local Coastal Program
- Humboldt County Grading Permit

2. Regulatory Background

The following is an overview of agencies that have potential oversight of the proposed Project related to biological resources. The regulatory setting is divided into sections on federal, state, and local jurisdiction.

2.1 Federal Jurisdiction

National Environmental Policy Act

The National Environmental Policy Act (NEPA) of 1969 requires federal agencies to prepare environmental documentation that discloses to decision-makers and the interested public a clear, accurate description of potential environmental effects resulting from proposed federal actions and reasonable alternatives to those actions. Through NEPA, the U.S. Congress directed federal agencies to integrate environmental factors in their planning and decision-making processes and encourage and facilitate public involvement in decisions that affect the quality of the human environment. Federal agencies are required to consider the environmental effects of a Proposed Action, alternatives to the Proposed Action, and a No Action alternative (assessing the potential environmental effects of not undertaking the Proposed Action).

Endangered Species Act

Section 9 of the federal ESA of 1973 prohibits acts of disturbance that result in the “take” of threatened or endangered species. As defined by the federal ESA, “endangered” refers to any species that is in danger of extinction throughout all or a significant portion of its current range. The term “threatened” is applied to any species likely to become endangered within the foreseeable future throughout all or a significant portion of its current range. Take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”

Critical habitat is defined by the ESA as a specific geographic area containing features essential for the conservation of an endangered or threatened species. Under Section 7 of the ESA, critical habitat should be evaluated if designated for federally listed species that may be present in the project’s Action Area (federally designated term for a “Project Study Boundary”).

Habitat Conservation Plans

Habitat Conservation Plans (HCPs) were incorporated into the ESA in 1982 (sections 10(a)(1)(B) and 10(a)(2)(A) of the ESA, as amended) to create a pathway for take exemptions under the Act for federal and non-federal entities (previously prohibited under Section 9 of the Act). HCPs are planning documents that provide measures to minimize or mitigate project impacts to listed or candidate species (as well as eagles, following 2011 guidance) at an ecosystem versus single-species level. A HCP provides a degree of assurance for private entities that measures agreed upon in the HCP by federal regulators and the entity would be upheld and not altered for the lifespan of the document, and no additional obligations (financial, land use, or other) would be required at a later date with respect to the species covered in the HCP (referred to as the “No Surprises Rule”; 63 FR 8859). Requirements for issuance of an HCP require that all take is incidental, take would be minimized and mitigated to the maximum extent practical, adequate funds are available to implement the plan, and the incidental take would not appreciably reduce the survival and recovery potential of the species, among others. HCPs are also must comply with the Five Point Policy (65 FR 35242) that requires the incorporation of biological goals and objectives for each species in the document, adaptive management, monitoring, a set time frame for implementation, and public participation through the NEPA process.

Habitat Conservation Plans That Overlap the Project

The PSB and BSA do not overlap any existing active or proposed HCPs according to a current list from the USFW ECOS website (USFWS 2022), and the CDFW list of HCPs and Natural Community Conservation Planning (NCCP)s (CDFW 2022a).

Executive Order 13112, Invasive Species

Executive Order 13112 was issued in 1999 to enhance federal coordination and response to the complex and accelerating problem of invasive species. It provides policy direction to promote coordinated efforts of federal, state, and local agencies in monitoring, detecting, preventing, evaluating, managing, and controlling the spread of invasive species and increasing the effectiveness of scientific research and public outreach affecting the spread and impacts of invasive species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-712) as amended established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. A migratory bird is

defined as any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. The MBTA prohibits the take, possession, buying, selling, purchasing, or bartering of any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Only exotic species such as Rock Pigeons (*Columba livia*), House Sparrows (*Passer domesticus*), and European Starlings (*Sturnus vulgaris*) are exempt from protection.

Clean Water Act

The objective of the CWA of 1977, as amended, is to maintain and restore the chemical, physical, and biological integrity of the nation's waters. Discharge of dredged or fill material into waters of the United States, including jurisdictional wetlands, is regulated under Section 404 of the CWA by the USACE via a permitting process. Applicants for Section 404 permits are also required to obtain water quality certification through the State (State Water Resources Control Board [SWRCB] or Regional Water Quality Control Board [RWQCB]) under Section 401 of the CWA.

Executive Order 11990

Executive Order 11990 (1977) furthers the protection of wetlands under NEPA through avoidance of long and short-term adverse impacts associated with the destruction or modification of wetlands where practicable. The order requires all federal agencies managing federal lands, sponsoring federal projects, or funding state or local projects to assess the effects of their actions on wetlands. The agencies are required to follow avoidance, mitigation, and preservation procedures. The Presidential Wetland Policy of 1993 and subsequent reaffirmation of the policy in 1995 supports effective protection and restoration of wetlands, while advocating for increased fairness of federal regulatory programs.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) was originally enacted in 1940 in order to protect the national emblem of the United States, the Bald Eagle (*Haliaeetus leucocephalus*). At this time, the Bald Eagle was experiencing significant population pressures from hunting, egg collection, and habitat loss (Buehler 2000). This act was expanded upon in 1962 to include protections for the Golden Eagle (*Aquila chrysaetos*).

The BGEPA prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." Regulations further define "disturb" as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR 22.6).

In addition to immediate impacts, this definition also covers effects that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

Regulations for permitting take of Bald Eagles or Golden Eagles (50 CFR 22) provide information on eagle permits for "the taking, possession, and transportation within the United States of Bald Eagles and Golden

Eagles and their parts, nests, and eggs for scientific, educational, and depredation control purposes; for the religious purposes of American Indian tribes; and to protect other interests in a particular locality.

2.2 State Jurisdiction

California Environmental Quality Act (CEQA)

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval. Under CEQA, a variety of technical studies including biological, cultural, traffic, and air quality studies as well as research and professional knowledge are considered to determine whether the project may have an "adverse effect" on the environment. Lead agencies are charged with evaluating the best available data when determining what specifically should be considered an "adverse effect" to the environment.

Porter-Cologne Water Quality Act

The Porter-Cologne Act provides for statewide coordination of water quality regulations by establishing the California State Water Resources Control Board (SWRCB). The SWRCB is the statewide authority that oversees nine separate RWQCBs that collectively oversee water quality at regional and local levels. California RWQCBs issue CWA Section 401 Water Quality Certifications for possible pollutant discharges into waters of the U.S. or State. The North Coast Regional Water Quality Control Board (NCRWQCB) may also regulate riparian areas as important buffers that prevent discharge and other negative impacts to Waters of the State.

California Endangered Species Act

The CESA includes provisions for the protection and management of species listed by the State of California as endangered, threatened, or designated as candidates for such listing (California Fish and Game Code (FGC) Sections 2050 through 2085). The CESA generally parallels the main provisions of the ESA and is administered by the CDFW, who maintains a list of state threatened and endangered species as well as candidate species. The CESA prohibits the "take" of any species listed as threatened or endangered unless authorized by the CDFW in the form of an Incidental Take Permit. Under FGC, "take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Other State Special Status Species and Communities

The CDFW maintains a list of Species of Species Concern (SSC). These are broadly defined as species that are of concern to the CDFW because of population declines and restricted distributions, and/or they are associated with habitats that are declining in California. The criteria used to define special status species are described by the CDFW. Impacts to special status plants, animals, and sensitive natural communities may be considered significant under CEQA.

State SSC include those plants and wildlife species that have not been formally listed yet are proposed or may qualify as endangered or threatened. In addition, United States Fish and Wildlife Service (USFWS) Birds of Conservation Concern, and CDFW special status invertebrates are considered special status species by CDFW.

Sensitive Natural Communities

Natural vegetation communities listed as Sensitive in the California Natural Diversity Database (CNDDDB) and on the SNCs List are to be addressed within the CEQA review process (CDFW 2022b). SNCs are primarily classified according to A Manual of California Vegetation (Sawyer et al. 2009). Legacy SNCs are listed in CNDDDB according to the Holland classification system (1986), and Holland types may be used when a current alliance-level classification does not exist (CDFW 2022b). CDFW considers alliances with a NatureServe State Rank of S1 to S3 to be SNCs. Associations currently designated as being of S3 or rare are considered sensitive by CDFW even if State ranks have not been determined. Sensitive alliances and associations are considered during the CEQA process (CDFW 2022b). The application of ranking for determination of SNCs is summarized as follows in **Table 1** (NatureServe 2022):

Table 2.1 NatureServe Conservation Status Ranks for Sensitive Natural Communities (SNCs)

Name	Calculated Status Rank	Status Description
Score ≤ 1.5	G1, N1, S1	Critically Imperiled
1.5 ≤ Score ≤ 2.5	G2, N2, S2	Imperiled
2.5 ≤ Score ≤ 3.5	G3, N3, S3	Vulnerable
3.5 ≤ Score ≤ 4.5	G4, N4, S4	Apparently Secure
Score > 4.5	G5, N5, S5	Secure

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, § 30107.5)

The Coastal Act’s designation of ESHA generally includes vegetation alliances listed in CDFW’s California SNCs List with an S1- S3 ranking, or may include those communities designated as “sensitive” by CDFW. The Coastal Act’s ESHA category is broadly defined, and it also includes habitat for special-status species, wetlands, riparian areas, and other areas that provide important ecosystem functions (CCC 2013). While there is not a specific list of habitats considered to be ESHA for the State or County, the California Coastal Commission (CCC) through the Coastal Act and counties or municipalities through the Local Coastal Programs are the jurisdictional agencies that exert authority in identifying and protecting ESHAs in the course of project activities (see Section 2.3 for local regulatory information pertaining to this Project under the Coastal Act).

Section 30240 of the Coastal Act includes language intended to protect ESHA:

Section 30240.

- a. Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.*
- b. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.*

California Fish and Game Code

Natural Community Conservation Planning Act

The Natural Community Conservation Act (Sections 2800-2835 of the FGC, as amended) is administered by the CDFW through their NCCP program. The program involves broad-based conservation planning for regions (multispecies and multihabitat coverage that serve as an alternative to project-by-project mitigation), while allowing for compatible economic activity and development. The Act's conservation requirements are more stringent than existing state and federal requirements for mitigation, as it requires that plan preparers actively participate in the recovery of sensitive species and habitats (while conserving ecosystem function, biological diversity, and ecological integrity of habitats). NCCPs are developed in coordination with landowners, regulatory agencies (including the USFWS and National Marine Fisheries Service [NMFS], as appropriate), and environmental organizations. The purpose of NCCPs is to provide a clear framework for project proponents to avoid, minimize, and mitigate impacts to sensitive resources within the coverage area of the NCCP and allow for an adaptive management approach to conservation. NCCPs and HCPs are often combined into one planning document for particular geographic regions of California.

Natural Community Conservation Plans that Overlap the PSB

The PSB and BSA do not overlap any existing NCCPs (CDFW 2022a).

Native Plant Protection Act

The CDFW administers the Native Plant Protection Act (Sections 1900–1913 of the FGC). These sections allow the California Fish and Game Commission to designate endangered and rare plant species and to notify landowners of the presence of such species. Plant species on California Native Plant Society's (CNPS) California Rare Plant Ranking (CRPR) Lists 1 and 2 are considered eligible for state listing as Endangered or Threatened pursuant to the California FGC and CDFW has oversight of these special status plant species as a trustee agency. As part of the 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. CRPR List 3 and 4 plants may warrant protection under CEQA Guidelines 15380 only in special circumstances. CDFW publishes and periodically updates lists of special status species which include, for the most part, the above categories. Additionally, there are a total of 64 plant species designated as "rare" in California, which is a special designation created before plants were rolled into CESA in the 1980s. The CESA and the Native Plant Protection Act (NPPA) required a project to have a "Scientific, Educational, or Management Permit" from CDFW for activities that would result in "take," possession, import, or export of state-listed plant species including research, seed banking, reintroduction efforts, habitat restoration, and other activities relating to any plant designated SE (State endangered), ST (State threatened), SR (State rare), or SC (State candidate for listing).

Birds of Prey and Native Nesting Birds

Sections 3503 and 3513 of the FGC prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Subsection 3503.5 specifically prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks and eagles) or Strigiformes (owls) and their eggs or nests. These provisions, along with the federal MBTA, essentially serve to protect nesting native birds. Non-native species, including the European Starling, Rock Dove, and House Sparrow, are not afforded protection under the MBTA or FGC.

Fully Protected Species

The CDFW enforces the FGC, which provides protection for “fully protected birds,” (Section 3511), “fully protected mammals” (Section 4700), “fully protected reptiles and amphibians” (Section 5050), and “fully protected fish” (Section 5515). As fully protected species, the CDFW cannot authorize any project or action that would result in “take” of these species, even with an incidental take permit.

Migratory Bird Protection Act (MBPA)

The California Migratory Bird Protection Act (MBPA; FGC Section 3513, as amended) was introduced in the California State Assembly 2019 by Assembly Member Ash Kalra and co-sponsored by the National Audubon Society. The text of the Act specifies that it is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 USC 703-712) before January 1, 2017. This upholds the interpretation of the MBTA under Clinton’s EO 13166, where “take” was defined as both “unintentional as well as intentional.” Governor Gavin Newsom signed the Act into law on September 27, 2019. The MBPA effectively closes the federal MBTA loophole on incidental take of migratory birds in California.

2.3 Local Jurisdiction

The PSB is entirely within the California Coastal Zone. The portion of the PSB in the Westhaven Drive area is in the jurisdiction of the Humboldt County LCP. The Trinidad Area Plan (2014) is the Land Use Plan for this area, and the Humboldt County Zoning Code is the Implementation Plan.

The portion of the PSB in the area of Edwards and Van Wycke Street is in the jurisdiction of the City of Trinidad LCP. The City of Trinidad’s General Plan (1978) is the Land Use Plan for the City’s LCP, and the Implementation Plan consists of the zoning, grading, building and subdivision ordinances.

Trinidad Area Plan

The Trinidad Area Plan (revised in 2014) includes the following relevant codes:

30233. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

30236 (d) Riparian corridors on all perennial and intermittent streams shall be, at a minimum, the larger of the following:

(1) 100 feet, measured as the horizontal distance from the stream transition line on both sides.

(2) 50 feet plus four times the average percent of slope, measured as a slope distance from the stream transition line on both sides of intermittent and perennial streams.

(3) Where necessary, the width of riparian corridors shall be expanded to include significant areas of riparian vegetation adjacent to the corridor, slides, and areas with visible evidence of slope instability, not to exceed 200 feet measured as a horizontal distance.

30240 (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

Environmentally sensitive habitats within the County Trinidad Planning Area shall include:

- *Rivers, creeks and associated riparian habitats*
- *Offshore rocks, islands and intertidal areas*
- *Other critical habitats for rare or endangered species listed on state or federal lists*
- *Wetlands. No wetlands are currently identified.*

City of Trinidad General Plan

The City of Trinidad General Plan (CoT 1978) includes the following relevant sections:

Biological Resources

Riparian vegetation is located along portions of all the coastal streams in the planning area. This vegetation protects the quality of the water, minimizes soil erosion and slippage, and provides a valuable habitat for a wide variety of animals and birds. Four types of rare plants are found in the planning area. The boundary of the areas where these plants are found has not been established.

Development Constraints

Riparian vegetation should be disturbed as little as possible. Development on sites where rare plants are known to exist should be located and designed to minimize the impact on the rare plants...

Recommended Land Use

Areas within 100 feet of streams near developed lands are placed in the Open Space or Special Environment categories to establish a riparian protection zone. Riparian habitat along streams in timber management areas has been designated Resource Production. The Forest Practices Act provides for the retention of streamside vegetation while allowing careful removal of merchantable timber.

Recommended policies

- *The Humboldt County Natural Resources Department should define the geographical limits of the three rare plants¹ located within potential development areas. Vegetation removal, timber harvesting, or development should be reviewed to ensure that all reasonable means have been considered to protect any existing rare plants.*

3. Environmental Baseline Conditions

3.1 Habitat Elements

The portion of the PSB in the City of Trinidad is largely residentially developed and landscaped areas with a border of coastal scrub on the south side of Van Wycke Street and the eastern end of Edwards Street. This portion of the PSB is closest to the coast and is approximately 85 - 180 feet above sea level (**Appendix A, Figure 2-1**).

The portion of the PSB along Westhaven Drive includes the eastern road shoulder in North Coast coniferous forest with low density residential development. The new water tank and pipeline along the

¹ The three rare plants of concern are not identified in the General Plan. These plants are discussed in a separate Environmental Conditions and Constraints Report.

access road will be installed approximately 840 feet northeast of Westhaven Drive (**Appendix A, Figure 2-2**).

3.2 Topography and Soils

The PSB is on a gradual slope in the City of Trinidad and along a slightly undulating road and forested slope in the community of Westhaven. The elevation of the entire PSB ranges between approximately 85 to 390 feet in elevation above sea level. Soils include Megwil and Cannonball soils, 0 to 5 percent slopes (38.5% of the PSB), Atwell-Ladybird complex, 30 to 50 percent slopes (29.0% of the PSB), Lepoil-Espa-Candymountain complex, 15 to 50 percent slopes (9.8% of the PSB), Candymountain, 30 to 75 percent slopes (12.3% of the PSB), and Halfbluff-Tepona-Urban Land, 2 to 9 percent slopes (10.4% of the PSB) (see the Trinidad Water System Wetland Delineation Report for more details, USDA 2022). All soils in the PSB are well drained or moderately well drained, and none are rated as hydric soils. The depth to the water table is generally between 20 and 59 inches except for Candymountain soils in the southeastern portion of Trinidad City where the depth to the water table is greater than 80 inches.

3.3 Hydrology

GHD delineated wetlands within the PSB on October 18 and 19, 2022 and findings are documented in a separate report (GHD 2022). Mean annual precipitation in the Project Area ranges from 35 to 90 inches (USDA 2022). Rainfall in the 2022 water year at the Arcata Eureka Airport totaled 32.47 inches which was below normal (46.25 inches).

The perennial Deadman's Creek flows through a culvert underneath the PSB on Westhaven Drive (USFWS 2018, **Appendix A, Figure 2-2**). The perennial Luffenholtz Creek is approximately 210 feet southeast of the PSB on Westhaven Drive as mapped by the USFWS National Wetlands Inventory. The PSB in the City of Trinidad is within 135 horizontal feet and 80 vertical feet of the Pacific Ocean (**Appendix A, Figure 2-1**).

3.4 Habitat Access, Connectivity, and Migratory Corridors

The PSB and BSA are located within the Pacific Flyway for migratory birds. There is a birding "hotspot" within 300 feet of the northern section of the BSA, where 158 species have been observed (eBird 2022). The PSB is approximately 8 miles from the nearest "essential connectivity area" and "natural landscape block" (CDFW 2022c). A "small natural landscape area" is approximately 800 feet from the northern section of the PSB and approximately one mile from the southern section of the PSB (CDFW 2022c). There are protected and recreational areas in proximity to the PSB, including Trinidad State Beach, Trinidad Head, and Little River State Beach. Due to the Project occurring primarily in residential areas with established roads, there would be no impact to the habitat access, connectivity, or migratory corridors of wildlife species.

4. Methods

4.1 Preliminary Investigation

Database Searches (CNDDDB, CNPS, EFH, IPaC, NOAA Critical Habitat)

Database searches for sensitive plant and wildlife species that may occur in the Project vicinity were conducted by GHD in September to November 2022 (**Appendix B**). Database searches included the

CNDDDB Quick View (CDFW 2022d), CNPS Inventory of Rare and Endangered Vascular Plants (CNPS 2022), the National Oceanic and Atmospheric Administration (NOAA) Essential Fish Habitat (EFH) Mapper (NOAA 2022a), the USFWS Information for Planning and Conservation (IPaC; USFWS 2022b), and the NOAA NMFS ESA Critical Habitat Mapper (NOAA 2022b). The NOAA Fisheries West Coast Region California Species List Tools is no longer publicly available; however, it was determined that other ESA threatened and endangered species regulated by NOAA Fisheries are unlikely to occur within the BSA (NOAA 2022c). The searches encompassed eight U.S. Geological Survey (USGS) quadrangles (quads) centered on the Project Area quad (Crannell) and the surrounding seven quads: Trinidad, Tyee City, Arcata North, Blue Lake, Panther Creek, Bald Hills, and Rodgers Peak.

Plant species on the CNPS California Rare Plant Ranking (CRPR) Lists 1 and 2 are considered eligible for state listing as endangered or threatened pursuant to the California Fish and Game Code. The CDFW has oversight of these special status plant species as a trustee agency. As part of the CEQA process, such species should be considered as they meet the definition of threatened or endangered under Sections 2062 and 2067 of the California Fish and Game Code.

CRPR List 3 and 4 plants may warrant protection under CEQA Guidelines 15380 only in special circumstances. CDFW publishes and periodically updates lists of special status species which include, for the most part, the above categories. Additionally, there are a total of 64 plant species designated as “rare” in California, which is a special designation created before plants were rolled into CESA in the 1980s. The CESA and the NPPA required a project to have a “Scientific, Educational, or Management Permit” from CDFW for activities that would result in “take,” possession, import, or export of state-listed plant species including research, seed banking, reintroduction efforts, habitat restoration, and other activities relating to any plant designated SE (State Endangered), ST (State Threatened), SR (State Rare), or SC (State Candidate for listing).

Scoping for special status plant species included any state or federally listed plants as well as plant species on CNPS CRPR Lists 1-4.

4.2 Field Surveys

Special Status Plants

All special status plant species identified by database scoping were evaluated by for potential to occur in the PSB (**Table 1**). GHD botanist Jane Cipra conducted a site survey November 3, 2022, which is outside of the blooming season for the majority of special status plant species with potential to occur in the Project Area. A recommendation for pre-construction, seasonally appropriate floristic surveys is included in **Section 6**. A protocol level floristic survey did not occur at this time, however, identifiable species that were observed are listed in **Appendix D**. Nomenclature follows *The Jepson Manual* (Baldwin et al. 2012). April and June floristic surveys for special status plants following CDFW (2018) and USFWS (2002) protocols and guidelines will be required before construction.

Natural Communities and SNCs were identified using the Manual of California Vegetation, Second Edition (Sawyer et al. 2009). SNCs are vegetation Alliances or Associations with a state rarity rank of S1-S3 and/or are on the List of California SNCs (CDFW 2022b).

Habitats were photo-documented onsite (**Appendix C**). Special status plants were mapped using points collected in the field with an Eos Arrow 100 Submeter Global Positioning System (GPS) Receiver with Global Navigation Satellite System (GNSS) and an iPad running ArcGIS Collector software in the WGS84 datum.

Aquatic Resources

A delineation of aquatic resources (including wetlands) was completed October 18 and 19, 2022 by GHD Soil Scientist Kerry McNamee, and GHD Botanist Jane Cipra. See the separate Trinidad Water System Wetland Delineation Report (GHD 2022) prepared for the Project. The total area of three-parameter wetlands within the Project Area is 1,265 square feet. The total area of one-parameter wetlands within the Project Area is 4,480 square feet. The three parameter wetlands are within the jurisdiction of the USACE and the SWRCB, and the HCLCP. The one-parameter wetlands are only within the jurisdiction of the HCLCP.

Wildlife Survey and Wildlife Habitat Evaluation Methods

A reconnaissance-level wildlife site visit was conducted by Sara Moriarty-Graves, GHD Wildlife Biologist (hereafter surveyor), on October 17, 2022, from 0730 to 1145. Weather during the survey included clear skies, about 59 degrees Fahrenheit, with calm air to light breeze (Beaufort scale 0-2).

Where private property access allowed, the surveyor walked within and along the PSB and BSA (**Appendix A, Figures 2-1 and 2-2**). Inaccessible areas within the surrounding 100 feet of the PSB and BSA were visually assessed from fixed locations with binoculars. Where access was possible and the habitat allowed for the surveyor to walk without risk of damaging nests or dens and surrounding vegetation, the survey included a physical search of the area. This included inspecting the ground, shrubs, culverts, holes, and trees for the presence of any wildlife species. Additionally, the bark of vegetation and the ground layer under vegetation were inspected for evidence of wildlife species, such as feathers, pellets, whitewash, scat, tracks, etc. This reconnaissance-level survey was conducted to identify general wildlife resources and habitat as well as wildlife activity in the BSA. No protocol-level surveys for special status wildlife were conducted.

5. Results

5.1 Summary of General Biological Resources

Based on occurrence records, field surveys, site visits, and habitat availability, five special status plant species and 22 special status wildlife species have a moderate to high potential to occur or are present in the PSB or BSA. Four SNCs were observed in the PSB including Red alder forest – salal association, Redwood forest and woodland, and Salal - berry brambles – California blackberry association (**Appendix A, Figures 3-1 and 3-2**).

Three bird species (Marbled Murrelet; *Brachyramphus marmoratus*, Bald Eagle, and Bank Swallow; *Riparia riparia*) that are federally-listed, state-listed (or both) have a moderate potential to occur based on recent detections in proximity to the BSA (eBird 2022). However, these species are unlikely to forage or nest within the BSA. In addition, three special status mammals, twelve other birds, four amphibians, and two fish species have a moderate to high potential to occur (**Table 4**). Recommendations to protect special status species are provided in **Section 6**.

5.2 Special Status Plants

Special Status Plants and Sensitive Habitats

Table 1 summarizes the potential for special status plants documented in the surrounding 9-quad area to occur within the PSB. No rare plants were observed in the site visit which occurred outside of the blooming season for most species. Protocol level surveys in April and June are required to determine rare plant presence, as recommended in **Section 6**. A list of all plants observed in the PSB is provided in **Appendix D**.

Table 2 Potential for Special Status Plants to Occur in the PSB

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	None	None	G4G5T2	S2	1B.1	Coastal dunes	No potential. The PSB is outside of the elevational range for this species (0 - 35 feet).
<i>Angelica lucida</i>	sea-watch	None	None	G5	S3	4.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Marshes and swamps	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Astragalus rattanii</i> var. <i>rattanii</i>	Rattan's milk-vetch	None	None	G4T4	S4	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest, Gravelly, Streambanks	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Astragalus umbraticus</i>	Bald Mountain milk-vetch	None	None	G4	S2	2B.2	Cismontane woodland, Lower montane coniferous forest, Roadsides (sometimes)	No potential. The PSB is outside of the elevational range for this species (490 - 4,100 feet).
<i>Calamagrostis bolanderi</i>	Bolander's reed grass	None	None	G4	S4	4.2	Bogs and fens, Broadleafed upland forest, Closed-cone coniferous forest, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Mesic	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Cardamine angulata</i>	seaside bittercress	None	None	G4G5	S3	2B.2	Lower montane coniferous forest, North Coast coniferous forest, Streambanks	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Carex arcta</i>	northern clustered sedge	None	None	G5	S1	2B.2	Bogs and fens, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Carex buxbaumii</i>	Buxbaum's sedge	None	None	G5	S3	4.2	Bogs and fens, Marshes and swamps, Meadows and seeps	No potential. No suitable habitat is present in the PSB.
<i>Carex lenticularis</i> var. <i>limnophila</i>	lagoon sedge	None	None	G5T5	S1	2B.2	Bogs and fens, Marshes and swamps, North Coast coniferous forest, Gravelly (often)	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Carex leptalea</i>	bristle-stalked sedge	None	None	G5	S1	2B.2	Bogs and fens, Marshes and swamps, Meadows and seeps	No potential. No suitable habitat is present in the PSB.
<i>Carex lyngbyei</i>	Lyngbye's sedge	None	None	G5	S3	2B.2	Marshes and swamps	No potential. The PSB is outside of the elevational range for this species (0 - 35 feet).

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Carex saliniformis</i>	deceiving sedge	None	None	G2	S2	1B.2	Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps, Mesic	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Carex viridula</i> ssp. <i>viridula</i>	green yellow sedge	None	None	G5T5	S2	2B.3	Bogs and fens, Marshes and swamps, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Castilleja ambigua</i> var. <i>humboldtensis</i>	Humboldt Bay owl's-clover	None	None	G4T2	S2	1B.2	Marshes and swamps	No potential. The PSB is outside of the elevational range for this species (0 - 10 feet).
<i>Castilleja litoralis</i>	Oregon coast paintbrush	None	None	G3	S3	2B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Sandy	Moderate potential. Marginally suitable habitat is present in the PSB along Van Wycke Street. There are three occurrences of this species in the Trinidad area from 1963 and 2018.
<i>Castilleja mendocinensis</i>	Mendocino Coast paintbrush	None	None	G2	S2	1B.2	Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	None	None	G4?T2	S2	1B.2	Marshes and swamps	No potential. The PSB is outside of the elevational range for this species (0 - 35 feet).
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	None	None	G5?	S3	4.3	North Coast coniferous forest, Riparian forest, Roadsides (sometimes), Seeps (sometimes), Streambanks	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Coptis laciniata</i>	Oregon goldthread	None	None	G4?	S3?	4.2	Meadows and seeps, North Coast coniferous forest, Mesic	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Discelium nudum</i>	naked flag moss	None	None	G4G5	S1	2B.2	Coastal bluff scrub	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Eleocharis parvula</i>	small spikerush	None	None	G5	S3	4.3	Marshes and swamps	No potential. No suitable habitat is present in the PSB.
<i>Empetrum nigrum</i>	black crowberry	None	None	G5	S1?	2B.2	Coastal bluff scrub, Coastal prairie	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street. This species was last observed in Trinidad in 1979.

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Erysimum menziesii</i>	Menzies' wallflower	FE	SE	G1	S1	1B.1	Coastal dunes	No potential. No suitable habitat is present in the PSB.
<i>Erythronium oregonum</i>	giant fawn lily	None	None	G5	S2	2B.2	Cismontane woodland, Meadows and seeps, Openings, Rocky, Serpentinite (sometimes)	No potential. No suitable habitat is present in the PSB.
<i>Erythronium revolutum</i>	coast fawn lily	None	None	G4G5	S3	2B.2	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest, Mesic, Streambanks	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Fissidens pauperculus</i>	minute pocket moss	None	None	G3?	S2	1B.2	North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	None	None	G5T3	S2	1B.2	Chaparral, Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Gilia millefoliata</i>	dark-eyed gilia	None	None	G2	S2	1B.2	Coastal dunes	No potential. No suitable habitat is present in the PSB.
<i>Glehnia littoralis</i> ssp. <i>leiocarpa</i>	American glehnia	None	None	G5T5	S2S3	4.2	Coastal dunes	No potential. The PSB is outside of the elevational range for this species (0 - 65 feet).
<i>Hemizonia congesta</i> ssp. <i>tracyi</i>	Tracy's tarplant	None	None	G5T4	S4	4.3	Coastal prairie, Lower montane coniferous forest, North Coast coniferous forest, Openings, Serpentinite (sometimes)	No potential. The PSB is outside of the elevational range for this species (395 - 3.935 feet).
<i>Hesperervax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	None	None	G4T3	S3	1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Hosackia gracilis</i>	harlequin lotus	None	None	G3G4	S3	4.2	Broadleafed upland forest, Cismontane woodland, Closed-cone/North Coast coniferous forest, Coastal bluff scrub/prairie/scrub, Marshes, swamps, meadows, and seeps, Valley and foothill grassland, Roadsides	Moderate potential. Suitable habitat is present in the PSB along Van Wycke Street.

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Iliamna latibracteata</i>	California globe mallow	None	None	G2G3	S2	1B.2	Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Riparian scrub, Burned areas (often)	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Juncus nevadensis</i> var. <i>inventus</i>	Sierra rush	None	None	G5T3T4	S1	2B.2	Bogs and fens	No potential. The PSB is outside of the elevational range for this species (0 - 35 feet).
<i>Kopsiopsis hookeri</i>	small groundcone	None	None	G4?	S1S2	2B.3	North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Lathyrus glandulosus</i>	sticky pea	None	None	G3	S3	4.3	Cismontane woodland	No potential. The PSB is outside of the elevational range for this species (985 - 2,625 feet).
<i>Lathyrus japonicus</i>	seaside pea	None	None	G5	S2	2B.1	Coastal dunes	No potential. No suitable habitat is present in the PSB.
<i>Lathyrus palustris</i>	marsh pea	None	None	G5	S2	2B.2	Bogs and fens, Coastal prairie/scrub, Lower montane/North Coast coniferous forest, Marshes and swamps, Mesic	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Layia carnosa</i>	beach layia	FT	SE	G2	S2	1B.1	Coastal dunes, Coastal scrub	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Lilium occidentale</i>	western lily	FE	SE	G1G2	S1	1B.1	Bogs and fens, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB.
<i>Listera cordata</i>	heart-leaved twayblade	None	None	G5	S4	4.2	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Lycopodiella inundata</i>	inundated bog-clubmoss	None	None	G5	S1	2B.2	Bogs and fens, Lower montane coniferous forest, Marshes and swamps	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Lycopodium clavatum</i>	running-pine	None	None	G5	S3	4.1	Lower montane coniferous forest, Marshes and swamps, North Coast coniferous forest, Edges (often), Openings, Roadsides	Moderate potential. Suitable habitat is present in the PSB. A CNDDB occurrence (from 1959) overlaps the PSB in the City of Trinidad, and other occurrence (from 2001) are within 1.0 mile of the water tank location.

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Lycopus uniflorus</i>	northern bugleweed	None	None	G5	S4	4.3	Bogs and fens, Marshes and swamps	No potential. No suitable habitat is present in the PSB.
<i>Mitellastrum caulescens</i>	leafy-stemmed mitrewort	None	None	G5	S4	4.2	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Mesic, Roadsides (sometimes)	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Moneses uniflora</i>	woodnymph	None	None	G5	S2	2B.2	Broadleafed upland forest, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Monotropa uniflora</i>	ghost-pipe	None	None	G5	S2	2B.2	Broadleafed upland forest, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Montia howellii</i>	Howell's montia	None	None	G3G4	S2	2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools, Roadsides (sometimes), Vernal Mesic	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Oenothera wolfii</i>	Wolf's evening-primrose	None	None	G2	S1	1B.1	Coastal bluff scrub/dunes/prairie, Lower montane coniferous forest, Mesic (usually), Sandy	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	None	None	G4T4	S2S3	2B.2	Coastal scrub, North Coast coniferous forest, Roadsides (sometimes)	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Piperia candida</i>	white-flowered rein orchid	None	None	G3?	S3	1B.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Serpentinite (sometimes)	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Pityopus californicus</i>	California pinefoot	None	None	G4G5	S4	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest, Mesic	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Pleuropogon refractus</i>	nodding semaphore grass	None	None	G4	S4	4.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest, Mesic	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Polemonium carneum</i>	Oregon polemonium	None	None	G3G4	S2	2B.2	Coastal prairie, Coastal scrub, Lower montane coniferous forest	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Ribes laxiflorum</i>	trailing black currant	None	None	G5?	S3	4.3	North Coast coniferous forest, Roadsides (sometimes)	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Romanzoffia tracyi</i>	Tracy's romanzoffia	None	None	G4	S2	2B.3	Coastal bluff scrub, Coastal scrub, Rocky	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	None	None	G3	S3	4.2	Broadleaved upland forest, Coastal prairie/scrub, North Coast coniferous forest, Riparian woodland, Disturbed areas (often)	Moderate potential. Suitable habitat is present throughout the PSB.
<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Siskiyou checkerbloom	None	None	G5T2	S2	1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest, Roadsides (often)	Moderate potential. Suitable habitat is present throughout the PSB.
<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	None	None	G5T1	S1	1B.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.
<i>Silene scouleri</i> ssp. <i>scouleri</i>	Scouler's catchfly	None	None	G5T4T5	S2S3	2B.2	Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Sulcaria spiralifera</i>	twisted horsehair lichen	None	None	G3G4	S2	1B.2	Coastal dunes, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Tiarella trifoliata</i> var. <i>trifoliata</i>	trifoliolate laceflower	None	None	G5T5	S2S3	3.2	Lower montane coniferous forest, North Coast coniferous forest, Edges, Streambanks	No potential. The PSB is outside of the elevational range for this species (560 - 4,920 feet).
<i>Trichodon cylindricus</i>	cylindrical trichodon	None	None	G4G5	S2	2B.2	Broadleaved upland forest, Meadows and seeps, Upper montane coniferous forest, Roadsides, Sandy	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.
<i>Usnea longissima</i>	Methuselah's beard lichen	None	None	G4	S4	4.2	Broadleaved upland forest, North Coast coniferous forest	Low potential. Marginally suitable habitat is present in the PSB near Westhaven Drive.

Scientific Name	Common Name	FESA	CESA	Global Rank ²	State Rank ²	CRPR ²	Habitat Requirements ¹	Potential to Occur in the PSB
<i>Viola palustris</i>	alpine marsh violet	None	None	G5	S1S2	2B.2	Bogs and fens, Coastal scrub	Low potential. Marginally suitable habitat is present in the PSB along Van Wycke Street.

Footnotes:

¹ General habitat, and microhabitat column information, reprinted from CNDDDB (April 2022).

² Rankings from CNDDDB (April 2022).

Column Header Categories and Abbreviations:

FESA Listing status under the federal Endangered Species Act (ESA)

FE Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; FD = Federally Delisted

CESA Listing status under the California state Endangered Species Act (CESA)

SE State Endangered; SD = State Delisted; ST = State Threatened.

GRank: Global Rank from NatureServe’s Heritage Methodology (NatureServe 2022) (ranking according to degree of global imperilment - G1 = Critically Imperiled—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors; G2 = Imperiled—At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors; G3 = Vulnerable—At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors; G4 = Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors; G5 = Secure—Common; widespread and abundant. Subspecies/variety level: “Subspecies/varieties receive a T-rank attached to the G-rank. With the subspecies/varieties, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety” (CDFW 2022e); ? = “ Denotes inexact numeric rank” (NatureServe 2022); Q = “ Questionable taxonomy that may reduce conservation priority” (NatureServe 2022).

SRank: State Rank from NatureServe’s Heritage Methodology (NatureServe 2022) (ranking according to degree of imperilment in the state (California) - S1 = Critically Imperiled—Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state; S2 = Imperiled—Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state; S3 = Vulnerable—Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state; S4 = Apparently Secure—Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors; S5 = Secure—Common, widespread, and abundant in the state; SNR = State Not Ranked.

CRPR: CNPS rankings for rare plants (CNPS 2022) - 1A = Plants presumed extinct in California; 1B = Plants rare, threatened or endangered in California and elsewhere; 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; 3 = Plants about which more information is needed (a review list); 4 = Plants of limited distribution (a watch list); n/a = not applicable; Threat Code extensions and their meanings: “.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 – Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat); .3 – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)” (CDFW 2022e).

Potential to Occur:

No Potential Habitat in and adjacent to the PSB is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Low Potential: Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found in the PSB.

- Moderate Potential:** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found in the PSB.
- High Potential:** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on in the PSB
- Present:** Detected or documented on-site.

5.2.1 Special Status Plants with Moderate Potential to Occur

Botanical species with a moderate or higher potential to occur in the PSB are evaluated in further detail below.

Oregon coast paintbrush (*Castilleja littoralis*) CRPR 2B.2

There is one historic occurrence of this species in the Trinidad area from 1963 and two occurrences from 2018. Suitable habitat for this perennial hemiparasitic herb includes sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub. Marginally suitable habitat is present in the PSB on the south side of Van Wycke Street where moderately impacted coastal scrub is present. This species could be encountered.

Harlequin lotus (*Hosackia gracilis*) CRPR 4.2

This species is not mapped in CNDDDB, but this species is present in the Trinidad USGS quad according to the CNPS inventory of rare plants (CNPS 2022). Suitable habitat for this perennial rhizomatous herb includes broadleafed upland forest, cismontane woodland, closed-cone and North Coast coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes, swamps, meadows, and seeps, valley and foothill grassland, and roadsides. Roadsides in North Coast coniferous forest and coastal scrub are present in all areas of the PSB. This species could be encountered.

Maple-leaved checkerbloom (*Sidalcea malachroides*) CRPR 4.2

The nearest CNDDDB occurrences of this species are in the town of McKinleyville (from 1934) and east of the town of Blue Lake (from 2001). Suitable habitat for this perennial herb includes broadleafed upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, riparian woodland, and disturbed areas (often). Disturbed areas in coastal scrub and North Coast coniferous forest are present throughout the PSB. This species could be encountered.

Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*) CRPR 1B.2

The nearest CNDDDB occurrences of this species are in the town of McKinleyville (from 2005). Suitable habitat for this perennial rhizomatous herb includes coastal bluff scrub, coastal prairie, North Coast coniferous forest, and roadsides (often). Disturbed areas in coastal scrub and North Coast coniferous forest are present throughout the PSB. This species could be encountered.

California globe mallow (*Iliamna latibracteata*) CRPR 1B.2

The nearest CNDDDB occurrence (from 2016) is approximately 15 miles northeast of the PSB. Suitable habitat for this perennial herb includes chaparral, lower montane coniferous forest, North Coast coniferous forest, riparian scrub, and burned areas (often). North Coast coniferous forest and some riparian scrub are present in the PSB along Westhaven Drive and this species could be encountered.

Woodnymph (*Moneses uniflora*) CRPR 2B.2

The nearest CNDDDB occurrence of this species (from 2012) is approximately 11 miles north of the PSB. Suitable habitat for this perennial rhizomatous herb includes broadleafed upland forest, and North Coast coniferous forest, which is present in the PSB along Westhaven Drive. This species could be encountered.

Running-pine (*Lycopodium clavatum*) CRPR 4.1

There is one historic CNDDDB occurrence (from 1959) in the City of Trinidad, and three occurrences (from 2001) within 1 mile of Westhaven Drive. Suitable habitat for this perennial rhizomatous herb includes edges (often), openings, and roadsides in lower montane coniferous forest, North Coast coniferous forest, marshes, and swamps. Suitable habitat is present throughout the PSB but particularly along Westhaven Drive.

5.3 Sensitive Natural Communities and Riparian Habitat

A database query of CNDDDB returned five terrestrial communities in the nine USGS quads surrounding the Project location: Coastal and Valley Freshwater Marsh, Northern Coastal Salt Marsh, Northern Fore dune Grassland, Sitka Spruce Forest, and Sphagnum Bog (**Table 3**). None of these communities are present in the PSB. A handful of Sitka spruce (*Picea sitchensis*) trees are present on Westhaven Drive; however, these trees are included in the Redwood forest alliance (*Sequoia sempervirens*).

Aside from the communities listed in CNDDDB, there are three SNCs present in the PSB: Red alder forest – salal association (*Alnus rubra* / *Gaultheria shallon*), Redwood forest and woodland, and Salal – berry brambles – California blackberry association (*Gaultheria shallon* – *Rubus [ursinus]*) (**Appendix A, Figures 3-1 and 3-2, Appendix E**). These SNCs may also be considered ESHAs in the Coastal Zone.

Table 3 Vegetation Alliances and Associations in the Project Area and PSB

Alliance	Association(s)	G Rank	S Rank	Sensitive
Red alder	Red alder / salal (<i>Alnus rubra</i> / <i>Gaultheria shallon</i>)			Yes
	No association	G5	S4	No
Redwood forest and woodland	Red alder / salmonberry (<i>Alnus rubra</i> / <i>Rubus spectabilis</i>)	G3	S3	Yes
	Douglas fir / salal (<i>Pseudotsuga menziesii</i> / <i>Gaultheria shallon</i>)			
	Douglas fir / huckleberry (<i>Pseudotsuga menziesii</i> / <i>Vaccinium ovatum</i>)			
	Swordfern (<i>Polystichum munitum</i>)			
Salal – berry brambles	California blackberry (<i>Rubus ursinus</i>)	GNR	S4	Yes

Red Alder Forest

Small stands of Red alder forest are present surrounding the existing water tanks, along Westhaven Drive and on the slope below Van Wycke Street (**Appendix A, Figures 3-1 and 3-2**). Red alder forest is defined by more than 50% cover of red alder in the tree layer with co-dominants including grand fir (*Abies grandis*), Sitka spruce, Douglas fir, redwood, and/or hemlock (*Tsuga heterophylla*) as co-dominants in the tree canopy. In the area of Deadman’s Creek the Red alder forest is associated with salal in the understory which. This combination is considered sensitive and may also be considered an ESHA in the Coastal Zone. In the water tank area and on the slope below Van Wycke Street, the Red alder forest does not have an association with salal and is therefore not considered sensitive and would not be considered an ESHA.

Redwood Forest and Woodland

The majority of the PSB on and around Westhaven Drive is in second growth Redwood forest and woodland with four possible associations: red alder / salmonberry, Douglas fir / salal, Douglas fir / huckleberry, and swordfern (**Appendix A, Figure 3-2**). The Redwood forest and woodland alliance was not mapped on the association level since the alliance and all associations are considered sensitive and all may be also considered ESHAs in the Coastal Zone. The Redwood forest alliance with red alder / salmonberry association intergrades with the Red alder alliance in the PSB.

Salal – Berry Brambles

There is a stand of the Salal-berry brambles alliance with a California blackberry association present on the slope below Van Wycke Street in the City of Trinidad (**Appendix A, Figure 3-1**). This alliance is characterized by having salal or California blackberry dominant in the shrub canopy. When California blackberry is the only dominant species, the association is considered sensitive by CDFW and may also be considered an ESHA in the Coastal Zone.

Riparian Habitat

There is one section of Red alder forest near the center of the PSB on Westhaven Drive that is also riparian habitat regulated by the NCRWQCB and the CCC (**Appendix A, Figure 4**). This stand of alder is approximately 80 feet wide and occurs on either side of Deadman’s Creek, which flows through a culvert underneath Westhaven Drive. According to the definition of “riparian corridor” in the Trinidad Area Local Coastal Plan, this riparian area includes an additional 100 feet on either side beyond the dripline of the riparian vegetation and is approximately 280 feet wide.

Red alder trees overhang the PSB on the road shoulder; however, no tree removal is planned in this area and no impacts are expected to the riparian corridor (**Appendix C, Photo C-8**).

5.4 Special Status Wildlife

Habitat availability and suitability was determined for each species reported by the databases mentioned above (**Appendix B**). Nomenclature for special-status animals conforms to CDFW guidelines (CDFW 2022d). The potential for each species to occur was determined based on habitat evaluations during the site visit and available data (see **Table 4**).

Special Status Wildlife Species

Federally-listed Wildlife Species

Fourteen federally-listed species (including three endangered and 11 threatened) that are regulated by the USFWS and NMFS under the ESA were identified during scoping in the vicinity of the PSB (i.e., the 9-quad search area; **Appendix A, Table 4**). Additionally, three federal candidate species were identified during database scoping. Based on habitat evaluations, and a database and literature review, it was determined that three endangered, ten threatened, and three candidate species are unlikely to occur in the PSB or BSA. One federally-threatened bird species (Marbled Murrelet) has been detected within close proximity of the BSA and have a moderate to high potential to occur. However, the species is more likely to fly over the BSA in the town of Trinidad (**Appendix A, Figure 2-1**). Additionally, the other section of the BSA along Westhaven Drive, the access road, and the water tanks (**Appendix A, Figure 2-2**) does not provide highly suitable nesting habitat for the Marbled Murrelet. Explanation of determinations is provided in **Table 4**.

State Listed or Special Status Wildlife Species

Eleven state-listed wildlife species (including six endangered and five threatened) that are regulated by the CDFW under the CESA were identified during scoping in the vicinity of the PSB (i.e., the 9-quad search area). Additionally, one state candidate was identified during database scoping. Eight of these species are also federally-listed or candidates for listing. The PSB does not contain suitable habitat to support four of the state-endangered species, four of the state-threatened species, and the one state candidate species. Two state-endangered species (Bald Eagle and Marbled Murrelet) and one state-threatened species (Bank Swallow) have a moderate to high potential to occur within or nearby the BSA. However, these species are more likely to fly over the BSA than utilize habitat within either sections of it for nesting or foraging.

In addition to the federally and state-listed species, 45 other special status species were identified during scoping in the vicinity of the PSB (i.e., the nine-quad search area). This includes animals on the CDFW Special Animals List (SAL), on the CDFW Watch List (WL), or CDFW Fully Protected (FP) species. Three special status mammals, 12 other birds, four amphibians, and two fish species have a moderate to high potential to occur (**Table 4**).

Wildlife Species Observed On-site

Various wildlife species were observed within the PSB during the October 18, 2022, reconnaissance-level site visit. One special status bird species (California Brown Pelican; *Pelecanus occidentalis*) was observed flying over the BSA. Tables of all wildlife species detected during the site visit are presented in **Tables F1** and **F3 (Appendix F)**. **Table F2** is a list of avian breeding codes, associated bird behaviour, and breeding status. **Tables F1** and **F3** are not intended to be comprehensive lists of all species that could occur within the PSB as no protocol level surveys have been conducted.

Table 4 Potential for Special Status Wildlife to Occur in the PSB and BSA

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
Mammals								
<i>Antrozous pallidus</i>	Pallid Bat	None	None	G4	S3	BLM S-Sensitive, CDFW SSC-Species of Special Concern, IUCN LC-Least Concern, USFS S-Sensitive, WBWG H-High Priority	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Low potential. Marginally suitable forested habitat available, but no rocky areas for roosting present.
<i>Aplodontia rufa humboldtiana</i>	Humboldt Mountain Beaver	None	None	G5TNR	SNR		Coastal scrub; Redwood; Riparian forest. Coast Range in southwestern Del Norte County and northwestern Humboldt County. Variety of coastal habitats, including coastal scrub, riparian forests, typically with open canopy and thickly vegetated understory.	Low potential. Riparian forest habitat is only present in small sections of the BSA near Deadman's Creek, which crosses under the PSB. The BSA contains a mainly closed canopy. Soil around Deadman's Creek did not appear to be friable, which is a requirement for burrows.
<i>Arborimus albipes</i>	White-footed Vole	None	None	G3G4	S2	CDFW SSC-Species of Special Concern, IUCN LC-Least Concern	North coast coniferous forest; Redwood; Riparian forest. Mature coastal forests in Humboldt and Del Norte counties. Prefers areas near small, clear streams with dense alder and shrubs. Occupies the habitat from the ground surface to the canopy. Feeds in all layers and nests on the ground under logs or rock.	Moderate potential. There is suitable alder and shrub habitat present within the BSA. Areas surrounding Deadman's Creek may be suitable.
<i>Arborimus pomo</i>	Sonoma Tree Vole	None	None	G3	S3	CDFW SSC-Species of Special Concern, IUCN NT-Near Threatened	North coast coniferous forest; Old growth; Redwood North coast fog belt from Oregon border to Sonoma County. In Douglas-fir, redwood and montane hardwood-conifer forests. Feeds almost exclusively on Douglas-fir needles. Will occasionally take	Low potential. There is suitable forested habitat present within the BSA. However, the forest is dominated by redwood. Douglas fir is not abundant within the BSA, which is a required food source.

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
							needles of grand fir, hemlock or spruce.	
<i>Enhydra lutris nereis</i>	Southern Sea Otter	FT	None	G4T2	S2	CDFW_FP-Fully Protected IUCN_EN-Endangered MMC_SSC-Species of Special Concern	Aquatic; Protected deepwater coastal communities. Nearshore marine environments from about Ano Nuevo, San Mateo Co. to Point Sal, Santa Barbara Co. Needs canopies of giant kelp and bull kelp for rafting and feeding. Prefers rocky substrates with abundant invertebrates.	No potential. No suitable nearshore marine habitat present in the BSA.
<i>Erethizon dorsatum</i>	North American Porcupine	None	None	G5	S3	IUCN LC-Least Concern	Broadleaved upland forest; Cismontane woodland; Closed-cone coniferous forest; Lower montane coniferous forest; North coast coniferous forest; Upper montane coniferous forest. Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges. Wide variety of coniferous and mixed woodland habitat.	Low potential. There is not highly suitable habitat present within the BSA.
<i>Eumetopias jubatus</i>	Steller Sea Lion	Delisted	None	G3	S2	MMPA Protected	Marine and bay.	No potential. No suitable marine and bay habitat present in the BSA.
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	None	None	G3G4	S3S4	IUCN_LC-Least Concern	Lower montane coniferous forest, oldgrowth, riparian forest. Primarily a coastal and montane forest dweller, feeding over streams, ponds and open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	Moderate potential. Suitable forested, coastal, and riparian habitat available. Hollow trees also present in the BSA.
<i>Martes caurina humboldtensis</i>	Humboldt Marten	FT	SE	G4G5T1	S1	CDFW SSC-Species of Special	North coast coniferous forest; Old growth; Redwood. Occurs only in the coastal redwood zone from the Oregon border	Low potential. The BSA is outside of the species' known distribution (CDFW 2016). The BSA does not overlap with

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
						Concern, USFS S-Sensitive	south to Sonoma County. Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	federally-designated critical habitat (Appendix B, IPaC Report).
<i>Myotis evotis</i>	Long-eared Myotis	None	None	G5	S3	BLM S-Sensitive, IUCN LC-Least Concern, WBWG M-Medium Priority	Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Low potential. Forested habitat and snags present. However, caves not present.
<i>Orcinus orca</i>	Killer Whale – Southern Resident DPS	FE	None	G4G5T1	N1	MMPA Protected	Marine.	No potential. There is no work in marine habitat to occur.
<i>Pekania pennanti</i>	Fisher	None	None	G5	S2S3	BLM S-Sensitive, CDFW SSC-Species of Special Concern, USFS S-Sensitive	North coast coniferous forest; Old growth; Riparian forest. Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Moderate potential. Suitable mature, dense forest habitat present within and around the BSA. Snags and a closed canopy are present.
Birds								
<i>Accipiter cooperii</i>	Cooper's Hawk	None	None	G5	S4	CDFW WL-Watch List, IUCN LC-Least Concern	Riparian woodland, upper montane coniferous forest. Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Present. Numerous observations recorded within and nearby the BSA. The most recent observation within the BSA is from August 2022 (eBird 2022). Most recorded observations are within the town of Trinidad, although there is an observation within approximately 0.5 miles of the southern section of the BSA (eBird 2022).
<i>Accipiter striatus</i>	Sharp-shinned Hawk	None	None	G5	S4	CDFW WL-Watch List,	Cismontane woodland; Lower montane coniferous forest; Riparian forest; Riparian	Present. Various observations recorded within and

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
						IUCN LC-Least Concern	woodland. Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	immediately adjacent to the BSA (eBird 2022).
<i>Ardea herodias</i>	Great Blue Heron	None	None	G5	S4	CDF S-Sensitive, IUCN LC-Least Concern	Brackish marsh; Estuary; Freshwater marsh; Marsh & swamp; Riparian forest; Wetland Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	High potential. Numerous observations immediately adjacent to the BSA (eBird 2022).
<i>Asio flammeus</i>	Short-eared Owl	None	None	G5	S3	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Low potential. No suitable habitat present. There is a recorded observation approximately one mile south of the BSA (eBird 2022).
<i>Asio otus</i>	Long-eared Owl	None	None	G5	S3?	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Cismontane woodland; Great Basin scrub; Riparian forest; Riparian woodland; Upper montane coniferous forest. Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Low potential. No suitable open land habitat present.
<i>Botaurus lentiginosus</i>	American Bittern	None	None	G5	S3S4	IUCN_LC-Least Concern	Freshwater and slightly brackish marshes. Also in coastal saltmarshes. Dense reed beds.	Low potential. No suitable marsh habitat present.

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
<i>Brachyramphus marmoratus</i>	Marbled Murrelet	FT	SE	G3	S2	CDF S-Sensitive, IUCN EN-Endangered, NABCI RWL-Red Watch List	Lower montane coniferous forest; Old growth; Redwood. Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	Present. Numerous observations recorded immediately adjacent to the BSA and within one mile (eBird 2022). The BSA does not overlap with federally-designated critical habitat (Appendix B, IPaC Report).
<i>Cerorhinca monocerata</i>	Rhinoceros Auklet	None	None	G5	S3	CDFW_WL-Watch List IUCN_LC-Least Concern	Off-shore islands and rocks along the California coast. Nests in a burrow on undisturbed, forested and unforested islands, and probably in cliff caves on the mainland.	No potential. The BSA is not off-shore and does not contain rocks along the coast.
<i>Charadrius montanus</i>	Mountain Plover	None	None	G3	S2S3	BLM S-Sensitive, CDFW SSC-Species of Special Concern, IUCN NT-Near Threatened, NABCI RWL-Red Watch List, USFWS BCC-Birds of Conservation Concern	Chenopod scrub; valley & foothill grassland. Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.	Low potential. No suitable scrub or grassland habitat available. However, the species has been documented in beach habitat approximately one mile south of the BSA (eBrid 2022).
<i>Charadrius nivosus nivosus</i>	Western Snowy Plover	FT	None	G3T3	S2	CDFW SSC-Species of Special Concern, NABCI RWL-Red Watch List	Great Basin standing waters; Sand shore; Wetland Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Low potential. There is suitable habitat on beaches adjacent to the BSA, but not within the BSA. Observations have been recorded in nearby areas (eBird 2022). The BSA does not overlap with federally-designated critical habitat (Appendix B, IPaC Report).
<i>Circus hudsonius</i>	Northern Harrier	None	None	G5	S3	CDFW SSC-Species of Special	Coastal scrub; Great Basin grassland; Marsh & swamp; Riparian scrub; Valley & foothill	Moderate potential. Some observations are recorded adjacent to the BSA (eBird

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
						Concern, IUCN LC-Least Concern, USFWS BCC-Birds of Conservation Concern	grassland; Wetland Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	2022). The BSA and adjacent areas are likely not suitable for nesting.
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo	FT	SE	G5T2T3	S1		Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No potential. The BSA is outside of the species range (CDFW 2016).
<i>Contopus cooperi</i>	Olive-sided Flycatcher	None	None	G4	S3	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest, redwood, upper montane coniferous forest. Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain.	Moderate potential. Few observations have been recorded adjacent to the BSA (eBird 2022).
<i>Egretta thula</i>	Snowy Egret	None	None	G5	S4	IUCN LC-Least Concern	Marsh & swamp; Meadow & seep; Riparian forest; Riparian woodland; Wetland. Colonial nester, with nest sites situated in protected beds of dense tules. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	Low potential. The BSA does not contain highly suitable habitat for this species.
<i>Elanus leucurus</i>	White-tailed Kite	None	None	G5	S3S4	BLM S-Sensitive, CDFW FP-Fully Protected, IUCN	Cismontane woodland; Marsh & swamp; Riparian woodland; Valley & foothill grassland; Wetland. Rolling foothills and valley margins with scattered oaks and river bottomlands or	Low potential. The BSA likely does not contain suitable nesting or perching habitat for this species. However, there are few documented

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
						LC-Least Concern	marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	observations adjacent to the BSA (eBird 2022).
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	Delisted	Delisted	G4T4	S3S4	CDF S-Sensitive, CDFW FP-Fully Protected	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Present. Numerous observations within and immediately surrounding the BSA (eBird 2022).
<i>Fratercula cirrhata</i>	Tufted Puffin	None	None	G5	S1S2	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Protected deepwater coastal communities. Open-ocean bird; nests along the coast on islands, islets, or (rarely) mainland cliffs. Requires sod or earth into which the birds can burrow, on island cliffs or grassy island slopes.	Low potential. There are documented observations adjacent to the BSA (eBird 2022). However, this is an open-ocean bird. Suitable nesting habitat is present on islands and islets off of the Trinidad coast.
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Delisted	SE	G5	S3	BLM S-Sensitive, CDF S-Sensitive, CDFW FP-Fully Protected, IUCN LC-Least Concern, USFS S-Sensitive	Lower montane coniferous forest; Old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Present. Numerous observations recorded within and adjacent to the BSA (eBird 2022). The BSA is within one mile of the ocean shore.
<i>Hydrobates furcatus</i>	Fork-tailed Storm-petrel	None	None	G5	S1	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Protected deep water coastal communities. Colonial nester on small, offshore islets. Forages over the open ocean, usually well off-shore. Birds choose offshore islets which provide nesting crannies beneath rocks or sod for burrowing.	Moderate potential. There is an observation from June 2022 within 0.5 miles from the BSA (eBird 2022). Most other observations are from over 15 years ago (eBird 2022).
<i>Nannopterum auritum</i>	Double-crested Cormorant	None	None	G5	S4	CDFW WL-Watch List,	Riparian forest; Riparian scrub; Riparian woodland. Colonial nester on coastal cliffs, offshore	Present. Many observations recorded within and adjacent to the BSA (eBird 2022).

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
						IUCN LC-Least Concern	islands, and along lake margins in the interior of the state. Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	None	None	G5	S4	IUCN LC-Least Concern	Marsh & swamp; Riparian forest; Riparian woodland; Wetland. Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Moderate potential. A few observations have been recorded adjacent to the BSA (eBird 2022).
<i>Pandion haliaetus</i>	Osprey	None	None	G5	S4	CDF S-Sensitive, CDFW WL-Watch List, IUCN LC-Least Concern	Riparian forest. Ocean shore, bays, freshwater lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Present. Numerous observations documented immediately adjacent to the BSA (eBird 2022).
<i>Passerculus sandwichensis alaudinus</i>	Bryant's Savannah Sparrow	None	None	G5T2T3	S2S3	CDFW_SSC-Species of Special Concern	Low tidally influences habitats, ruderal areas, and grasslands. Around Humboldt Bay, the species breeds in dairy pastures, taller grasses and rushes, along roads and fences, and water canals (Shuford and Gardali 2008). They are ground nesters.	Moderate potential. Marginally suitable habitat available within the BSA. However, the BSA includes roadsides.
<i>Pelecanus occidentalis californicus</i>	California Brown Pelican	Delisted	Delisted	G4T3T4	S3	BLM_S-Sensitive CDFW_FP-Fully Protected USFS_S-Sensitive	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators. Roosts communally.	Low potential. The BSA does not contain suitable habitat for this coastal island bird. The species may fly over or nearby the BSA.
<i>Poecile atricapillus</i>	Black-capped Chickadee	None	None	G5	S3	CDFW_WL-Watch List IUCN_LC-Least Concern	Riparian woodland. Inhabits riparian woodlands in Del Norte and northern Humboldt counties. Mainly found in deciduous tree-types, especially willows and alders,	Present. Numerous observations immediately adjacent to the BSA (eBird 2022).

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
							along large or small watercourses.	
<i>Ptychoramphus aleuticus</i>	Cassin's Auklet	None	None	G4	S2S4	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFWS_BCC-Birds of Conservation Concern	Offshore islands with enough soil for burrowing. Will also nest in rock crevices, under buildings and in debris.	Low potential. There is suitable habitat on islands offshore of Trinidad, but not within the BSA.
<i>Rallus obsoletus obsoletus</i>	California Ridgway's Rail	FE	SE	G3T1	S1	CDFW FP-Fully Protected, NABCI RWL-Red Watch List	Brackish marsh; Marsh & swamp; Salt marsh; Wetland. Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed, but feeds away from cover on invertebrates from mud-bottomed sloughs.	No potential. The BSA is outside of the species currently known range.
<i>Riparia riparia</i>	Bank Swallow	None	ST	G5	S2	BLM S-Sensitive, IUCN LC-Least Concern	Riparian scrub; Riparian woodland. Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Moderate potential. There is a documented occurrence from July 2021 adjacent to the BSA (eBird 2022).
<i>Strix occidentalis caurina</i>	Northern Spotted Owl	FT	ST	G3T3	S2S3		North coast coniferous forest; Old growth; Redwood. Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.	Low potential. The BSA is outside of the species' range (CDFW 2016). The BSA does not overlap with federally-designated critical habitat (Appendix B, IPaC Report).

Reptiles

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
<i>Emys marmorata</i>	Western Pond Turtle	None	None	G3G4	S3	BLM S-Sensitive, CDFW SSC-Species of Special Concern, IUCN VU-Vulnerable, USFS S-Sensitive	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Low potential. No suitable basking or upland habitat present within the BSA.
Amphibians								
<i>Ascaphus truei</i>	Pacific Tailed Frog	None	None	G4	S3S4	CDFW SSC-Species of Special Concern, IUCN LC-Least Concern	Aquatic; Klamath/North coast flowing waters; Lower montane coniferous forest; North coast coniferous forest; Redwood; Riparian forest. Occurs in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine habitats. Restricted to perennial montane streams. Tadpoles require water below 15 degrees C.	Moderate potential. Deadman's Creek may provide suitable habitat for this species. The BSA is within the species range (AmphibiaWeb 2022).
<i>Plethodon elongatus</i>	Del Norte Salamander	None	None	G4	S3	CDFW_WL-Watch List IUCN_NT-Near Threatened	Old-growth associated species with optimum conditions in the mixed conifer/hardwood ancient forest ecosystem. Cool, moist, stable microclimate, a deep litter layer, closed multi-storied canopy, dominated by large, old trees.	Moderate potential. Multi-storied canopy with mature trees present. The BSA is within the species range and there is a documented observation from 2001 within two miles (AmphibiaWeb 2022).
<i>Rana aurora</i>	Northern Red-legged Frog	None	None	G4	S3	CDFW SSC-Species of Special Concern, IUCN LC-Least Concern, USFS S-Sensitive	Klamath/North coast flowing waters; Riparian forest; Riparian woodland. Humid forests, woodlands, grasslands, and streamsides in northwestern California, usually near dense riparian cover. Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	Present. There is a documented detection from August 2018 within the BSA, near the intersection of N Westhaven Drive and Fox Farm Road (iNaturalist 2022).

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
<i>Rana boylei</i>	Foothill Yellow-legged Frog	None	SE	G3	S3	BLM S-Sensitive, CDFW SSC-Species of Special Concern, IUCN NT-Near Threatened, USFS S-Sensitive	Aquatic; Chaparral; Cismontane woodland; Coastal scrub; Klamath/North coast flowing waters; Lower montane coniferous forest; Meadow & seep; Riparian forest; Riparian woodland; Sacramento/San Joaquin flowing waters. Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Low potential. The BSA is within the species range, but has a low predicted habitat suitability (CDFW 2016).
<i>Rhyacotriton variegatus</i>	Southern Torrent Salamander	None	None	G3G4	S2S3	CDFW SSC-Species of Special Concern, IUCN LC-Least Concern, USFS S-Sensitive	Lower montane coniferous forest; Old growth; Redwood; Riparian forest. Coastal redwood, Douglas-fir, mixed conifer, montane riparian and montane hardwood-conifer habitats. Old growth forest. Cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rocks within trickling water.	Moderate potential. Deadman's Creek may provide suitable habitat for the species. The BSA is within the species range, and there is a documented observation from 2001 within two miles (CDFW 2016, AmphibiaWeb 2022).
Fish								
<i>Acipenser medirostris pop. 1</i>	Green Sturgeon - Southern DPS	FT	None	G2T1	S1	AFS VU-Vulnerable, IUCN NT - Near Threatened	Marine. Humboldt Bay, CA to Coos Bay, OR.	No potential. There is designated critical habitat for this species within 1 mile of the BSA (NOAA 2022b; Appendix B, NOAA Critical Habitat Mapper). However, there is no suitable marine habitat within the BSA for this species.

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
<i>Acipenser medirostris</i> pop. 2	Green Sturgeon - Northern DPS	None	None	G2T1	S1	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	Aquatic; Estuary; Klamath/North coast flowing waters; Marine bay. Exhibits spawning site fidelity. Known to spawn in the Klamath, Trinity, Salmon, and Eel Rivers in California; historically known to spawn in the South Fork Trinity River. Non-spawning adults occupy marine and estuarine waters. Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	No potential. The BSA does not contain suitable aquatic habitat for this species. However, the BSA is within the species range (CDFW 2016).
<i>Entosphenus tridentatus</i>	Pacific Lamprey	None	None	G4	S3	AFS VU-Vulnerable, BLM S-Sensitive, CDFW SSC-Species of Special Concern, USFS S-Sensitive	Aquatic; Klamath/North coast flowing waters; Sacramento/San Joaquin flowing waters; South coast flowing waters. Found in Pacific Coast streams north of San Luis Obispo County, however regular runs in Santa Clara River. Size of runs is declining. Swift-current gravel-bottomed areas for spawning with water temps between 12-18 C. Ammocoetes need soft sand or mud.	Low potential. The BSA is within the species range. However, Deadman's Creek is not an aquatic feature with a known and mapped distribution (USFWS 2017). Additionally, no in-water work is currently proposed.
<i>Eucyclogobius newberryi</i>	Tidewater Goby	FE	None	G3	S3	AFS EN-Endangered, IUCN VU-Vulnerable	Aquatic; Klamath/North coast flowing waters; Sacramento/San Joaquin flowing waters; South coast flowing waters. Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	No potential. The BSA is within the species range. However, Deadman's Creek does not contain suitable brackish aquatic habitat for the species. Also, the BSA does not overlap with federally-designated critical habitat.

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
<i>Lampetra richardsoni</i>	Western Brook Lamprey	None	None	G4G5	S3S4	CDFW SSC-Species of Special Concern, USFS S-Sensitive	Found in the Sacramento River basin northward into British Columbia. Requires fine gravel beds for spawning. Larvae burrow in fine sediment.	Moderate potential. The BSA is within the species range (CDFW 2016). Deadman's Creek provides marginally suitable habitat for this species.
<i>Oncorhynchus clarkii clarkii</i>	Coast Cutthroat Trout	None	None	G5T4	S3	AFS VU-Vulnerable, CDFW SSC-Species of Special Concern, USFS S-Sensitive	Aquatic; Klamath/North coast flowing waters. Small coastal streams from the Eel River to the Oregon border. Small, low gradient coastal streams and estuaries. Needs shaded streams with water temperatures <18C, and small gravel for spawning.	Moderate potential. The species has known occurrences in creeks within 0.5 miles of the BSA (CDFW 2022d). However, no in-water work is currently proposed.
<i>Oncorhynchus kisutch pop. 2</i>	Coho Salmon - Southern Oregon / Northern California ESU	FT	ST	G5T2Q	S2	AFS TH-Threatened	Aquatic; Klamath/North coast flowing waters; Sacramento/San Joaquin flowing waters. Federal listing refers to populations between Cape Blanco, Oregon and Punta Gorda, Humboldt County, California. State listing refers to populations between the Oregon border and Punta Gorda, California.	Low potential. Deadman's Creek does not provide suitable habitat for this species. The BSA is outside of the mapped distribution (CDFW 2016). No in-water work is currently proposed.
<i>Oncorhynchus mykiss irideus pop. 16</i>	Steelhead - Northern California DPS	FT	None	G5T2T3Q	S2S3	AFS TH-Threatened	Aquatic; Sacramento/San Joaquin flowing waters. Coastal basins from Redwood Creek south to the Gualala River, inclusive. Does not include summer-run steelhead.	Low potential. Deadman's Creek does not provide suitable features for this species. Deadman's Creek is not currently mapped as having Steelhead occurrences (CDFW 2014). Additionally, no in-water work is currently proposed.
<i>Oncorhynchus mykiss irideus pop. 36</i>	Summer-run Steelhead Trout	None	SC	G5T4Q	S2	CDFW SSC-Species of Special Concern	Aquatic, Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters. California coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS and No. Calif DPS. Cool, swift, shallow water and clean loose gravel for spawning, and	Low potential. Deadman's Creek does not provide suitable features for this species. It is not currently mapped as having Summer-run Steelhead distribution (CDFG 2011). Additionally, no in-water work is currently proposed.

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
							suitably large pools in which to spend the summer.	
<i>Oncorhynchus tshawytscha</i> pop. 17	Chinook Salmon - California Coastal ESU	FT	None				Rivers and streams south of the Klamath River to the Russian River.	Low potential. Deadman's Creek does not provide suitable habitat for this species. Deadman's Creek is outside of the mapped distribution (CDFW 2016). Additionally, no in-water work is currently proposed.
<i>Oncorhynchus tshawytscha</i> pop. 30	Chinook Salmon - Upper Klamath and Trinity Rivers ESU	FC	ST	G5T2Q	S2	CDFW_SSC- Species of Special Concern USFS_S- Sensitive	Klamath/North coast flowing waters. Spring-run chinook in the Trinity River and the Klamath River upstream of the mouth of the Trinity River. Major limiting factor for juvenile chinook salmon is temperature, which strongly effects growth and survival.	No potential. The BSA encompasses the California Coastal ESU.
<i>Spirinchus thaleichthys</i>	Longfin Smelt	FC	ST	G5	S1		Aquatic; Estuary. Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	No potential. The BSA is outside of the mapped range (CDFW 2016).
<i>Thaleichthys pacificus</i>	Eulachon	FT	None	G5	S2		Aquatic; Klamath/North coast flowing waters. Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries. Spawn in lower reaches of coastal rivers with moderate water velocities and bottom of pea-sized gravel, sand, and woody debris. Eulachon were documented in the Little River in 2022 by the Green Diamond Timber Company.	No potential. Deadman's Creek does not provide suitable features for this species. The BSA is outside of the mapped range (CDFW 2016). Additionally, no in-water work is currently proposed.

Mollusks

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
<i>Margaritifera falcata</i>	Western Pearlshell	None	None	G4G5	S1S2		Aquatic. Prefers lower velocity waters.	Low potential. Due to the probable absence of salmonids in Deadman's Creek, which is required for the species' egg laying, this species is unlikely to occur. Additionally, no in-water work is currently proposed.
Insects								
<i>Bombus caliginosus</i>	Obscure Bumble Bee	None	None	G2G3	S1S2	IUCN VU-Vulnerable	Coastal areas from Santa Barbara County to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Low potential. The BSA does not contain large patches of plants in the preferred genera for foraging. Additionally, there are few observations over nine miles from the BSA (iNaturalist 2022).
<i>Bombus crotchii</i>	Crotch Bumble Bee	None	None	G2	S1S2		Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Low potential. The BSA appears to be outside of the species distribution (Bumble Bee Watch 2022, iNaturalist 2022). Additionally, the BSA does not contain suitable foraging habitat.
<i>Bombus occidentalis</i>	Western Bumble Bee	None	None	G2G3	S1	USFS S-Sensitive	Once common and widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease. Prefers large patches of native nectar plants. Typically, the species nests underground in abandoned rodent or other animal nests, but they have also been found aboveground among logs of railroad ties.	Low potential. The BSA does not contain large patches of plants in the preferred genera for foraging. Additionally, there are no known occurrences near the BSA (Bumble Bee Watch 2022, iNaturalist 2022).
<i>Danaus plexippus</i>	Monarch Butterfly – California overwintering, pop. 1	FC	None	G4T2T3	S2S3		Fields, roadside areas, open areas, wet areas or urban gardens. This species only lays eggs on milkweed. Overwintering tree habitat includes eucalyptus, Monterey pine, Monterey cypress, western sycamore, coast	Low potential. There is a documented observation within 0.25 miles of the BSA from September 2017 (iNaturalist 2022). However, known overwintering sites are south of Humboldt County (Pelton et al. 2016).

Scientific Name	Common Name	ESA	CESA	Global Rank ²	State Rank ²	Other Status	Habitat Requirements ¹	Potential to Occur
							redwood, and coast live oak trees.	
<i>Scaphinotus behrensi</i>	Behrens' Snail-eating Beetle	None	None	G2G4	S2S4		North coast coniferous forest. Found in extreme NW CA along the coast.	Low potential. Snails were not observed during the site visit.
<i>Bombus caliginosus</i>	Obscure Bumble Bee	None	None	G2G3	S1S2	IUCN VU-Vulnerable	Coastal areas from Santa Barbara County to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Low potential. The BSA does not contain large patches of plants in the preferred genera for foraging. Additionally, there are few observations over nine miles from the BSA (iNaturalist 2022).

Footnotes:

¹ General habitat, and microhabitat column information, reprinted from CNDDDB (September 2022).

² Rankings from CNDDDB (September 2022).

Column Header Categories and Abbreviations:

FESA: Listing status under the federal Endangered Species Act (ESA)

FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; FD = Federally Delisted

CESA: Listing status under the California state Endangered Species Act (CESA)

SE = State Endangered; SD = State Delisted; ST = State Threatened.

Global Rank: Global Rank from NatureServe's Heritage Methodology (NatureServe 2022) (ranking according to degree of global imperilment - G1 = Critically Imperiled—At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors; G2 = Imperiled—At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors; G3 = Vulnerable—At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors; G4 = Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors; G5 = Secure—Common; widespread and abundant. Subspecies/variety level: "Subspecies/varieties receive a T-rank attached to the G-rank. With the subspecies/varieties, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety" (CDFW 2022e); ? = "Denotes inexact numeric rank" (NatureServe 2022); Q = "Questionable taxonomy that may reduce conservation priority" (NatureServe 2022)

State Rank: State Rank from NatureServe's Heritage Methodology (NatureServe 2022) (ranking according to degree of imperilment in the state (California) - S1 = Critically Imperiled—Critically imperiled in the state because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state; S2 = Imperiled—Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state; S3 = Vulnerable—Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state; S4 = Apparently Secure—Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors; S5 = Secure—Common, widespread, and abundant in the state; SNR = State Not Ranked.

Other Statuses (other federal or state listings may include):

S (California Department of Forestry and Fire Protection Sensitive): "those species that warrant special protection during timber operations" (CDFW 2022e);

FP (CDFW Fully Protected Animal): "This classification was the State of California's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds and mammals. Most of the species on these lists have subsequently been listed under the state and/or federal endangered species acts." (CDFW 2022e);

SSC (CDFW Species of Special Concern): "It is the goal and responsibility of the Department of Fish and Wildlife to maintain viable populations of all native species. To this end, the Department has designated certain vertebrate species as 'Species of Special Concern' because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating species as 'Species of Special Concern' is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long-term viability" (CDFW 2022e);

WL (California Department of Fish and Wildlife Watch List): "The CDFW maintains a list consisting of taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status" (CDFW 2022e);

Potential to Occur:

- No Potential** Habitat in and adjacent to the PSB is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- Low Potential:** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found in the PSB.
- Moderate Potential:** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found in the PSB.
- High Potential:** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on in the PSB
- Present:** Detected or documented on-site.

Critical Habitat

There is no USFWS or NOAA-designated Critical Habitat within the BSA. However, there is NOAA-designated Critical Habitat for the Killer Whale (*Orcinus orca*) and Green Sturgeon (*Acipenser medirostris* pop. 1; southern DPS) within one mile of the BSA (**Appendix A, Figure 5**). The Critical Habitat is located in the Trinidad Bay, where no work is proposed. No impact to critical habitat will occur.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) requires that EFH be identified for all federally managed species including all species managed by the Pacific Fisheries Management Council (PFMC). EFH has been defined for the purposes of the MSFCMA as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” NOAA Fisheries has further added the following interpretations to clarify this definition:

- “Waters” include aquatic areas and their associated physical, chemical, and biological properties that are used by fish, and may include areas historically used by fish where appropriate;
- “Substrate” includes sediment, hard bottom, structures underlying the waters, and associated biological communities;
- “Necessary” means the habitat required to support a sustainable fishery and the managed species’ contribution to a healthy ecosystem; and
- “Spawning, breeding, feeding, or growth to maturity” covers the full life cycle of a species.

Adverse effect means any effect that reduces quality and/or quantity of EFH, and may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey or reduction in species fecundity), or site-specific or habitat-wide effects, including individual, cumulative, or synergistic consequences of actions.

Under the PFMC, the Pacific Coast Salmon Fishery Management Plan (FMP) was created to manage commercial and recreational salmon fisheries along the west coast of the U.S. There is designated Chinook (*Oncorhynchus tshawytscha*) and Coho (*Oncorhynchus kisutch*) Salmon EFH within the BSA, and the PFMC Salmon FMP encompasses these species (**Appendix B, EFH Report**). However, no in-water work where salmon would occur is proposed and no impacts to EFH are expected. A recommendation to protect EFH is provided in **Section 6**.

6. Conclusion and Recommendations

Based on surveys, suitable habitat, and nearby occurrence records, five special status plants have moderate potential to occur within the PSB. Protocol level plant surveys will be required in April and June to determine if special status plant species are present in the PSB. No state or federally listed plants have a moderate or high potential to occur in the PSB.

Red alder woodland, Redwood forest and woodland, and Salal – berry brambles are all SNCs present in the PSB and may also be considered ESHAs in the Coastal Zone. Some berry brambles may be removed south of Van Wycke Street, but would be expected to revegetate naturally, resulting in temporary impacts. The Project requires the clearing of approximately 0.5 acres of Red alder woodland and some redwood trees surrounding the water tanks up to a distance of 80 feet, which will result in permanent impacts. Loss of habitat (including SNCs which also may be ESHA) may occur.

Three bird species (Marbled Murrelet, Bald Eagle, and Bank Swallow) that are federally-listed, state-listed (or both) have a moderate potential to occur based on recent detections in proximity to the BSA. However, these species are more likely to fly over the BSA than nest within the BSA. In addition, three other special status mammals, 12 other birds, four amphibians, and two fish species have a moderate to high potential to occur. Due to the possibility of various species occurring within the BSA during construction, a pre-construction awareness training on identification of special status mammals, birds, amphibians, and their sign is recommended to reduce potential impacts.

With inclusion of the measures listed below, impacts to sensitive plants, SNCs, and wildlife species would be reduced. The proposed measures may be included in and potentially expanded upon in forthcoming regulatory documents (as needed).

Recommendations to Protect Special Status Plants

Avoidance and minimization measures for special status plant species are addressed collectively for all species. Significant impacts to special-status plant species present or likely to be present onsite shall be minimized, or avoided with the following measures:

- Seasonally appropriate pre-construction surveys for special status plant species shall occur prior to construction within the planned area of disturbance for the project, during the appropriate blooming times (April and June). Survey methods shall comply with CDFW rare plant survey protocols and shall be performed by a qualified field botanist. Any populations of special status plant species that are detected shall be mapped.
- The locations of any special status plant populations to be avoided shall be clearly identified in the field and surrounded by highly visible exclusion fencing and/or flagging.
- A pre-construction worker training will occur within seven days of the start of construction and detail any areas where special status plant populations have been identified for protection within the limits of construction, staging, and stockpiling.

If special status plant populations are detected where construction would have unavoidable impacts, a compensatory conservation plan shall be prepared and implemented in coordination with CDFW. Such plans may include salvage, propagation, on-site reintroduction in restored habitats, and monitoring.

Recommendations to Protect Sensitive Natural Communities

Significant impacts to Sensitive Natural Communities present onsite shall be minimized, or avoided, with the following measures:

- Pruning and removal of trees will be kept to the minimum necessary for fire safety and to complete project activities. If impacts cannot be avoided, the SNCs shall be replaced at an off-site location at no less than a 1:1 ratio or to the satisfaction of jurisdictional agencies.

Recommendations to Protect Special Status Mammals

The White-footed Vole (CDFW SSC), Silver-haired Bat (CDFW SAL), and Fisher (CDFW SSC) have a moderate potential to occur based on detections or habitat quality within and around the BSA. The following measure is recommended for inclusion to reduce potential impacts:

- Potential locations for denning, roosting, and nesting will be inspected within the PSB and BSA within a week of construction commencing. Varying for species, this includes hollowed-out trees, snags, and under rocks and logs within the BSA.

- All trees planned for removal will be marked and a qualified biologist will thoroughly inspect them for signs of the species' inhabitation within a week of removal.
- If a den, roost, or nest is located, a no-work buffer will be determined based on the species.
- A pre-construction worker training will occur within seven days of the start of construction and address identification and protection of special status mammals.

Recommendations to Protect Special Status and Nesting Birds

One special status species (California Brown Pelican; CDFW Fully Protected) was observed flying over the BSA during the site visit. Three bird species (Marbled Murrelet, Bald Eagle, and Bank Swallow) that are federally-listed, state-listed (or both) have a moderate potential to occur based on recent detections in proximity to the BSA. These listed species are unlikely to forage or nest within the BSA. The Project would not adversely affect these species, and consultation under Section 7 of the ESA would therefore not be required. However, twelve other special status bird species have a moderate to high potential to occur.

In addition, migratory and nesting birds are protected by the Migratory Bird Treaty Act and Fish and Game Code. If state special status and/or native migratory birds are nesting in the PSB, or up to 500 feet during construction activities, these species may be impacted by removal of nesting habitat, elevated levels of noise, and anthropogenic disturbance. To protect nesting special status birds, as well as native migratory bird species that are nesting, the following measure is recommended for inclusion into environmental documentation to reduce potential impacts to said species:

- Ground disturbance and vegetation clearing would be conducted, if possible, during the fall and/or winter months and outside of the avian nesting season (which is generally assumed to occur between March 15 – August 15) to avoid any direct effects to special-status and protected birds.
- If ground disturbance or vegetation clearing cannot be confined to the fall and/or winter outside of the nesting season, a qualified biologist would conduct pre-construction surveys within the vicinity of the PSB, to check for nesting activity of native birds and to evaluate the site for presence of raptors and special status bird species. The ornithologist would conduct at minimum a one-day pre-construction survey within the seven-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance and vegetation removal work lapses for seven days or longer during the nesting season, a qualified biologist would conduct a supplemental avian pre-construction survey before Project work is reinitiated.
- If active nests are detected within the construction footprint, or within 500 feet of construction activities, the biologist would flag a buffer around each nest. Construction activities would avoid nest sites until the biologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within up to 500 feet of the construction area, buffers would be implemented as needed. In general, the buffer size for common species would be determined on a case-by-case basis in consultation with the CDFW and, if applicable, with USFWS. Buffer sizes would take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds.

- If active nests are detected during the survey, the qualified biologist would monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified biologist, disturb nesting activities (e.g., excessive noise), would be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified biologist would immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors.
- A pre-construction worker training will occur within seven days of the start of construction and address identification and protection of special status and nesting birds.

Recommendations to Protect Special Status Amphibians

The Pacific Tailed Frog (CDFW SSC), Del Norte Salamander (CDFW Watch List), Northern Red-legged Frog (CDFW SSC), and Southern Torrent Salamander (CDFW SSC) have a moderate to high potential to occur based on recorded occurrences (either public observations or on the CNDDDB; CDFW 2022f, iNaturalist 2022) or the presence of suitable habitat within or nearby the BSA. Also, Deadman’s Creek is described as amphibian-bearing in a Nonindustrial Timber Management Plan (N. Simpson, personal communication, November 17, 2022). To reduce potential impacts to these amphibian species, the following measures are recommended:

- A qualified biologist would perform a pre-construction survey for the amphibian species within seven days prior to commencement of ground disturbance. The survey shall be limited to the PSB and within 100 feet of suitable habitat. Suitable habitat would be determined by the qualified biologist. The biologist would relocate any specimens that occur within the work-impact zone to nearby suitable habitat.
- In the event that a special status amphibian is observed in an active construction zone, the contractor would halt construction activities in the area and the frog and/or salamander would be moved by a qualified biologist to a safe location in similar habitat outside of the construction zone.
- Work crews will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for amphibians that may have become trapped or are seeking refuge.
- A pre-construction worker training will occur within seven days of the start of construction and address identification and protection of special amphibians.

Recommendations to Protect Special Status Fish and EFH

Two special status fish species (Western Brook Lamprey and Coast Cutthroat Trout) have a moderate potential to occur within Deadman’s Creek, which crosses under Westhaven Drive and the BSA. Additionally, there is designated Chinook (*Oncorhynchus tshawytscha*) and Coho (*Oncorhynchus kisutch*) Salmon EFH within the BSA, and the PFMC Salmon FMP encompasses these species. Deadman’s Creek

is not currently mapped as containing special status or listed fish species (CDFW 2022f). Currently, no in-water work or modification to the culvert that directs Deadman's Creek under Westhaven Drive is proposed. If Project construction plans involving the culvert or in-water work change, additional recommendations to protect special status fish will be implemented. The following measure is recommended to reduce potential impacts to EFH and special status fish species:

- Any Project-related construction materials or dirt from trench-digging will be restricted from entering Deadman's Creek to reduce impacts of sedimentation or turbidity.
- Removal of riparian habitat along Deadman's Creek shall be avoided if feasible. If riparian habitat removal cannot be avoided, riparian habitat would be replanted at ratios acceptable to jurisdictional resource agencies.

7. Scope and limitations

GHD otherwise disclaims responsibility to any person other than City of Trinidad arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer to section 10 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

8. Assumptions

Conclusions for this BRR were drawn from historic surveys and studies, as well as web-based sensitive species database and literature searches, field surveys and site visits. As these studies/surveys only serve as a snapshot of conditions during a short time period, they may not accurately reflect actual occurrence of species presence in the Project vicinity at a given time. Therefore, conclusions in this BRR have been based more on the assumption of presence or non-presence given existing habitat in the PSB and BSA, and impact minimization measures have been developed accordingly. All determinations herein were based on the proposed Project Description, the current Project footprint, known as the PSB, and a buffered distance of 100 feet to account for impacts to wildlife species, known as the BSA (**Appendix A, Figure 2-1 and 2-2**). If the Project footprint or construction methods change significantly prior to Project implementation, determinations would need to be revisited, to ensure that they are still accurate.

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10. Report Preparers

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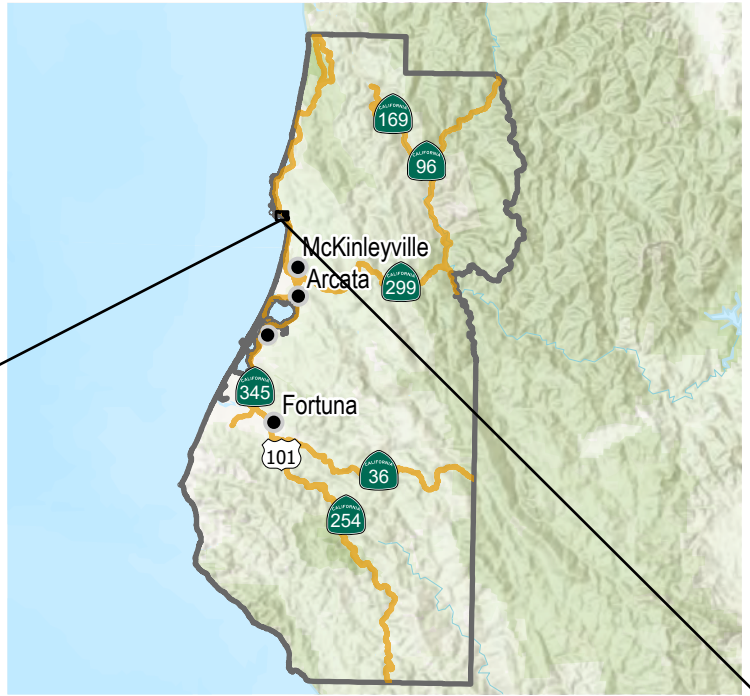
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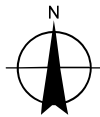
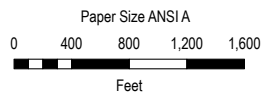
Appendices

Appendix A

Figures



Legend
 Project Study Boundary



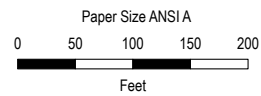
**City of Trinidad
 Water Tank and Pipeline
 Replacement Project**

Project No. 12591317
 Revision No. -
 Date 11/17/2022

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

Vicinity Map

FIGURE 1

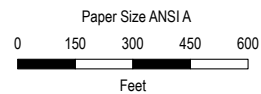


City of Trinidad
Water Tank and Pipeline
Replacement Project

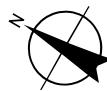
Project No. 12591317
Revision No. -
Date 11/17/2022

**Project Study Boundary
and Biological Study Area**

FIGURE 2-1



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



City of Trinidad
Water Tank and Pipeline
Replacement Project

Project No. 12591317
Revision No. -
Date 11/17/2022

**Project Study Boundary
and Biological Study Area**

FIGURE 2-2



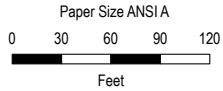
Legend

- Biological Study Area (100' from PSB)
- Project Study Boundary
- Parcel Boundaries
- ▲ Vegetation/ SNC Point

Sensitive Natural Communities

Common Name

- Berry brambles
- Red alder



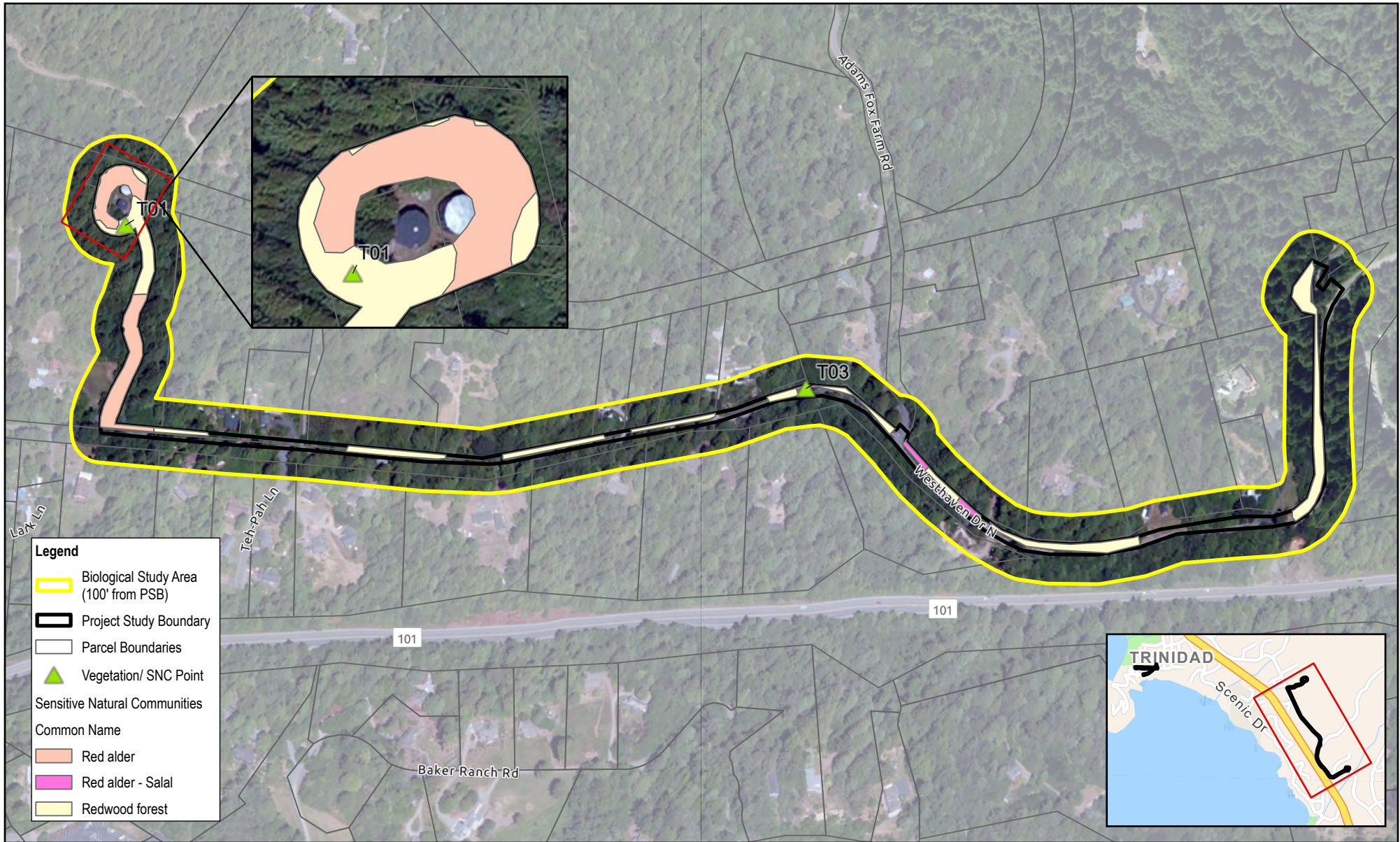
Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



City of Trinidad
Water Tank and Pipeline
Replacement Project

Project No. 12591317
 Revision No. -
 Date 11/17/2022

Sensitive Natural Communities

FIGURE 3-1



<p>Paper Size ANSIA</p> <p>0 100 200 300 400 500</p> <p>Feet</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet</p>			<p>City of Trinidad Water Tank and Pipeline Replacement Project</p>	<p>Project No. 12591317 Revision No. - Date 11/18/2022</p>
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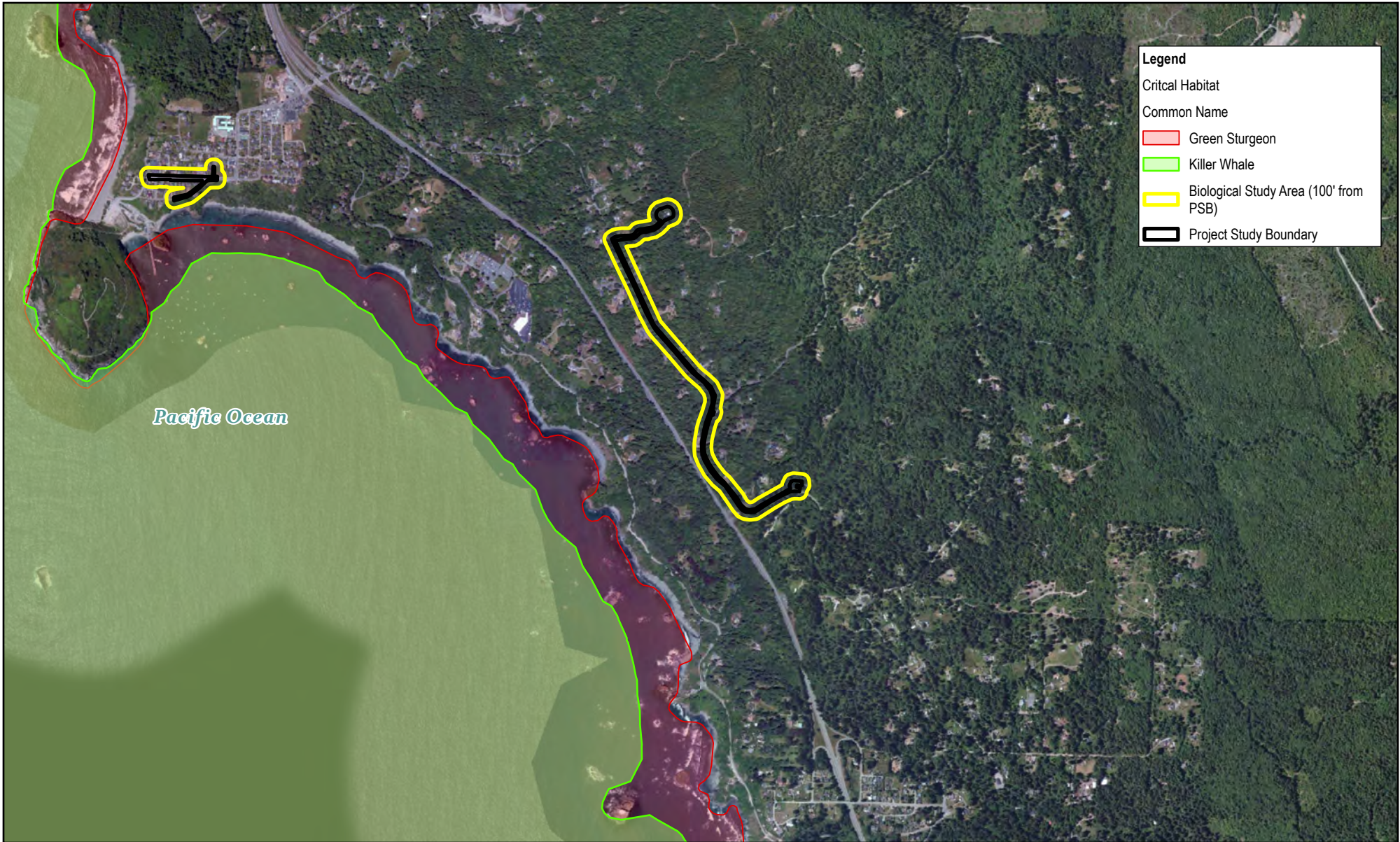
Sensitive Natural Communities

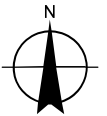

FIGURE 3-2



Riparian Vegetation

FIGURE 4



<p>Paper Size ANSIA</p> <p>0 740 1,480 2,220</p> <p>Feet</p> <p>Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet</p>			<p>City of Trinidad Water Tank and Pipeline Replacement Project</p> <p>Critical Habitat</p>	<p>Project No. 12591317 Revision No. - Date 11/17/2022</p> <p>FIGURE 5</p>
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Appendix B

Database Search Results

**(CNDDDB, CNPS, IPaC, EFH, NOAA Fisheries
Critical Habitat)**

CNDDB 9-Quad Species List 358 records.

v QV API Elements for 9QuadsElement Type	Scientific Name	Common Name	Element Code	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4112328	BALD HILLS	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4112412	TRINIDAD	Mapped	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4112318	PANTHER CREEK	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Plethodon elongatus	Del Norte salamander	AAAAD12050	None	None	WL	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Amphibians - Plethodontidae - Plethodon elongatus
Animals - Amphibians	Plethodon elongatus	Del Norte salamander	AAAAD12050	None	None	WL	-	4112318	PANTHER CREEK	Mapped and Unprocessed	Animals - Amphibians - Plethodontidae - Plethodon elongatus
Animals - Amphibians	Plethodon elongatus	Del Norte salamander	AAAAD12050	None	None	WL	-	4112411	CRANNELL	Unprocessed	Animals - Amphibians - Plethodontidae - Plethodon elongatus
Animals - Amphibians	Plethodon elongatus	Del Norte salamander	AAAAD12050	None	None	WL	-	4112328	BALD HILLS	Mapped and Unprocessed	Animals - Amphibians - Plethodontidae - Plethodon elongatus
Animals - Amphibians	Rana aurora	northern red- legged frog	AAABH01021	None	None	SSC	-	4112328	BALD HILLS	Mapped	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red- legged frog	AAABH01021	None	None	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red- legged frog	AAABH01021	None	None	SSC	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red- legged frog	AAABH01021	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red- legged frog	AAABH01021	None	None	SSC	-	4112318	PANTHER CREEK	Mapped	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red- legged frog	AAABH01021	None	None	SSC	-	4012482	TYEE CITY	Mapped	Animals - Amphibians - Ranidae - Rana aurora

Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4112318	PANTHER CREEK	Mapped	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4112412	TRINIDAD	Mapped	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4112411	CRANNELL	Mapped	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rana boylei	foothill yellow-legged frog	AAABH01050	None	Endangered	SSC	-	4112328	BALD HILLS	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4112328	BALD HILLS	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4112318	PANTHER CREEK	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Birds	Accipiter cooperii	Cooper's hawk	ABNKC12040	None	None	WL	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Accipitridae - Accipiter cooperii
Animals - Birds	Accipiter striatus	sharp-shinned hawk	ABNKC12020	None	None	WL	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Accipitridae - Accipiter striatus

Animals - Birds	Accipiter striatus	sharp-shinned hawk	ABNKC12020	None	None	WL	-	4112421	RODGERS PEAK	Unprocessed	Animals - Birds - Accipitridae - Accipiter striatus
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	4112421	RODGERS PEAK	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4112328	BALD HILLS	Mapped	Animals - Birds - Alcidae - Brachyramphus marmoratus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4112421	RODGERS PEAK	Mapped	Animals - Birds - Alcidae - Brachyramphus marmoratus
Animals - Birds	Cerorhinca monocerata	rhinoceros auklet	ABNNN11010	None	None	WL	-	4112412	TRINIDAD	Mapped	Animals - Birds - Alcidae - Cerorhinca monocerata
Animals - Birds	Cerorhinca monocerata	rhinoceros auklet	ABNNN11010	None	None	WL	-	4112411	CRANNELL	Mapped	Animals - Birds - Alcidae - Cerorhinca monocerata
Animals - Birds	Fratercula cirrhata	tufted puffin	ABNNN12010	None	None	SSC	-	4112411	CRANNELL	Mapped	Animals - Birds - Alcidae - Fratercula cirrhata
Animals - Birds	Fratercula cirrhata	tufted puffin	ABNNN12010	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Birds - Alcidae - Fratercula cirrhata
Animals - Birds	Ptychoramphus aleuticus	Cassin's auklet	ABNNN08010	None	None	SSC	-	4112412	TRINIDAD	Unprocessed	Animals - Birds - Alcidae - Ptychoramphus aleuticus
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Botaurus lentiginosus	American bittern	ABNGA01020	None	None	-	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Ardeidae - Botaurus lentiginosus
Animals - Birds	Egretta thula	snowy egret	ABNGA06030	None	None	-	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Ardeidae - Egretta thula
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4112411	CRANNELL	Unprocessed	Animals - Birds - Charadriidae - Charadrius montanus
Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Charadriidae - Charadrius montanus
Animals - Birds	Charadrius montanus	mountain plover	ABNNB03100	None	None	SSC	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Charadriidae - Charadrius montanus

Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012482	TYEE CITY	Mapped and Unprocessed	Animals - Birds - Charadriidae - Charadrius nivosus nivosus
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Birds - Charadriidae - Charadrius nivosus nivosus
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4112411	CRANNELL	Unprocessed	Animals - Birds - Charadriidae - Charadrius nivosus nivosus
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Birds - Charadriidae - Charadrius nivosus nivosus
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Birds - Charadriidae - Charadrius nivosus nivosus
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	4112421	RODGERS PEAK	Mapped	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	4112411	CRANNELL	Unprocessed	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	4012481	ARCATA NORTH	Mapped	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4112411	CRANNELL	Mapped	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Hydrobates furcatus	fork-tailed storm-petrel	ABNDC04010	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Birds - Hydrobatidae - Hydrobates furcatus
Animals - Birds	Hydrobates furcatus	fork-tailed storm-petrel	ABNDC04010	None	None	SSC	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Birds - Hydrobatidae - Hydrobates furcatus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4112411	CRANNELL	Mapped	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4012388	BLUE LAKE	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Poecile atricapillus	black-capped chickadee	ABPAW01010	None	None	WL	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Paridae - Poecile atricapillus
Animals - Birds	Passerculus sandwichensis alaudinus	Bryant's savannah sparrow	ABPBX99011	None	None	SSC	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Passerellidae - Passerculus sandwichensis alaudinus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	FP	-	4012482	TYEE CITY	Unprocessed	Animals - Birds - Pelecanidae - Pelecanus occidentalis californicus

Animals - Birds	<i>Pelecanus occidentalis californicus</i>	California brown pelican	ABNFC01021	Delisted	Delisted	FP	-	4112421	RODGERS PEAK	Unprocessed	Animals - Birds - Pelecanidae - <i>Pelecanus occidentalis californicus</i>
Animals - Birds	<i>Pelecanus occidentalis californicus</i>	California brown pelican	ABNFC01021	Delisted	Delisted	FP	-	4112411	CRANNELL	Unprocessed	Animals - Birds - Pelecanidae - <i>Pelecanus occidentalis californicus</i>
Animals - Birds	<i>Pelecanus occidentalis californicus</i>	California brown pelican	ABNFC01021	Delisted	Delisted	FP	-	4112412	TRINIDAD	Unprocessed	Animals - Birds - Pelecanidae - <i>Pelecanus occidentalis californicus</i>
Animals - Birds	<i>Nannopterum auritum</i>	double-crested cormorant	ABNFD01020	None	None	WL	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Birds - Phalacrocoracidae - <i>Nannopterum auritum</i>
Animals - Birds	<i>Nannopterum auritum</i>	double-crested cormorant	ABNFD01020	None	None	WL	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Birds - Phalacrocoracidae - <i>Nannopterum auritum</i>
Animals - Birds	<i>Nannopterum auritum</i>	double-crested cormorant	ABNFD01020	None	None	WL	-	4112421	RODGERS PEAK	Unprocessed	Animals - Birds - Phalacrocoracidae - <i>Nannopterum auritum</i>
Animals - Birds	<i>Rallus obsoletus obsoletus</i>	California Ridgway's rail	ABNME05011	Endangered	Endangered	FP	-	4012482	TYEE CITY	Mapped	Animals - Birds - Rallidae - <i>Rallus obsoletus obsoletus</i>
Animals - Birds	<i>Asio flammeus</i>	short-eared owl	ABNSB13040	None	None	SSC	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Strigidae - <i>Asio flammeus</i>
Animals - Birds	<i>Asio otus</i>	long-eared owl	ABNSB13010	None	None	SSC	-	4012388	BLUE LAKE	Unprocessed	Animals - Birds - Strigidae - <i>Asio otus</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012388	BLUE LAKE	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4012481	ARCATA NORTH	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4112318	PANTHER CREEK	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4112328	BALD HILLS	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4112411	CRANNELL	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4112412	TRINIDAD	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Strix occidentalis caurina</i>	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4112421	RODGERS PEAK	Mapped	Animals - Birds - Strigidae - <i>Strix occidentalis caurina</i>
Animals - Birds	<i>Contopus cooperi</i>	olive-sided flycatcher	ABPAE32010	None	None	SSC	-	4012481	ARCATA NORTH	Unprocessed	Animals - Birds - Tyrannidae - <i>Contopus cooperi</i>
Animals - Fish	<i>Acipenser medirostris</i> pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4112421	RODGERS PEAK	Unprocessed	Animals - Fish - Acipenseridae - <i>Acipenser medirostris</i> pop. 2
Animals - Fish	<i>Eucyclogobius newberryi</i>	tidewater goby	AFCQN04010	Endangered	None	-	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Fish - Gobiidae - <i>Eucyclogobius newberryi</i>

Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4112412	TRINIDAD	Mapped	Animals - Fish - Gobiidae - Eucyclogobius newberryi
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Fish - Osmeridae - Spirinchus thaleichthys
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4012482	TYEE CITY	Unprocessed	Animals - Fish - Osmeridae - Spirinchus thaleichthys
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4012482	TYEE CITY	Mapped	Animals - Fish - Osmeridae - Thaleichthys pacificus
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Fish - Osmeridae - Thaleichthys pacificus
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Osmeridae - Thaleichthys pacificus
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4112421	RODGERS PEAK	Mapped	Animals - Fish - Osmeridae - Thaleichthys pacificus
Animals - Fish	Thaleichthys pacificus	eulachon	AFCHB04010	Threatened	None	-	-	4012388	BLUE LAKE	Mapped	Animals - Fish - Osmeridae - Thaleichthys pacificus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Fish - Petromyzontidae - Lampetra richardsoni
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Petromyzontidae - Lampetra richardsoni
Animals - Fish	Lampetra richardsoni	western brook lamprey	AFBAA02180	None	None	SSC	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Petromyzontidae - Lampetra richardsoni
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4112318	PANTHER CREEK	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4112328	BALD HILLS	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii

Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012388	BLUE LAKE	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4112328	BALD HILLS	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4112421	RODGERS PEAK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4012481	ARCATA NORTH	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	-	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 16
Animals - Fish	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 16
Animals - Fish	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4012481	ARCATA NORTH	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 16
Animals - Fish	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4112328	BALD HILLS	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 16
Animals - Fish	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4112421	RODGERS PEAK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 16
Animals - Fish	Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	AFCHA0209Q	Threatened	None	-	-	4012388	BLUE LAKE	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 16
Animals - Fish	Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	AFCHA0213B	None	Candidate Endangered	SSC	-	4012388	BLUE LAKE	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 36

Animals - Fish	Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	AFCHA0213B	None	Candidate Endangered	SSC	-	4112328	BALD HILLS	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 36
Animals - Fish	Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	AFCHA0213B	None	Candidate Endangered	SSC	-	4012481	ARCATA NORTH	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 36
Animals - Fish	Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	AFCHA0213B	None	Candidate Endangered	SSC	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 36
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha pop. 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha pop. 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4112421	RODGERS PEAK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha pop. 17
Animals - Fish	Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	AFCHA0205S	Threatened	None	-	-	4012388	BLUE LAKE	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha pop. 17
Animals - Fish	Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	AFCHA02056	Candidate	Threatened	SSC	-	4112411	CRANNELL	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha pop. 30
Animals - Fish	Oncorhynchus tshawytscha pop. 30	chinook salmon - upper Klamath and Trinity Rivers ESU	AFCHA02056	Candidate	Threatened	SSC	-	4112318	PANTHER CREEK	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus tshawytscha pop. 30
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4112411	CRANNELL	Mapped	Animals - Insects - Apidae - Bombus caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012481	ARCATA NORTH	Mapped	Animals - Insects - Apidae - Bombus caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4012482	TYEE CITY	Mapped	Animals - Insects - Apidae - Bombus caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4112421	RODGERS PEAK	Mapped	Animals - Insects - Apidae - Bombus caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4112412	TRINIDAD	Mapped	Animals - Insects - Apidae - Bombus caliginosus
Animals - Insects	Bombus crotchii	Crotch bumble bee	IIHYM24480	None	None	-	-	4012482	TYEE CITY	Mapped	Animals - Insects - Apidae - Bombus crotchii
Animals - Insects	Bombus crotchii	Crotch bumble bee	IIHYM24480	None	None	-	-	4012481	ARCATA NORTH	Mapped	Animals - Insects - Apidae - Bombus crotchii
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4012482	TYEE CITY	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4112411	CRANNELL	Mapped	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis

Animals - Insects	Scaphinotus behrensi	Behrens' snail-eating beetle	IICOL4L070	None	None	-	-	4012481	ARCATA NORTH	Mapped	Animals - Insects - Carabidae - Scaphinotus behrensi
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012481	ARCATA NORTH	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4112411	CRANNELL	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4112412	TRINIDAD	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Aplodontia rufa humboldtiana	Humboldt mountain beaver	AMAF01017	None	None	-	-	4012388	BLUE LAKE	Mapped	Animals - Mammals - Aplodontiidae - Aplodontia rufa humboldtiana
Animals - Mammals	Arborimus albipes	white-footed vole	AMAFF23010	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus albipes
Animals - Mammals	Arborimus albipes	white-footed vole	AMAFF23010	None	None	SSC	-	4112421	RODGERS PEAK	Unprocessed	Animals - Mammals - Cricetidae - Arborimus albipes
Animals - Mammals	Arborimus albipes	white-footed vole	AMAFF23010	None	None	SSC	-	4012482	TYEE CITY	Mapped	Animals - Mammals - Cricetidae - Arborimus albipes
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012481	ARCATA NORTH	Mapped	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4112411	CRANNELL	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4112318	PANTHER CREEK	Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4112328	BALD HILLS	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012388	BLUE LAKE	Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4112412	TRINIDAD	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum

Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4112411	CRANNELL	Mapped	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4012482	TYEE CITY	Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Enhydra lutris nereis	southern sea otter	AMAJF09012	Threatened	None	FP	-	4112411	CRANNELL	Unprocessed	Animals - Mammals - Mustelidae - Enhydra lutris nereis
Animals - Mammals	Enhydra lutris nereis	southern sea otter	AMAJF09012	Threatened	None	FP	-	4112421	RODGERS PEAK	Unprocessed	Animals - Mammals - Mustelidae - Enhydra lutris nereis
Animals - Mammals	Enhydra lutris nereis	southern sea otter	AMAJF09012	Threatened	None	FP	-	4112412	TRINIDAD	Unprocessed	Animals - Mammals - Mustelidae - Enhydra lutris nereis
Animals - Mammals	Martes caurina humboldtensis	Humboldt marten	AMAJF01012	Threatened	Endangered	SSC	-	4112328	BALD HILLS	Mapped	Animals - Mammals - Mustelidae - Martes caurina humboldtensis
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4112328	BALD HILLS	Unprocessed	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4112421	RODGERS PEAK	Unprocessed	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4112411	CRANNELL	Unprocessed	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4112318	PANTHER CREEK	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4012481	ARCATA NORTH	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Pekania pennanti	Fisher	AMAJF01020	None	None	SSC	-	4012388	BLUE LAKE	Mapped and Unprocessed	Animals - Mammals - Mustelidae - Pekania pennanti
Animals - Mammals	Eumetopias jubatus	Steller sea lion	AMAJC03010	Delisted	None	-	-	4112412	TRINIDAD	Mapped	Animals - Mammals - Otariidae - Eumetopias jubatus
Animals - Mammals	Antrozous pallidus	pallid bat	AMACC10010	None	None	SSC	-	4112328	BALD HILLS	Mapped	Animals - Mammals - Vespertilionidae - Antrozous pallidus
Animals - Mammals	Lasionycteris noctivagans	silver-haired bat	AMACC02010	None	None	-	-	4112328	BALD HILLS	Mapped	Animals - Mammals - Vespertilionidae - Lasionycteris noctivagans
Animals - Mammals	Myotis evotis	long-eared myotis	AMACC01070	None	None	-	-	4112328	BALD HILLS	Mapped	Animals - Mammals - Vespertilionidae - Myotis evotis

Animals - Mammals	Myotis evotis	long-eared myotis	AMACC01070	None	None	-	-	4012481	ARCATA NORTH	Mapped	Animals - Mammals - Vespertilionidae - Myotis evotis
Animals - Mammals	Myotis evotis	long-eared myotis	AMACC01070	None	None	-	-	4112411	CRANNELL	Mapped	Animals - Mammals - Vespertilionidae - Myotis evotis
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4112411	CRANNELL	Mapped	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4112318	PANTHER CREEK	Mapped	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012481	ARCATA NORTH	Mapped	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4112421	RODGERS PEAK	Mapped and Unprocessed	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4112328	BALD HILLS	Mapped	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Mollusks	Margaritifera falcata	western pearlshell	IMBIV27020	None	None	-	-	4012388	BLUE LAKE	Mapped	Animals - Mollusks - Margaritiferidae - Margaritifera falcata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012388	BLUE LAKE	Mapped	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4012481	ARCATA NORTH	Mapped	Animals - Reptiles - Emydidae - Emys marmorata
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4112411	CRANNELL	Mapped	Animals - Reptiles - Emydidae - Emys marmorata
Community - Terrestrial	Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	-	-	4112421	RODGERS PEAK	Mapped	Community - Terrestrial - Coastal and Valley Freshwater Marsh
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4012482	TYEE CITY	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh
Community - Terrestrial	Northern Foredune Grassland	Northern Foredune Grassland	CTT21211CA	None	None	-	-	4012482	TYEE CITY	Mapped	Community - Terrestrial - Northern Foredune Grassland
Community - Terrestrial	Sitka Spruce Forest	Sitka Spruce Forest	CTT82110CA	None	None	-	-	4112412	TRINIDAD	Mapped	Community - Terrestrial - Sitka Spruce Forest
Community - Terrestrial	Sphagnum Bog	Sphagnum Bog	CTT51110CA	None	None	-	-	4112412	TRINIDAD	Mapped	Community - Terrestrial - Sphagnum Bog
Plants - Bryophytes	Discellium nudum	naked flag moss	NBMUS2E010	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Bryophytes - Discoliaceae - Discellium nudum
Plants - Bryophytes	Trichodon cylindricus	cylindrical trichodon	NBMUS7N020	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Bryophytes - Ditrichaceae - Trichodon cylindricus
Plants - Bryophytes	Trichodon cylindricus	cylindrical trichodon	NBMUS7N020	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped	Plants - Bryophytes - Ditrichaceae - Trichodon cylindricus

Plants - Bryophytes	Trichodon cylindricus	cylindrical trichodon	NBMUS7N020	None	None	-	2B.2	4012481	ARCATA NORTH	Mapped	Plants - Bryophytes - Ditrichaceae - Trichodon cylindricus
Plants - Bryophytes	Fissidens pauperculus	minute pocket moss	NBMUS2W0U0	None	None	-	1B.2	4012481	ARCATA NORTH	Mapped	Plants - Bryophytes - Fissidentaceae - Fissidens pauperculus
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	4012482	TYEE CITY	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	4112411	CRANNELL	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	4112421	RODGERS PEAK	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	4112412	TRINIDAD	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Usnea longissima	Methuselah's beard lichen	NLLEC5P420	None	None	-	4.2	4112328	BALD HILLS	Mapped	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselah's beard lichen	NLLEC5P420	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselah's beard lichen	NLLEC5P420	None	None	-	4.2	4112318	PANTHER CREEK	Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselah's beard lichen	NLLEC5P420	None	None	-	4.2	4012388	BLUE LAKE	Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012482	TYEE CITY	Unprocessed	Plants - Vascular - Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Apiaceae - Angelica lucida
Plants - Vascular	Angelica lucida	sea-watch	PDAPI070G0	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Apiaceae - Angelica lucida
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4012482	TYEE CITY	Unprocessed	Plants - Vascular - Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Hemizonia congesta ssp. tracyi	Tracy's tarplant	PDAST4R067	None	None	-	4.3	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Asteraceae - Hemizonia congesta ssp. tracyi

Plants - Vascular	<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	PDASTE5011	None	None	-	1B.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Asteraceae - <i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>
Plants - Vascular	<i>Layia carnosa</i>	beach layia	PDAST5N010	Threatened	Endangered	-	1B.1	4112411	CRANNELL	Mapped	Plants - Vascular - Asteraceae - <i>Layia carnosa</i>
Plants - Vascular	<i>Layia carnosa</i>	beach layia	PDAST5N010	Threatened	Endangered	-	1B.1	4012482	TYEE CITY	Mapped and Unprocessed	Plants - Vascular - Asteraceae - <i>Layia carnosa</i>
Plants - Vascular	<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	PDAST8H0H1	None	None	-	2B.2	4112411	CRANNELL	Mapped and Unprocessed	Plants - Vascular - Asteraceae - <i>Packera bolanderi</i> var. <i>bolanderi</i>
Plants - Vascular	<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	PDAST8H0H1	None	None	-	2B.2	4112318	PANTHER CREEK	Mapped	Plants - Vascular - Asteraceae - <i>Packera bolanderi</i> var. <i>bolanderi</i>
Plants - Vascular	<i>Cardamine angulata</i>	seaside bittercress	PDBRA0K010	None	None	-	2B.1	4112421	RODGERS PEAK	Mapped and Unprocessed	Plants - Vascular - Brassicaceae - <i>Cardamine angulata</i>
Plants - Vascular	<i>Erysimum menziesii</i>	Menzies' wallflower	PDBRA160R0	Endangered	Endangered	-	1B.1	4012482	TYEE CITY	Mapped and Unprocessed	Plants - Vascular - Brassicaceae - <i>Erysimum menziesii</i>
Plants - Vascular	<i>Silene scouleri</i> ssp. <i>scouleri</i>	Scouler's catchfly	PDCAR0U1MC	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Caryophyllaceae - <i>Silene scouleri</i> ssp. <i>scouleri</i>
Plants - Vascular	<i>Silene scouleri</i> ssp. <i>scouleri</i>	Scouler's catchfly	PDCAR0U1MC	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Caryophyllaceae - <i>Silene scouleri</i> ssp. <i>scouleri</i>
Plants - Vascular	<i>Carex arcta</i>	northern clustered sedge	PMCYP030X0	None	None	-	2B.2	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Cyperaceae - <i>Carex arcta</i>
Plants - Vascular	<i>Carex buxbaumii</i>	Buxbaum's sedge	PMCYP032B0	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Cyperaceae - <i>Carex buxbaumii</i>
Plants - Vascular	<i>Carex buxbaumii</i>	Buxbaum's sedge	PMCYP032B0	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Cyperaceae - <i>Carex buxbaumii</i>
Plants - Vascular	<i>Carex lenticularis</i> var. <i>limnophila</i>	lagoon sedge	PMCYP037A7	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Cyperaceae - <i>Carex lenticularis</i> var. <i>limnophila</i>
Plants - Vascular	<i>Carex lenticularis</i> var. <i>limnophila</i>	lagoon sedge	PMCYP037A7	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Cyperaceae - <i>Carex lenticularis</i> var. <i>limnophila</i>
Plants - Vascular	<i>Carex leptalea</i>	bristle-stalked sedge	PMCYP037E0	None	None	-	2B.2	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - <i>Carex leptalea</i>
Plants - Vascular	<i>Carex leptalea</i>	bristle-stalked sedge	PMCYP037E0	None	None	-	2B.2	4112411	CRANNELL	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - <i>Carex leptalea</i>
Plants - Vascular	<i>Carex lyngbyei</i>	Lyngbye's sedge	PMCYP037Y0	None	None	-	2B.2	4112411	CRANNELL	Mapped	Plants - Vascular - Cyperaceae - <i>Carex lyngbyei</i>
Plants - Vascular	<i>Carex lyngbyei</i>	Lyngbye's sedge	PMCYP037Y0	None	None	-	2B.2	4012482	TYEE CITY	Mapped	Plants - Vascular - Cyperaceae - <i>Carex lyngbyei</i>
Plants - Vascular	<i>Carex lyngbyei</i>	Lyngbye's sedge	PMCYP037Y0	None	None	-	2B.2	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Cyperaceae - <i>Carex lyngbyei</i>
Plants - Vascular	<i>Carex saliniformis</i>	deceiving sedge	PMCYP03BY0	None	None	-	1B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Cyperaceae - <i>Carex saliniformis</i>
Plants - Vascular	<i>Carex viridula</i> ssp. <i>viridula</i>	green yellow sedge	PMCYP03EM5	None	None	-	2B.3	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Cyperaceae - <i>Carex viridula</i> ssp. <i>viridula</i>

Plants - Vascular	<i>Carex viridula</i> ssp. <i>viridula</i>	green yellow sedge	PMCYP03EM5	None	None	-	2B.3	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Cyperaceae - <i>Carex viridula</i> ssp. <i>viridula</i>
Plants - Vascular	<i>Eleocharis parvula</i>	small spikerush	PMCYP091G0	None	None	-	4.3	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Cyperaceae - <i>Eleocharis parvula</i>
Plants - Vascular	<i>Empetrum nigrum</i>	black crowberry	PDEMP03020	None	None	-	2B.2	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Empetraceae - <i>Empetrum nigrum</i>
Plants - Vascular	<i>Astragalus rattanii</i> var. <i>rattanii</i>	Rattan's milk-vetch	PDFAB0F7E2	None	None	-	4.3	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Fabaceae - <i>Astragalus rattanii</i> var. <i>rattanii</i>
Plants - Vascular	<i>Astragalus umbraticus</i>	Bald Mountain milk-vetch	PDFAB0F990	None	None	-	2B.2	4112328	BALD HILLS	Mapped and Unprocessed	Plants - Vascular - Fabaceae - <i>Astragalus umbraticus</i>
Plants - Vascular	<i>Hosackia gracilis</i>	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Fabaceae - <i>Hosackia gracilis</i>
Plants - Vascular	<i>Lathyrus glandulosus</i>	sticky pea	PDFAB251A0	None	None	-	4.3	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Fabaceae - <i>Lathyrus glandulosus</i>
Plants - Vascular	<i>Lathyrus glandulosus</i>	sticky pea	PDFAB251A0	None	None	-	4.3	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Fabaceae - <i>Lathyrus glandulosus</i>
Plants - Vascular	<i>Lathyrus japonicus</i>	seaside pea	PDFAB250C0	None	None	-	2B.1	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Fabaceae - <i>Lathyrus japonicus</i>
Plants - Vascular	<i>Lathyrus japonicus</i>	seaside pea	PDFAB250C0	None	None	-	2B.1	4112411	CRANNELL	Mapped	Plants - Vascular - Fabaceae - <i>Lathyrus japonicus</i>
Plants - Vascular	<i>Lathyrus japonicus</i>	seaside pea	PDFAB250C0	None	None	-	2B.1	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Fabaceae - <i>Lathyrus japonicus</i>
Plants - Vascular	<i>Lathyrus palustris</i>	marsh pea	PDFAB250P0	None	None	-	2B.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Fabaceae - <i>Lathyrus palustris</i>
Plants - Vascular	<i>Lathyrus palustris</i>	marsh pea	PDFAB250P0	None	None	-	2B.2	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Fabaceae - <i>Lathyrus palustris</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4112411	CRANNELL	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4112318	PANTHER CREEK	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Ribes laxiflorum</i>	trailing black currant	PDGRO020V0	None	None	-	4.3	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Grossulariaceae - <i>Ribes laxiflorum</i>
Plants - Vascular	<i>Romanzoffia tracyi</i>	Tracy's romanzoffia	PDHYD0E030	None	None	-	2B.3	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Hydrophyllaceae - <i>Romanzoffia tracyi</i>
Plants - Vascular	<i>Juncus nevadensis</i> var. <i>inventus</i>	Sierra rush	PMJUN011Z5	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Juncaceae - <i>Juncus nevadensis</i> var. <i>inventus</i>
Plants - Vascular	<i>Lycopus uniflorus</i>	northern bugleweed	PDLAM0X080	None	None	-	4.3	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Lamiaceae - <i>Lycopus uniflorus</i>

Plants - Vascular	Erythronium oregonum	giant fawn lily	PMLIL0U0C0	None	None	-	2B.2	4112318	PANTHER CREEK	Mapped	Plants - Vascular - Liliaceae - Erythronium oregonum
Plants - Vascular	Erythronium oregonum	giant fawn lily	PMLIL0U0C0	None	None	-	2B.2	4012388	BLUE LAKE	Mapped	Plants - Vascular - Liliaceae - Erythronium oregonum
Plants - Vascular	Erythronium revolutum	coast fawn lily	PMLIL0U0F0	None	None	-	2B.2	4012388	BLUE LAKE	Mapped and Unprocessed	Plants - Vascular - Liliaceae - Erythronium revolutum
Plants - Vascular	Erythronium revolutum	coast fawn lily	PMLIL0U0F0	None	None	-	2B.2	4112328	BALD HILLS	Mapped and Unprocessed	Plants - Vascular - Liliaceae - Erythronium revolutum
Plants - Vascular	Lilium occidentale	western lily	PMLIL1A0G0	Endangered	Endangered	-	1B.1	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Liliaceae - Lilium occidentale
Plants - Vascular	Lycopodiella inundata	inundated bog-clubmoss	PPLYC03060	None	None	-	2B.2	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodiella inundata
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4112328	BALD HILLS	Mapped	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4112421	RODGERS PEAK	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4112318	PANTHER CREEK	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4112411	CRANNELL	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012481	ARCATA NORTH	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4012388	BLUE LAKE	Mapped and Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Iliamna latibracteata	California globe mallow	PDMAL0K040	None	None	-	1B.2	4012388	BLUE LAKE	Mapped	Plants - Vascular - Malvaceae - Iliamna latibracteata
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012388	BLUE LAKE	Mapped and Unprocessed	Plants - Vascular - Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4012481	ARCATA NORTH	Mapped and Unprocessed	Plants - Vascular - Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4112328	BALD HILLS	Mapped and Unprocessed	Plants - Vascular - Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea oregana ssp. eximia	coast checkerbloom	PDMAL110K9	None	None	-	1B.2	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Malvaceae - Sidalcea oregana ssp. eximia

Plants - Vascular	Monotropa uniflora	ghost-pipe	PDMON03030	None	None	-	2B.2	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Monotropaceae - Monotropa uniflora
Plants - Vascular	Monotropa uniflora	ghost-pipe	PDMON03030	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Monotropaceae - Monotropa uniflora
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4112318	PANTHER CREEK	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Pityopus californicus	California pinefoot	PDMON05010	None	None	-	4.2	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Monotropaceae - Pityopus californicus
Plants - Vascular	Montia howellii	Howell's montia	PDPOR05070	None	None	-	2B.2	4112318	PANTHER CREEK	Mapped	Plants - Vascular - Montiaceae - Montia howellii
Plants - Vascular	Montia howellii	Howell's montia	PDPOR05070	None	None	-	2B.2	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Montiaceae - Montia howellii
Plants - Vascular	Montia howellii	Howell's montia	PDPOR05070	None	None	-	2B.2	4112328	BALD HILLS	Mapped	Plants - Vascular - Montiaceae - Montia howellii
Plants - Vascular	Abronia umbellata var. breviflora	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Nyctaginaceae - Abronia umbellata var. breviflora
Plants - Vascular	Abronia umbellata var. breviflora	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Nyctaginaceae - Abronia umbellata var. breviflora
Plants - Vascular	Abronia umbellata var. breviflora	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4012482	TYEE CITY	Mapped	Plants - Vascular - Nyctaginaceae - Abronia umbellata var. breviflora
Plants - Vascular	Abronia umbellata var. breviflora	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4112411	CRANNELL	Mapped	Plants - Vascular - Nyctaginaceae - Abronia umbellata var. breviflora
Plants - Vascular	Oenothera wolfii	Wolf's evening-primrose	PDONA0C1K0	None	None	-	1B.1	4112411	CRANNELL	Mapped	Plants - Vascular - Onagraceae - Oenothera wolfii
Plants - Vascular	Oenothera wolfii	Wolf's evening-primrose	PDONA0C1K0	None	None	-	1B.1	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Onagraceae - Oenothera wolfii
Plants - Vascular	Oenothera wolfii	Wolf's evening-primrose	PDONA0C1K0	None	None	-	1B.1	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Onagraceae - Oenothera wolfii
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata

Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4112318	PANTHER CREEK	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	4112411	CRANNELL	Mapped	Plants - Vascular - Orchidaceae - Piperia candida
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Orchidaceae - Piperia candida
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	4112328	BALD HILLS	Mapped and Unprocessed	Plants - Vascular - Orchidaceae - Piperia candida
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's-clover	PDSCR0D402	None	None	-	1B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Orobanchaceae - Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's-clover	PDSCR0D402	None	None	-	1B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Orobanchaceae - Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's-clover	PDSCR0D402	None	None	-	1B.2	4012482	TYEE CITY	Mapped	Plants - Vascular - Orobanchaceae - Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's-clover	PDSCR0D402	None	None	-	1B.2	4012481	ARCATA NORTH	Mapped	Plants - Vascular - Orobanchaceae - Castilleja ambigua var. humboldtiensis
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4112411	CRANNELL	Mapped	Plants - Vascular - Orobanchaceae - Castilleja litoralis
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped and Unprocessed	Plants - Vascular - Orobanchaceae - Castilleja litoralis
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Orobanchaceae - Castilleja litoralis
Plants - Vascular	Castilleja mendocinensis	Mendocino Coast paintbrush	PDSCR0D3N0	None	None	-	1B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Orobanchaceae - Castilleja mendocinensis
Plants - Vascular	Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	PDSCR0J0C3	None	None	-	1B.2	4012482	TYEE CITY	Mapped	Plants - Vascular - Orobanchaceae - Chloropyron maritimum ssp. palustre
Plants - Vascular	Kopsiopsis hookeri	small groundcone	PDORO01010	None	None	-	2B.3	4112328	BALD HILLS	Mapped	Plants - Vascular - Orobanchaceae - Kopsiopsis hookeri
Plants - Vascular	Calamagrostis bolanderi	Bolander's reed grass	PMPOA17010	None	None	-	4.2	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Poaceae - Calamagrostis bolanderi
Plants - Vascular	Calamagrostis bolanderi	Bolander's reed grass	PMPOA17010	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Poaceae - Calamagrostis bolanderi

Plants - Vascular	<i>Calamagrostis bolanderi</i>	Bolander's reed grass	PMPOA17010	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Poaceae - <i>Calamagrostis bolanderi</i>
Plants - Vascular	<i>Pleuropogon refractus</i>	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Poaceae - <i>Pleuropogon refractus</i>
Plants - Vascular	<i>Pleuropogon refractus</i>	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4112318	PANTHER CREEK	Unprocessed	Plants - Vascular - Poaceae - <i>Pleuropogon refractus</i>
Plants - Vascular	<i>Pleuropogon refractus</i>	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Poaceae - <i>Pleuropogon refractus</i>
Plants - Vascular	<i>Pleuropogon refractus</i>	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Poaceae - <i>Pleuropogon refractus</i>
Plants - Vascular	<i>Pleuropogon refractus</i>	nodding semaphore grass	PMPOA4Y080	None	None	-	4.2	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Poaceae - <i>Pleuropogon refractus</i>
Plants - Vascular	<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Polemoniaceae - <i>Gilia capitata</i> ssp. <i>pacifica</i>
Plants - Vascular	<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4112328	BALD HILLS	Unprocessed	Plants - Vascular - Polemoniaceae - <i>Gilia capitata</i> ssp. <i>pacifica</i>
Plants - Vascular	<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4112411	CRANNELL	Mapped	Plants - Vascular - Polemoniaceae - <i>Gilia capitata</i> ssp. <i>pacifica</i>
Plants - Vascular	<i>Gilia millefoliata</i>	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4112411	CRANNELL	Mapped and Unprocessed	Plants - Vascular - Polemoniaceae - <i>Gilia millefoliata</i>
Plants - Vascular	<i>Gilia millefoliata</i>	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4012482	TYEE CITY	Mapped	Plants - Vascular - Polemoniaceae - <i>Gilia millefoliata</i>
Plants - Vascular	<i>Gilia millefoliata</i>	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Polemoniaceae - <i>Gilia millefoliata</i>
Plants - Vascular	<i>Polemonium carneum</i>	Oregon polemonium	PDPLM0E050	None	None	-	2B.2	4112412	TRINIDAD	Mapped	Plants - Vascular - Polemoniaceae - <i>Polemonium carneum</i>
Plants - Vascular	<i>Polemonium carneum</i>	Oregon polemonium	PDPLM0E050	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Polemoniaceae - <i>Polemonium carneum</i>
Plants - Vascular	<i>Moneses uniflora</i>	woodnymph	PDPYR02010	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped and Unprocessed	Plants - Vascular - Pyrolaceae - <i>Moneses uniflora</i>
Plants - Vascular	<i>Coptis laciniata</i>	Oregon goldthread	PDRAN0A020	None	None	-	4.2	4112328	BALD HILLS	Mapped and Unprocessed	Plants - Vascular - Ranunculaceae - <i>Coptis laciniata</i>
Plants - Vascular	<i>Coptis laciniata</i>	Oregon goldthread	PDRAN0A020	None	None	-	4.2	4112318	PANTHER CREEK	Unprocessed	Plants - Vascular - Ranunculaceae - <i>Coptis laciniata</i>
Plants - Vascular	<i>Coptis laciniata</i>	Oregon goldthread	PDRAN0A020	None	None	-	4.2	4012388	BLUE LAKE	Mapped and Unprocessed	Plants - Vascular - Ranunculaceae - <i>Coptis laciniata</i>
Plants - Vascular	<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Chrysosplenium glechomifolium</i>
Plants - Vascular	<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4112411	CRANNELL	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Chrysosplenium glechomifolium</i>
Plants - Vascular	<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Chrysosplenium glechomifolium</i>

Plants - Vascular	<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4112412	TRINIDAD	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Chrysosplenium glechomifolium</i>
Plants - Vascular	<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	PDSAX07020	None	None	-	4.3	4112421	RODGERS PEAK	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Chrysosplenium glechomifolium</i>
Plants - Vascular	<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012481	ARCATA NORTH	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Mitellastra caulescens</i>
Plants - Vascular	<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4112411	CRANNELL	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Mitellastra caulescens</i>
Plants - Vascular	<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4112318	PANTHER CREEK	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Mitellastra caulescens</i>
Plants - Vascular	<i>Mitellastra caulescens</i>	leafy-stemmed mitrewort	PDSAX0N020	None	None	-	4.2	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Mitellastra caulescens</i>
Plants - Vascular	<i>Tiarella trifoliata</i> var. <i>trifoliata</i>	trifoliolate laceflower	PDSAX10031	None	None	-	3.2	4012388	BLUE LAKE	Unprocessed	Plants - Vascular - Saxifragaceae - <i>Tiarella trifoliata</i> var. <i>trifoliata</i>
Plants - Vascular	<i>Viola palustris</i>	alpine marsh violet	PDVIO041G0	None	None	-	2B.2	4112421	RODGERS PEAK	Mapped	Plants - Vascular - Violaceae - <i>Viola palustris</i>
Plants - Vascular	<i>Viola palustris</i>	alpine marsh violet	PDVIO041G0	None	None	-	2B.2	4112412	TRINIDAD	Mapped and Unprocessed	Plants - Vascular - Violaceae - <i>Viola palustris</i>

Search Results

65 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [4112411:4112318:4112412:4112421:4112328:4012481:4012482:4012388]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	Nyctaginaceae	annual herb	Jun-Oct	None	None	G4G5T2	S2	1B.1
<i>Angelica lucida</i>	sea-watch	Apiaceae	perennial herb	Apr-Sep	None	None	G5	S3	4.2
<i>Astragalus rattanii</i> var. <i>rattanii</i>	Rattan's milk-vetch	Fabaceae	perennial herb	Apr-Jul	None	None	G4T4	S4	4.3
<i>Astragalus umbraticus</i>	Bald Mountain milk-vetch	Fabaceae	perennial herb	May-Aug	None	None	G4	S2	2B.2
<i>Calamagrostis bolanderi</i>	Bolander's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	None	None	G4	S4	4.2
<i>Cardamine angulata</i>	seaside bittercress	Brassicaceae	perennial herb	(Jan)Mar-Jul	None	None	G4G5	S3	2B.2
<i>Carex arcta</i>	northern clustered sedge	Cyperaceae	perennial herb	Jun-Sep	None	None	G5	S1	2B.2
<i>Carex buxbaumii</i>	Buxbaum's sedge	Cyperaceae	perennial rhizomatous herb	Mar-Aug	None	None	G5	S3	4.2
<i>Carex lenticularis</i> var. <i>limnophila</i>	lagoon sedge	Cyperaceae	perennial herb	Jun-Aug	None	None	G5T5	S1	2B.2
<i>Carex leptalea</i>	bristle-stalked sedge	Cyperaceae	perennial rhizomatous herb	Mar-Jul	None	None	G5	S1	2B.2
<i>Carex lyngbyei</i>	Lyngbye's sedge	Cyperaceae	perennial rhizomatous herb	Apr-Aug	None	None	G5	S3	2B.2
<i>Carex saliniformis</i>	deceiving sedge	Cyperaceae	perennial rhizomatous herb	Jun(Jul)	None	None	G2	S2	1B.2
<i>Carex viridula</i> ssp. <i>viridula</i>	green yellow sedge	Cyperaceae	perennial herb	(Jun)Jul-Sep(Nov)	None	None	G5T5	S2	2B.3
<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
<i>Castilleja litoralis</i>	Oregon coast paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Jun	None	None	G3	S3	2B.2
<i>Castilleja mendocinensis</i>	Mendocino Coast paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Aug	None	None	G2	S2	1B.2
<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
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	Saxifragaceae	perennial herb	Feb-Jun	None	None	G5?	S3	4.3
<i>Coptis laciniata</i>	Oreon	Ranunculaceae	perennial	(Feb)Mar-	None	None	G4?	S3?	4.2

	goldthread		rhizomatous herb	May(Sep-Nov)						
<i>Discelium nudum</i>	naked flag moss	Disceliaceae	ephemeral moss		None	None	G4G5	S1	2B.2	
<i>Eleocharis parvula</i>	small spikerush	Cyperaceae	perennial herb	(Apr)Jun-Aug(Sep)	None	None	G5	S3	4.3	
<i>Empetrum nigrum</i>	black crowberry	Empetraceae	perennial evergreen shrub	Apr-Jun	None	None	G5	S1?	2B.2	
<i>Erysimum menziesii</i>	Menzies' wallflower	Brassicaceae	perennial herb	Mar-Sep	FE	CE	G1	S1	1B.1	
<i>Erythronium oregonum</i>	giant fawn lily	Liliaceae	perennial herb	Mar-Jun(Jul)	None	None	G5	S2	2B.2	
<i>Erythronium revolutum</i>	coast fawn lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	None	None	G4G5	S3	2B.2	
<i>Fissidens pauperculus</i>	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2	
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	Polemoniaceae	annual herb	Apr-Aug	None	None	G5T3	S2	1B.2	
<i>Gilia millefoliata</i>	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	
<i>Glehnia littoralis</i> ssp. <i>leiocarpa</i>	American glehnia	Apiaceae	perennial herb	May-Aug	None	None	G5T5	S2S3	4.2	
<i>Hemizonia congesta</i> ssp. <i>tracyi</i>	Tracy's tarplant	Asteraceae	annual herb	(Mar)May-Oct	None	None	G5T4	S4	4.3	
<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	Asteraceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2	
<i>Hosackia gracilis</i>	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2	
<i>Iliamna latibracteata</i>	California globe mallow	Malvaceae	perennial herb	Jun-Aug	None	None	G2G3	S2	1B.2	
<i>Juncus nevadensis</i> var. <i>inventus</i>	Sierra rush	Juncaceae	perennial rhizomatous herb	Jul-Nov	None	None	G5T3T4	S1	2B.2	
<i>Kopsiopsis hookeri</i>	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	None	None	G4?	S1S2	2B.3	
<i>Lathyrus glandulosus</i>	sticky pea	Fabaceae	perennial rhizomatous herb	Apr-Jun	None	None	G3	S3	4.3	
<i>Lathyrus japonicus</i>	seaside pea	Fabaceae	perennial rhizomatous herb	May-Aug	None	None	G5	S2	2B.1	
<i>Lathyrus palustris</i>	marsh pea	Fabaceae	perennial herb	Mar-Aug	None	None	G5	S2	2B.2	
<i>Layia carnosa</i>	beach layia	Asteraceae	annual herb	Mar-Jul	FT	CE	G2	S2	1B.1	
<i>Lilium occidentale</i>	western lily	Liliaceae	perennial bulbiferous herb	Jun-Jul	FE	CE	G1G2	S1	1B.1	
<i>Listera cordata</i>	heart-leaved twayblade	Orchidaceae	perennial herb	Feb-Jul	None	None	G5	S4	4.2	
<i>Lycopodiella inundata</i>	inundated bogclubmoss	Lycopodiaceae	perennial rhizomatous herb	Jun-Sep	None	None	G5	S1	2B.2	

<u><i>Lycopodium clavatum</i></u>	running-pine	Lycopodiaceae	perennial rhizomatous herb	Jun-Aug(Sep)	None	None	G5	S3	4.1
<u><i>Lycopus uniflorus</i></u>	northern bugleweed	Lamiaceae	perennial herb	Jul-Sep	None	None	G5	S4	4.3
<u><i>Mitellastrucaulescens</i></u>	leafy-stemmed mitrewort	Saxifragaceae	perennial rhizomatous herb	(Mar)Apr-Oct	None	None	G5	S4	4.2
<u><i>Moneses uniflora</i></u>	woodnymph	Ericaceae	perennial rhizomatous herb	May-Aug	None	None	G5	S2	2B.2
<u><i>Monotropa uniflora</i></u>	ghost-pipe	Ericaceae	perennial herb (achlorophyllous)	Jun-Aug(Sep)	None	None	G5	S2	2B.2
<u><i>Montia howellii</i></u>	Howell's montia	Montiaceae	annual herb	(Feb)Mar-May	None	None	G3G4	S2	2B.2
<u><i>Oenothera wolfii</i></u>	Wolf's evening-primrose	Onagraceae	perennial herb	May-Oct	None	None	G2	S1	1B.1
<u><i>Packera bolanderi</i> var. <i>bolanderi</i></u>	seacoast ragwort	Asteraceae	perennial rhizomatous herb	(Jan-Apr)May-Jul(Aug)	None	None	G4T4	S2S3	2B.2
<u><i>Piperia candida</i></u>	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar)May-Sep	None	None	G3?	S3	1B.2
<u><i>Pityopus californicus</i></u>	California pinefoot	Ericaceae	perennial herb (achlorophyllous)	(Mar-Apr)May-Aug	None	None	G4G5	S4	4.2
<u><i>Pleuropogon refractus</i></u>	nodding semaphore grass	Poaceae	perennial rhizomatous herb	(Mar)Apr-Aug	None	None	G4	S4	4.2
<u><i>Polemonium carneum</i></u>	Oregon polemonium	Polemoniaceae	perennial herb	Apr-Sep	None	None	G3G4	S2	2B.2
<u><i>Ribes laxiflorum</i></u>	trailing black currant	Grossulariaceae	perennial deciduous shrub	Mar-Jul(Aug)	None	None	G5?	S3	4.3
<u><i>Romanzoffia tracyi</i></u>	Tracy's romanzoffia	Hydrophyllaceae	perennial herb	Mar-May	None	None	G4	S2	2B.3
<u><i>Sidalcea malachroides</i></u>	maple-leaved checkerbloom	Malvaceae	perennial herb	(Mar)Apr-Aug	None	None	G3	S3	4.2
<u><i>Sidalcea malviflora</i> ssp. <i>patula</i></u>	Siskiyou checkerbloom	Malvaceae	perennial rhizomatous herb	(Mar)May-Aug	None	None	G5T2	S2	1B.2
<u><i>Sidalcea oregana</i> ssp. <i>eximia</i></u>	coast checkerbloom	Malvaceae	perennial herb	Jun-Aug	None	None	G5T1	S1	1B.2
<u><i>Silene scouleri</i> ssp. <i>scouleri</i></u>	Scouler's catchfly	Caryophyllaceae	perennial herb	(Mar-May)Jun-Aug(Sep)	None	None	G5T4T5	S2S3	2B.2
<u><i>Sulcaria spiralifera</i></u>	twisted horsehair lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G3G4	S2	1B.2
<u><i>Tiarella trifoliata</i> var. <i>trifoliata</i></u>	trifoliolate laceflower	Saxifragaceae	perennial rhizomatous herb	(May)Jun-Aug	None	None	G5T5	S2S3	3.2
<u><i>Trichodon cylindricus</i></u>	cylindrical trichodon	Ditrichaceae	moss		None	None	G4G5	S2	2B.2
<u><i>Usnea longissima</i></u>	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2

	habitats	family	life history	flowering time	endemic	native	status	conservation	notes
<i>Viola palustris</i>	alpine marsh violet	Violaceae	perennial rhizomatous herb	Mar-Aug	None	None	G5	S1S2	2B.2

Showing 1 to 65 of 65 entries

Suggested Citation:

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EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

[West Coast Regional Office](#)

[Alaska Regional Office](#)

Query Results

Degrees, Minutes, Seconds: Latitude = 41° 3' 35" N, Longitude = 125° 51' 40" W


Decimal Degrees: Latitude = 41.060, Longitude = -124.139

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

No Essential Fish Habitats (EFH) were identified at the report location.

Salmon EFH

Link	HUC Name	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
	Mad-Redwood - Below	Chinook Salmon, Coho Salmon	All	Pacific	Pacific Coast Salmon Plan

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.

****For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.

****For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

Pacific Coastal Pelagic Species,

Jack Mackerel,

Pacific (Chub) Mackerel,

Pacific Sardine,

Northern Anchovy - Central Subpopulation,

Northern Anchovy - Northern Subpopulation,

Pacific Highly Migratory Species,

Bigeye Thresher Shark - North Pacific,

Bluefin Tuna - Pacific,

Dolphinfish (Dorado or Mahimahi) - Pacific,

Pelagic Thresher Shark - North Pacific,

Swordfish - North Pacific



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:

November 01, 2022

Project Code: 2023-0011124

Project Name: Trinidad Water Tank and Pipeline Replacement Project

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 ECOS-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 ECOS-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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.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/birds/policies-and-regulations.php>.

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/birds/bird-enthusiasts/threats-to-birds.php>.

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/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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: 2023-0011124

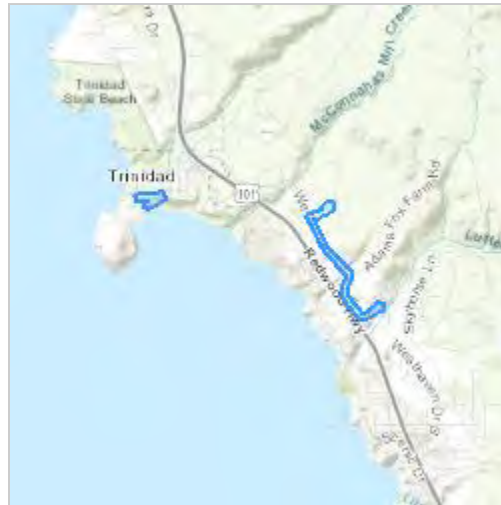
Project Name: Trinidad Water Tank and Pipeline Replacement Project

Project Type: Water Supply Facility - Maintenance / Modification

Project Description: The proposed project includes replacement of water pipelines and a water tank.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.0582586,-124.14571788553485,14z>



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

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

Flowering Plants

NAME	STATUS
Western Lily <i>Lilium occidentale</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/998	Endangered

Critical habitats

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

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.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

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
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	Breeds Feb 1 to Jul 15
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.	Breeds Jan 1 to Sep 30

NAME	BREEDING SEASON
<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>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>Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481</p>	Breeds elsewhere
<p>Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914</p>	Breeds May 20 to Aug 31
<p>Rufous Hummingbird <i>selasphorus rufus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002</p>	Breeds Apr 15 to Jul 15
<p>Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480</p>	Breeds Jun 1 to Aug 10
<p>Tufted Puffin <i>Fratercula cirrhata</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/430</p>	Breeds May 5 to Oct 5

NAME	BREEDING SEASON
Western Grebe <i>aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Wrentit <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	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.

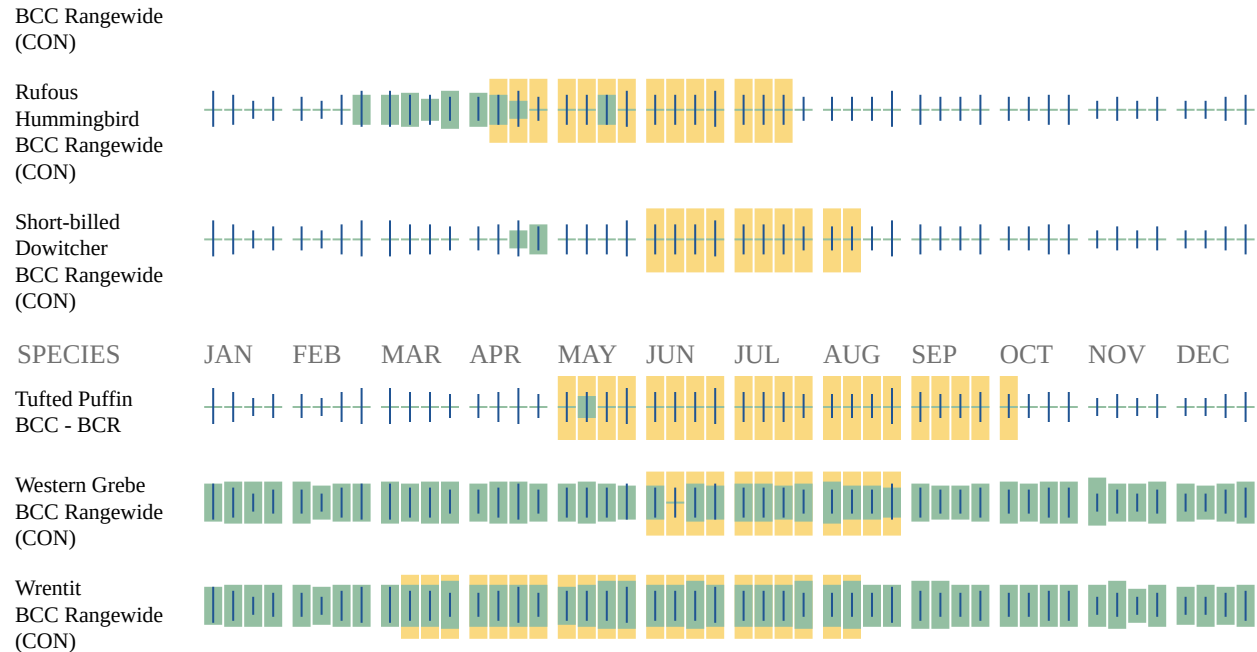
No Data (-)

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.





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 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.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: GHD

Name: Sara Moriarty-Graves

Address: 718 3rd Street

City: Eureka

State: CA

Zip: 95501

Email: sara.moriarty-graves@ghd.com

Phone: 7072672221



NOAA Critical Habitat Report

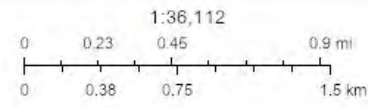
Area of Interest (AOI) Information

Area : 0.34 km²

Nov 7 2022 11:50:15 Pacific Standard Time



 All_critical_habitat_poly_20221017



General Bathymetric Chart of the Oceans (GEBCO), NOAA National Centers for Environmental Information (NCEI), NOAA National Marine Fisheries Service

Summary

Name	Count	Area(km ²)	Length(m)
All Critical Habitat Polyline	0	N/A	0
All Critical Habitat Polygon	0	0	N/A

Appendix C

Site Visit Photographs



Photo C-1. View of residential neighborhood on Edwards Street in northern section of the PSB.



☀ 228°SW (T) ● 41°3'29"N, 124°8'41"W ±78ft ▲ 131ft



Sara Moriarty-Graves

18 Oct 2022, 08:01:47

Photo C-2. Van Wycke Street in northern section of the PSB that extends toward Trinidad Head.



Photo C-3. Redwood forest and woodland SNC along the access road to the water tank.



Photo C-4. Standing water present adjacent to the PSB (and within the BSA), near the access road to the water tank.



Photo C-5. Second growth Redwood forest and woodland within the BSA near the water tank, with a well established canopy and understory.



Photo C-6. Red alders and cotoneaster (*Cotoneaster sp.*) in the BSA near the water tank.



Photo C-7. View of roadside vegetation and residential landscaping in the southern section of the PSB, on Westhaven Drive.

West Elevation

☉ 103°E (T) ● 41.051354°, -124.119668° ±13ft ▲ 278ft



Photo C-8. View of riparian habitat and degraded roadside habitat invaded by English ivy above Deadman's Creek culvert under Westhaven Drive.

Appendix D

List of Plant Species Observed On-site

Table D1 All plant species observed within the PSB.

Scientific Name	Common Name	Native	Family
<i>Sambucus nigra</i>	elderberry	Native	Adoxaceae
<i>Daucus pusillus</i>	wild carrot	Native	Apiaceae
<i>Oenanthe sarmentosa</i>	water parsley	Native	Apiaceae
<i>Lysichiton americanus</i>	skunk cabbage	Native	Araceae
<i>Hedera helix</i>	English ivy	Non-native	Araliaceae
<i>Achillea millefolium</i>	yarrow	Native	Asteraceae
<i>Baccharis pilularis</i>	Coyote brush	Native	Asteraceae
<i>Helminthotheca echioides</i>	prickly oxtongue	Non-native	Asteraceae
<i>Hypochaeris radicata</i>	rough cat's ear	Non-native	Asteraceae
<i>Lapsana communis</i>	nipplewort	Non-native	Asteraceae
<i>Sonchus oleraceus</i>	prickly lettuce	Non-native	Asteraceae
<i>Athyrium filix-femina</i>	lady fern	Native	Athyriaceae
<i>Alnus rubra</i>	red alder	Native	Betulaceae
<i>Raphanus raphanistrum</i>	wild radish	Non-native	Brassicaceae
<i>Lonicera involucrata</i>	twinberry	Native	Caprifoliaceae
<i>Cerastrium glomeratum</i>	sticky mouse-ear chickweed	Non-native	Caryophyllaceae
<i>Sequoia sempervirens</i>	coast redwood	Native	Cupressaceae
<i>Carex obnupta</i>	slough sedge	Native	Cyperaceae
<i>Cyperus eragrostis</i>	tall flatsedge	Native	Cyperaceae
<i>Isolepis cernua</i>	fiber optic grass	Native	Cyperaceae
<i>Pteridium aquilinum</i>	brackenfern	Native	Dennstaedtiaceae
<i>Polystichum munitum</i>	Western sword fern	Native	Dryopteridaceae
<i>Equisetum telmateia</i>	great horsetail	Native	Equisetaceae
<i>Gaultheria shallon</i>	salal	Native	Ericaceae
<i>Vaccinium ovatum</i>	evergreen huckleberry	Native	Ericaceae
<i>Vaccinium parviflorum</i>	red huckleberry	Native	Ericaceae
<i>Euphorbia peplus</i>	petty spurge	Non-native	Eurphorbiaceae
<i>Lotus corniculatus</i>	bird's-foot trefoil	Non-native	Fabaceae
<i>Trifolium dubium</i>	lesser trefoil	Non-native	Fabaceae
<i>Trifolium pratense</i>	red clover	Non-native	Fabaceae
<i>Geranium robertianum</i>	herb-robert	Non-native	Geraniaceae
<i>Crocsmia sp.</i>	crocsmia	Non-native	Iridaceae
<i>Juncus sp.</i>	(not flowering)	Native	Juncaceae
<i>Myrica californica</i>	wax myrtle	Native	Myricaceae
<i>Epilobium ciliatum</i>	Northern willow herb	Native	Onagraceae
<i>Abies grandis</i>	grand fir	Native	Pinaceae
<i>Picea sitchensis</i>	Sitka spruce	Native	Pinaceae

<i>Pinus radiata</i>	Monterey pine	Non-native	Pinaceae
<i>Pseudotsuga menziesii</i>	Douglas fir	Native	Pinaceae
<i>Tsuga heterophylla</i>	Hemlock	Native	Pinaceae
<i>Plantago lanceolata</i>	ribwort plantain	Non-native	Plantaginaceae
<i>Plantago major</i>	broadleaf plantain	Non-native	Plantaginaceae
<i>Veronica americana</i>	American brooklime	Non-native	Plantaginaceae
<i>Agrostis stolonifera</i>	creeping bentgrass	Non-native	Poaceae
<i>Anthoxanthum oderatum</i>	vernal sweet grass	Non-native	Poaceae
<i>Avena sativa</i>	oats	Non-native	Poaceae
<i>Cortaderia jubata</i>	pampas grass	Non-native	Poaceae
<i>Dactylus glomerata</i>	orchard grass	Non-native	Poaceae
<i>Holcus lanatus</i>	soft chess	Non-native	Poaceae
<i>Rumex crispus</i>	curly dock	Non-native	Polygonaceae
<i>Ranunculus repens</i>	buttercup	Non-native	Ranunculaceae
<i>Rhamnus purshiana</i>	casacara	Native	Rhamnaceae
<i>Cotoneaster sp.</i>	cotoneaster	Non-native	Rosaceae
<i>Potentilla anserina</i>	silverweed	Native	Rosaceae
<i>Rubus armeniacus</i>	Himalayan blackberry	Non-native	Rosaceae
<i>Rubus parviflorus</i>	thimbleberry	Native	Rosaceae
<i>Rubus ursinus</i>	California blackberry	Native	Rosaceae
<i>Gallium aparine</i>	cleavers	Non-native	Rubiaceae
<i>Salix lasiolepis</i>	Arroyo willow	Native	Salicaceae
<i>Viola sempervirens</i>	redwood violet	Native	Violaceae

Appendix E

Rapid Assessment Datasheets

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance <u>Sequoia sempervirens</u> Association
			circle: Relevé or RA

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Database #: <u>T01</u>	Date: <u>10/18/22</u>	Name of recorder: <u>Jane Cipra</u>
UID:		Other surveyors: <u>"</u>
Location Name:		

GPS name: E054 For Relevé only: Bearing°, left axis at ID point ___ of Long / Short side

UTME _____ UTMN _____ Zone: 11 NAD83 GPS error: ft./ m./ PDOP _____

Decimal degrees: LAT 41.057492 LONG 124.122263

GPS within stand? **Yes** / No If No, cite from GPS to stand: distance (m) ___ bearing° ___ inclination° ___

and record: Base point ID _____ Projected UTM: UTME _____ UTMN _____

Camera Name: _____ Cardinal photos at ID point: _____

Other photos: _____

Stand Size (acres): <1, 1-5, **>5** | Plot Area (m²): 100 / _____ | Plot Dimensions ___ x ___ m | RA Radius 50 m

Exposure, Actual °: ___ NE **NW** SE SW Flat Variable | Steepness, Actual °: ___ 0° **1-5°** >5-25° >25

Topography: Macro: top upper **mid** lower bottom | Micro: convex **flat** concave undulating

Geology code: _____ Soil Texture code: _____ | Upland or Wetland/Riparian (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H₂O: BA Stems: 3 Litter: 97 Bedrock: Boulder: Stone: Cobble: Gravel: Fines: =100%

% Current year bioturbation _____ Past bioturbation present? Yes / **No** | % Hoof punch _____

Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

Second growth redwood forest, with swordfern, huckleberry understory. Alders + cottonaster are around edges.

Disturbance code / Intensity (L,M,H): ___ / ___ / ___ / ___ / ___ / ___ "Other" _____

II. HABITAT DESCRIPTION

Tree DBH: **T1** (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: **S1** seedling (<3 yr. old), **S2** young (<1% dead), **S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: **H1** (<12" plant ht.), **H2** (>12" ht.)

Desert Riparian Tree/Shrub: **1** (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: **1** (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: Sequoia sempervirens

Field-assessed Association name (optional): Sequoia sem vivens, Polystichum minutum

Adjacent Alliances/direction: _____ / _____ / _____

Confidence in Alliance identification: L M **H** Explain: _____

Phenology (E,P,L): Herb Shrub Tree Other identification or mapping information: _____

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised March 27, 2018)
SPECIES SHEET

Database #: 101

IV. VEGETATION DESCRIPTION

% NonVasc cover: _____ Total % Vasc Veg cover: 103

% Cover - Conifer tree / Hardwood tree: 80 / 3 Regenerating Tree: _____ Shrub: _____ Herbaceous: _____
 Height Class - Conifer tree / Hardwood tree: 1 Regenerating Tree: _____ Shrub: _____ Herbaceous: _____

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
T	<i>Sequoia sempervirens</i>	80		
T	<i>Alnus rubra</i>	3		
H	<i>Polystichum munifidum</i>	10		
S	<i>Vaccinium ovatum</i>	5		
S	<i>Lotoneaster sp.</i>	5		

Unusual species: _____

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #: <u>T02</u>	Final vegetation type: Alliance <u>Rubus ursinus</u> Association	
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			circle: Relevé or <u>RA</u>
Database #: <u>T02</u>	Date: <u>10/19/22</u>	Name of recorder: <u>Jane Cipra</u>	□ □ □
UID:		Other surveyors:	
GPS name: <u>E05H</u>		For Relevé only: Bearing°, left axis at ID point _____ of <u>Long</u> / <u>Short</u> side	
UTME _____ UTMN _____		Zone: <u>11</u> NAD83 GPS error: ft./ m./ PDOP _____	
Decimal degrees: LAT <u>41.057764</u>		LONG <u>124.145742</u>	
GPS within stand? <u>Yes</u> / No If No, cite from GPS to stand: distance (m) _____ bearing ° _____ inclination ° _____			
and record: Base point ID _____ Projected UTM: UTM _____ UTMN _____			
Camera Name:		Cardinal photos at ID point:	
Other photos:			
Stand Size (acres): <u><1</u> , <u>1-5</u> , >5 Plot Area (m²): 100 / _____ Plot Dimensions _____ x _____ m RA Radius <u>0</u> m			
Exposure, Actual °: _____ NE NW <u>SE</u> SW Flat Variable Steepness, Actual °: _____ 0° 1-5° >5-25° <u>>25</u>			
Topography: Macro: top upper <u>mid</u> lower bottom		Micro: convex flat <u>concave</u> undulating	
Geology code: _____		Soil Texture code: _____ <u>Upland</u> or Wetland/Riparian (circle one)	
% Surface cover: <u>not visible</u> (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ 0: BA Stems: <u>3</u> Litter: _____ Bedrock: _____ Boulder: _____ Stone: _____ Cobble: _____ Gravel: _____ Fines: =100%			
% Current year bioturbation _____ Past bioturbation present? Yes / <u>No</u> % Hoof punch _____			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: <u>Slope of Rubus ursinus with garden nasturtium, scattered alders</u>			
Disturbance code / Intensity (L,M,H): _____ / _____ / _____ / _____ / _____ / _____ "Other" _____ / _____			
II. HABITAT DESCRIPTION			
Tree DBH : <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead) - <u>Rubus</u>			
Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.)			
Desert Riparian Tree/Shrub: <u>1</u> (<2ft. stem ht.), <u>2</u> (2-10ft. ht.), <u>3</u> (10-20ft. ht.), <u>4</u> (>20ft. ht.)			
Desert Palm/Joshua Tree: <u>1</u> (<1.5" base diameter), <u>2</u> (1.5-6" diam.), <u>3</u> (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>Rubus ursinus</u>			
Field-assessed Association name (optional): _____			
Adjacent Alliances/direction: _____ / _____ / _____			
Confidence in Alliance identification: L M H Explain: _____			
Phenology (E,P,L): Herb Shrub Tree Other identification or mapping information: _____			

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance <u>Alnus rubra</u> Association <u>Alnus rubra / Gaultheria shallon</u> circle: <u>Relevé or RA</u>
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #: <u>T103</u>	Date: <u>11/3/22</u>	Name of recorder: <u>Jane Cipra</u>	Other surveyors:
UID:	Location Name: <u>Westhaven Drive, Trinidad, CA</u>		
GPS name: <u>E054</u>		For Relevé only: Bearing°, left axis at ID point ___ of <u>Long / Short</u> side	
UTME _____ UTMN _____		Zone: <u>11</u> NAD83 GPS error: ft./m./PDOP _____	
Decimal degrees: LAT <u>41.051165</u>		LONG <u>124.119570</u>	
GPS within stand? <u>Yes</u> / No If No, cite from GPS to stand: distance (m) ___ bearing ° ___ inclination ° ___			
and record: Base point ID _____		Projected UTM: UTM _____ UTMN _____	
Camera Name: _____		Cardinal photos at ID point: _____	
Other photos: _____			
Stand Size (acres): <1, <u>1-5</u> , >5 Plot Area (m ²): 100 / _____ Plot Dimensions ___ x ___ m RA Radius ___ m			
Exposure, Actual °: ___ NE NW SE SW Flat Variable Steepness, Actual °: ___ 0° 1-5° >5-25° >25			
Topography: Macro: top upper mid <u>lower</u> bottom Micro: convex flat <u>concave</u> undulating			
Geology code: _____ Soil Texture code: _____ Upland or Wetland <u>Riparian</u> (circle one)			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ O: BA Stems: <u>3</u> Litter: <u>97</u> Bedrock: _____ Boulder: _____ Stone: _____ Cobble: _____ Gravel: _____ Fines: <u>=100%</u>			
% Current year bioturbation _____ Past bioturbation present? Yes / <u>No</u> % Hoof punch _____			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: <u>Riparian stand on Deadman's Creek. Alder trees ~100' tall.</u> <u>Understory is salal, swordfern, English ivy, California blackberry</u>			
Disturbance code / Intensity (L,M,H): ___ / ___ / ___ / ___ / ___ / ___ "Other" _____			
II. HABITAT DESCRIPTION			
Tree DBH: <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead)			
Herbaceous: <u>H1</u> (>12" plant ht.), <u>H2</u> (>12" ht.)			
Desert Riparian Tree/Shrub: <u>1</u> (<2ft. stem ht.), <u>2</u> (2-10ft. ht.), <u>3</u> (10-20ft. ht.), <u>4</u> (>20ft. ht.)			
Desert Palm/Joshua Tree: <u>1</u> (<1.5" base diameter), <u>2</u> (1.5-6" diam.), <u>3</u> (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>Alnus rubra</u>			
Field-assessed Association name (optional): <u>Alnus rubra / Gaultheria shallon</u>			
Adjacent Alliances/direction: <u>Sequoia sempervirens / N</u> , <u>Sequoia sempervirens / S</u>			
Confidence in Alliance identification: L M <u>H</u> Explain: _____			
Phenology (E,P,L): Herb Shrub <u>Tree</u> Other identification or mapping information: _____			

Appendix F

List of Wildlife Species Detected On-site

Table F1 Terrestrial Wildlife Observed On-site

Scientific Name	Common Name	Observation Type	Special Status
<i>Ursus americanus</i>	American Black Bear	Scat	None
<i>Urocyon cinereoargenteus</i>	Gray Fox	Scat	None
<i>Procyon lotor</i>	Raccoon	Observed	None

Table F2 List of avian breeding codes, associated bird behavior, and breeding status (the highest ranking code was recorded for each species during the survey)

Breeding Rank	Breeding Code	Description	Breeding Status
1	N	Active nest	Breeding
2	M	Carrying nesting material	Breeding
3	F	Carrying food or fecal sac	Breeding
4	D	Distraction display/feigning	Breeding
5	L	Local young fed by parents	Breeding
6	Y	Local young incapable of sustained flight	Breeding
7	C	Copulation or courtship observed	Breeding
8	T	Territorial behavior	Unconfirmed
9	S	Territorial song or drumming heard	Unconfirmed
10	E	Encountered in study area	Unconfirmed
11	O	Encountered flying over the study area	Unconfirmed

Table F3 Avian Species Detected On-site

Alpha Code	Common Name	Latin Name	Highest Breeding Status	Breeding Code	Special Status
ANHU	Anna's Hummingbird	<i>Calypte anna</i>	Encountered in study area	E	FGC, MTBA
WREN	Wrentit	<i>Chamaea fasciata</i>	Territorial song or drumming heard	S	FGC, MTBA
NOFL	Northern Flicker	<i>Colaptes auratus</i>	Territorial song or drumming heard	S	FGC, MTBA
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	Encountered in the study area	E	FGC, MTBA
STJA	Steller's Jay	<i>Cyanocitta stelleri</i>	Territorial song or drumming heard	S	FGC, MTBA
HOFI	House Finch	<i>Haemorhous mexicanus</i>	Encountered in the study area	E	FGC, MTBA
VATH	Varied Thrush	<i>Ixoreus naevius</i>	Territorial song or drumming heard	S	FGC, MTBA
DEJU	Dark-eyed Junco	<i>Junco hyemalis</i>	Encountered in the study area	E	FGC, MTBA
SOSP	Song Sparrow	<i>Melospiza melodia</i>	Territorial song or drumming heard	S	FGC, MTBA
FOSP	Fox Sparrow	<i>Passerella iliaca</i>	Territorial song or drumming heard	S	FGC, MTBA
BRPE	California Brown Pelican	<i>Pelecanus occidentalis</i>	Encountered flying over the study area	E	CDFW FP, FGC, MTBA
SPTO	Spotted Towhee	<i>Pipilo maculatus</i>	Territorial song or drumming heard	S	FGC, MTBA
CBCH	Chestnut-backed Chickadee	<i>Poecile rufescens</i>	Encountered in the study area	E	FGC, MTBA
RCKI	Ruby-crowned kinglet	<i>Regulus calendula</i>	Encountered in the study area	E	None, invasive
BLPH	Black Phoebe	<i>Sayornis nigricans</i>	Encountered in the study area	E	FGC, MTBA
EUST	European Starling	<i>Sturnus vulgaris</i>	Encountered in the study area	E	None, invasive
AMRO	American Robin	<i>Turdus migratorius</i>	Encountered in study area	E	FGC, MTBA
GCSP	Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>	Territorial song or drumming heard	S	FGC, MTBA
WCSP	White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	Encountered in study area	E	FGC, MTBA

Definitions:

FGC = protected by California Fish and Game Code

MTBA = protected by the federal Migratory Bird Treaty Act

CDFW FP = California Department of Fish and Wildlife Fully Protected species



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