Biological Report

Albee Stadium Renovations Project

Assessor's Parcel Numbers: 005-132-008, 005-131-008, 005-243-003, 005-243-004, 005-246-004, 011-121-001, 011-131-005, and 005-121-002

Eureka, California

Prepared for:

Eureka City Schools

December 2020

020069.200

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Reference: 020069.200

December 17, 2020

Eureka City Schools
Paul Ziegler
2100 J Street
Eureka, California 95501

Subject: Biological Report, Albee Stadium Renovations Project, Eureka, California

Dear Paul Ziegler:

SHN has prepared this Biological Report for the Albee Stadium Renovations project. This report addresses environmentally sensitive habitat areas and special-status botanical and animal species present or potentially occurring within the study area, evaluates project-related impacts, and recommends appropriate avoidance and minimization measures.

Fieldwork was conducted on May 13, May 15, July 17, August 25, and September 23, 2020, which included the bloom period for special-status plant species potentially occurring onsite. One special-status botanical species and one special-status animal species were observed within the study area.

The project will not have significant effects on the natural resources within the area if the avoidance measures and recommendations contained within this Biological Report are implemented.

Please email me at jsaler@shn-engr.com or call me at 707-822-5785 if you have any comments or concerns.

Sincerely,

SHN

Joseph Saler
Botanist

JLS:cet

Enclosure: Biological Report

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Eureka, California

Prepared for:

Eureka City Schools

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December 2020

QA/QC:JLS
Reference: 020069.200

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Abbreviations and Acronyms

Terms of Measure

°C	degrees Celsius
°F	degrees Fahrenheit
ft	feet
km	kilometers
ppt	parts per thousand

Additional Terms

ADA	Americans with Disabilities Act
APN	Assessor's Parcel Number
BIOS	Biogeographical Information and Observation System
BMP	best management practice
C	candidate species status
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CT	candidate threatened species status
CWA	Clean Water Act
D	delisted species status
DPS	Distinct population segment/species status
E	endangered species status
EPA	United States Environmental Protection Agency
ESU	evolutionarily significant unit/species status
FESA	Federal Endangered Species Act
FP	fully protected species status
G	global rank
G1/S1	critically imperiled species heritage rank
G2/S2	imperiled species heritage rank
G3/S3	vulnerable species heritage rank
G4/S4	apparently secure species heritage rank
G5/S5	secure species heritage rank
IPaC	Information for Planning and Conservation
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Planning
NCDC	National Climatic Data Center
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic & Atmospheric Administration
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
PT	proposed threatened species status
Q	Taxonomic questions associated with species
RWQCB	Regional Water Quality Control Board
S	state rank
SAA	Streambed Alteration Agreement
SNR	State – No Ranking Status
SSC	species of special concern
SWRCB	State Water Resources Control Board
T	threatened species status
TNR	Sub-species – No Ranking Status
USACE	United States Army Corps of Engineers
USC	United States Code

Abbreviations and Acronyms, Continued

USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VegCAMP	Vegetation Classification and Mapping Program
VU	vulnerable
WDR	Waste Discharge Requirement
WL	watch list species status

1.0 Introduction

SHN has conducted literature review, seasonally appropriate surveys, and habitat assessments to determine biological resources present in relation to the proposed Albee Stadium Renovations project in Eureka, California. The current athletic facilities include baseball, softball, and football fields with associated infrastructure including a stadium, bleachers, all-weather track, concession facilities, batting cages, and dugouts. This Biological Report has been prepared to evaluate the potential for special-status biological resources within the study area.

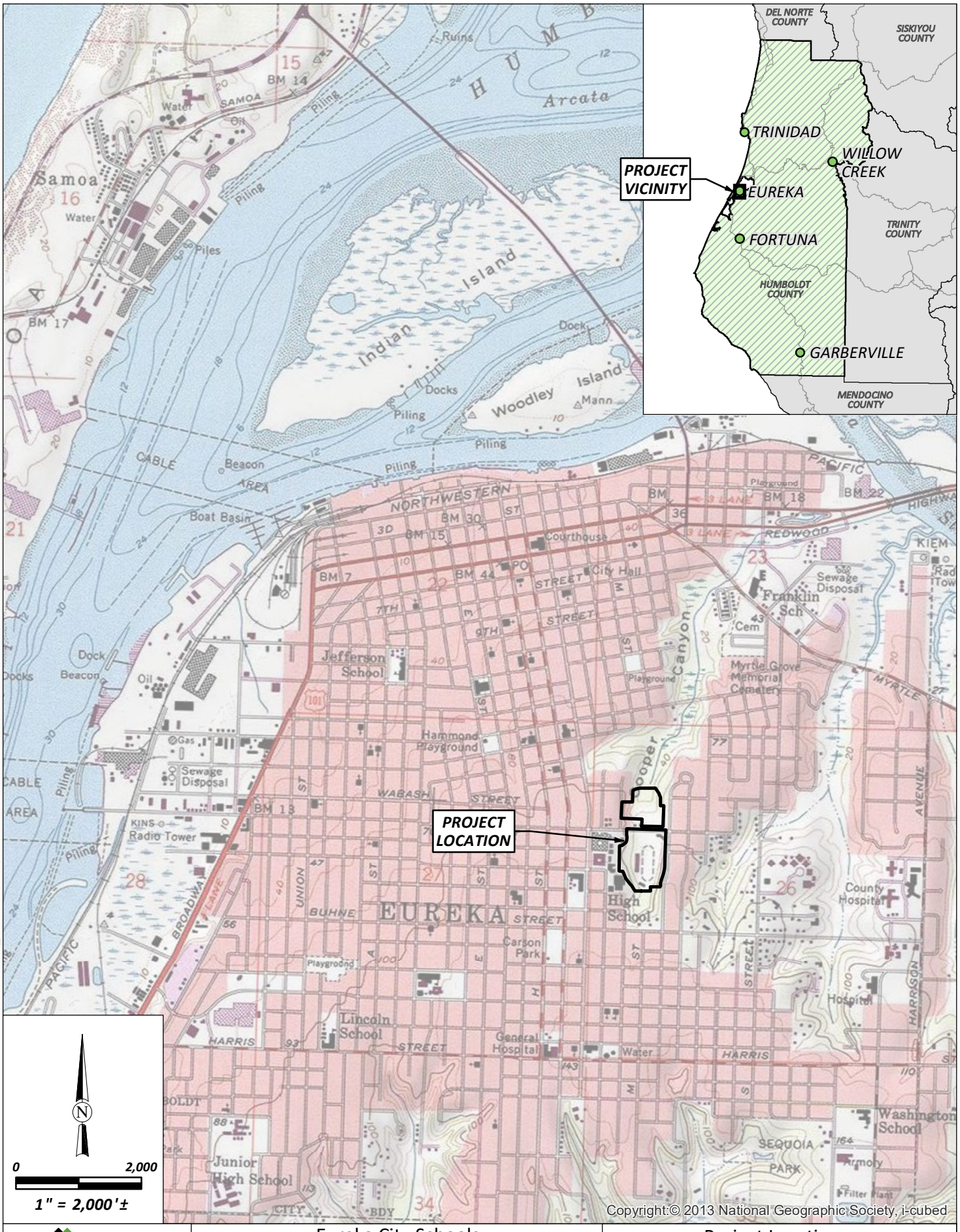
1.1 Project Location

The study area (site) exists within eight parcels (Assessor's Parcel Numbers [APNs] 005-132-008, 005-131-008, 005-243-003, 005-243-004, 005-246-004, 011-121-001, 011-131-005, and 005-121-002) which contain the Eureka High School Athletic facilities, stadium, agricultural program buildings, woodshop building, and welding shop building (Appendix 1). The study area is located within the City of Eureka, California, within the grounds of Eureka High School with an average elevation of 90 feet above sea level. The site is situated approximately 1.10 miles south of the Eureka Slough at the CA 255 bridge and 1.6 miles east of the Humboldt Bay main channel at the Del Norte pier (Figure 1). Del Norte Street bisects the study area, with the softball field, football field, track, and stadium situated south of Del Norte Street and the baseball field and associated facilities, woodshop, welding shop, and the agricultural program facilities situated north of Del Norte Street (Figure 2). The site is within the U.S. Geological Survey (USGS) Eureka 7.5-minute quadrangle, N.W. ¼, Section 26, Township 5 North, Range 1 West, Humboldt Baseline and Meridian with a center point at latitude 40.7900060° and longitude -124.155321° (Google Earth, 2020; USGS, 2020). The study area covers 21.2 acres, which is primarily mowed lawn for the football, softball, and baseball fields, however it also includes portions of remnant conifer forest which dominates the steep slopes surrounding the fields and associated facilities (Figure 2; Appendix 2, Photos 4-8, 10, 13, and 15).

1.2 Project Description

The Albee Stadium portion of the project involves regrading and replacing the existing running track with an all-weather running track, replacing the existing sod football field with synthetic turf or natural turf, regrading and replacing the existing sod softball field with synthetic or natural turf, and possibly constructing a new dugout, batting cages, and bullpens. The project will create a system of Americans with Disabilities Act (ADA) accessible pathways throughout high traffic areas (that is, parking areas, bleachers, buildings, etc.). The existing fieldhouse will be remodeled and two new structures, including a multi-use building (that is, concessions, restrooms, etc.) and athletics building (that is, team rooms, restrooms, etc.), will be constructed. Existing stadium lighting will be replaced with a reconfigured stadium lighting system. Emergency lighting will be added from the bleachers and buildings to stadium exits or safe dispersal area(s). Within the footprint of Albee Stadium, the Cooper Gulch storm drainpipe will be rehabilitated using trenchless methods. Additionally, the inlet to the storm drainpipe may be improved with a new concrete headwall and rock slope protection. Various auxiliary, utility, and stormwater management improvements are also proposed.

The Bud Cloney Field portion of the project involves regrading and replacing the existing sod baseball field with synthetic or natural turf and possibly constructing new dugouts, batting cages, and bullpens.



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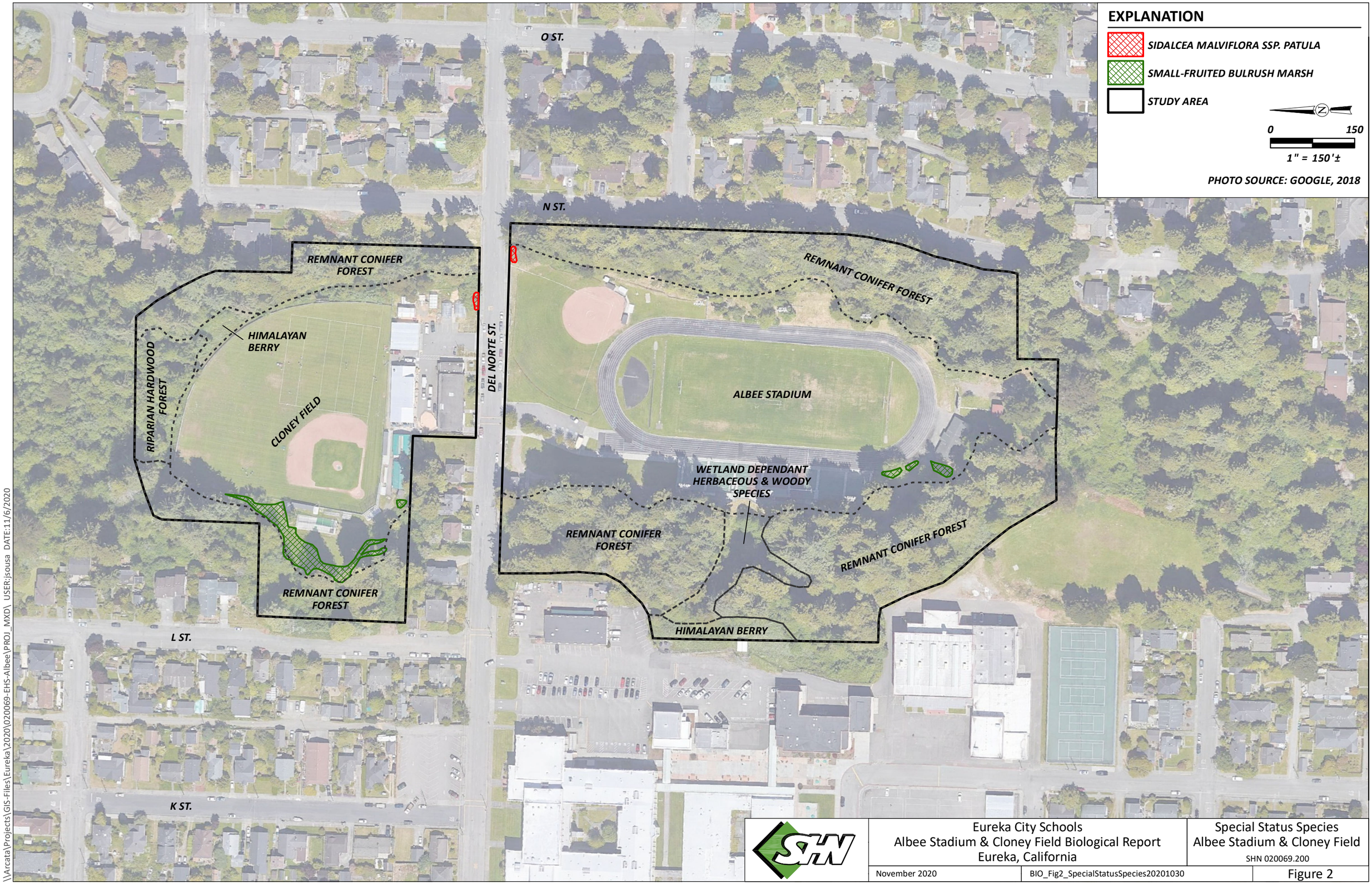
SHN	Eureka City Schools Albee Stadium & Cloney Field Biological Report Eureka, California	Project Location SHN 020069.200
	October 2020 | BIO_Fig1_ProjectLocation	Figure 1



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SHN	Eureka City Schools Albee Stadium & Cloney Field Biological Report Eureka, California	Special Status Species Albee Stadium & Cloney Field SHN 020069.200
	November 2020 | BIO_Fig2_SpecialStatusSpecies20201030	Figure 2

Two existing structures, including the Agricultural Building and Welding Shop, will be demolished. In their place, the project will construct an expanded parking area with drainage improvements and pedestrian-scale lighting. The project will create various ADA-accessible pathways throughout high traffic areas (that is, parking areas, bleachers, buildings, etc.). Within the footprint of Bud Cloney Field, the Cooper Gulch storm drainpipe will be rehabilitated using both open trench and trenchless methods. Additionally, the culvert outfall will likely be improved with a new concrete headwall, rock energy dissipater, and slope stabilization. Various auxiliary, utility, and stormwater improvements are also proposed.

1.3 Site Description

The approximately 21.2-acre project area encompasses two distinct portions of the EHS campus, including areas in and around Albee Stadium and Bud Cloney Field. Albee Stadium and Bud Cloney Field are separated by Del Norte Street, which passes through the project site from east to west (Figure 2). The project site has been used for athletic facilities for over 74 years (Appendix 2, Photos 1-3). The existing facilities are in need of upgrades, reflecting the many years of use. Cooper Creek flows beneath the project site for a total length of 1,500 feet, entering a 30-inch diameter storm drainpipe south of Albee Stadium and daylighting north of Bud Cloney Field. Critical failure of the Cooper Gulch storm drainpipe has resulted in sinkholes, posing a significant health and safety hazard and resulting in closures of portions of the project site. The study area is surrounded by residential development to the south, east, and west, with extensive wetlands to the north. Remanent forest occurs on the slopes surrounding the athletic facilities, which are in turn surrounded by residential development (Figure 2; Appendix 2, Photos 4-8, 10, 13, and 15).

2.0 Methods

2.1 Literature Review

This Biological Report includes a review of pertinent literature on habitat characteristics of the site, and a review of information related to special-status plant and animal species that could potentially use the described habitats.

The findings for this report are the result of several sources, including a review of existing literature regarding sensitive resources that have the potential to occur within the site. Resources for this determination included:

- California Natural Diversity Database (CNDDB) query for the Eureka and surrounding USGS 7.5-minute topographic quadrangles (Tyee City, Arcata North, Arcata South, Cannibal Island, Fields Landing and McWhinney Creek; California Department of Fish and Wildlife, [CDFW], 2020a)
- Biogeographical Information and Observation System (BIOS; CDFW, 2020b)
- Electronic Inventory of Rare and Endangered Vascular Plants of California (California Native Plant Society, [CNPS], 2020) queried for a list of all plant species reported for the Eureka and surrounding USGS 7.5-minute topographic quadrangles
- Special Vascular Plants, Bryophytes, and Lichens of California List (CDFW, 2020c)
- Special Animals of California List (CDFW, 2020d)

- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) was queried for threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of the proposed project and/or may be affected by the proposed project (USFWS, 2020a).

From the database queries, a list of species potentially occurring within the study area was compiled. Tables 1 and 2 in Appendix 3 include species reported by the CNDDB and USFWS, and species listed in the CNPS inventory of rare plants.

2.2 Field Observations and Studies

SHN's biologists conducted site visits on May 13, May 15, July 17, August 25, and September 23, 2020 for biological surveys and habitat assessments for a total of sixteen hours of surveying. A wetland delineation (SHN, 2020) was done concurrently with the surveys in order to better analyze the habitats found within the study area, but is not included within the survey hours mentioned above. Surveys were conducted according to CDFW protocol as outlined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW, 2018a). Surveys were conducted with an attempt to identify all species present within the project-related study areas, including possible species of special concern. In addition to surveying for target species, a list of all botanical and animal species encountered was compiled and is included in Appendix 3 (Tables 3 and 4). Plants were identified to the lowest taxonomic level possible to distinguish special-status species from others. Nomenclature for special-status animals conforms to CDFW guidelines (CDFW, 2018a, 2020b). Plant community names conform to *A Manual of California Vegetation, Second Edition* (Sawyer et al., 2009) and the VegCAMP (Vegetation Classification and Mapping Program) Natural Communities List (CDFW, 2018b). Botanical nomenclature of species in this assessment follows the *Jepson Manual (*Baldwin et al., 2012) and subsequent online revisions. The May, July, August, and September site visits were conducted at seasonally appropriate times to best detect early and late blooming special-status plant species, special-status animals, and a number of nesting bird species. Analysis of the habitat and vegetation communities present within the study area during the site visits indicates that suitable habitat for several special-status plant and animal species exists onsite. The areas most likely to support special-status species include ravines dominated by native vegetation, wet areas, and shrubby, early successional vegetation. All portions of the study area were investigated for the presence of special-status species and habitat availability for special-status species. Sensitive natural communities and special-status species were mapped as part of this report (Figure 2) and will be discussed further.

Photographs from the site visits are included in Appendix 2.

3.0 Environmental Setting

The study area is situated between approximately 62- to 120-foot elevation above mean sea level, with the highest elevations represented at the southwest portion of the project site adjacent to Eureka High School and the lowest elevation at the northern portion of the project site within the baseball field. The geology at the site is mapped as marine and non-marine sedimentary rocks (geologic map unit Qoa), which consists of alluvium, lake, playa, and terrace deposits–unconsolidated and semi-consolidated. Proximity to the coast indicates these are likely uplifted marine deposits.

The underlying soils in the study area have the United States Department of Agriculture (USDA)-National Resources Conservation Service (NRCS) soil map unit designation 257—Lepoil-Candymountain

complex, 2 to 15 percent slopes (Appendix 1; USDA-NRCS, 2020). Soils were characterized by loamy and sandy textures (see Wetland and Other Waters Delineation, [SHN, 2020] for additional soils information). The site topography rises on the west, east, and south sides of the project site, shaping the site into a basin that drains to the north into Cooper Gulch. A review of historical photos shows that this site has been a sports field since at least 1946 (Appendix 2, Photos 1-3).

The average 30-year precipitation data for this area is 40.33 inches (National Oceanic and Atmospheric Administration, [NOAA] Eureka Station, 2020) with the majority of precipitation occurring between October and April. Temperatures in Eureka range from an average low of 41 degrees Fahrenheit (°F) in the winter to an average high of 64°F in the summer; extremes in temperatures are relatively uncommon due to the regional maritime influence.

3.1 Vegetation

Vegetation composition varies widely within the study area reflecting the forested slopes, riparian and wetland areas, and developed nature of the site and surroundings (Appendix 2, Photos 8-10, 12, 15, and 16). The study area is surrounded by urban development consisting of roadways, residential housing, and school grounds. This influences the vegetation within the vicinity of the project, resulting in a higher percentage of non-native and invasive species within the study area. Forested areas were dominated by coast redwood (*Sequoia sempervirens*), Douglas fir (*Pseudotsuga menziesii*), and Sitka spruce (*Picea sitchensis*) in the canopy (Appendix 2, Photos 4-8), and English ivy (*Hedera helix*), evergreen huckleberry (*Vaccinium ovatum*), and large flower fairy bells (*Prosartes smithii*) in the understory, among others (Appendix 2, Photos 8-10). Forested wetland areas were dominated by skunk cabbage (*Lysichiton americanus*), western lady fern (*Athyrium filix-femina* var. *cyclosorum*), and slough sedge (*Carex obnupta*), among others. Open areas were dominated by various herbaceous species including sweet vernal grass (*Anthoxanthum odoratum*), creeping bentgrass (*Agrostis stolonifera*), orchard grass (*Dactylis glomerata*), and hairy cat's-ear (*Hypochaeris radicata*), among others (Appendix 2, Photos 4, 7, 11, 13-15, and 18). Wetlands within open areas were dominated by small fruit bulrush (*Scirpus microcarpus*) (Appendix 2, Photos 16 and 17), creeping buttercup (*Ranunculus repens*), giant horse tail (*Equisetum telmateia*), common horsetail (*Equisetum arvense*), and montebretia (*Crocosmia* x *crocosmiflora*), among others. Developed/disturbed areas were dominated by ruderal species such as English plantain (*Plantago lanceolata*) and allseed (*Polycarpon tetraphyllum* var. *tetraphyllum*), among others Appendix 2, Photo 18). Riparian woodland associated with Cooper Gulch Canyon exists to the north of the project area and is dominated by red alder (*Alnus rubra*), Pacific willow (*Salix lasiandra* var. *lasiandra*), and coast willow (*Salix hookeriana*), among others, as well as a mix of native and non-native species in the understory (Appendix 2, Photo 15).

A complete list of plants observed within the study area is compiled in Appendix 3, Table 3.

3.2 Wildlife Habitats

Common wildlife species expected within the study area are those typically associated with grasslands, riparian areas, urban settings, and forest openings of northwestern California. Although the project site is immediately adjacent to some areas of dense trees and shrubs that may provide food and shelter for animals, the site experiences frequent human disturbance and is surrounded by urban development. The dense vegetative cover along the northern boundary provides the highest quality wildlife habitat within the study area, with connectivity to the Cooper Gulch Drainage. Animal species observed during

fieldwork are presented in Appendix 3, Table 4. Other wildlife species are likely to inhabit the surrounding area and it is expected that there are many other bird, mammal, and amphibian species that might use the study area, if only transitionally.

3.3 Wildlife Movement Corridors

Wildlife movement includes seasonal migration, inter-population movement (genetic flow), and small, daily travel pathways within an animal's territory. Although small travel pathways usually facilitate movement for daily home range activities (such as, foraging or escape from predators), they also provide connection between outlying populations and the main corridor, permitting an increase in genetic flow among populations.

Where patches of habitat are fragmented, the movement between wildlife populations is facilitated through habitat linkages, migration corridors, and movement corridors. Depending on the condition of the corridor, genetic flow between populations may be high in frequency, thus allowing high genetic diversity within the population, or may be low in frequency. Low-frequency genetic flow may potentially lead to complete isolation and, if pressures are strong, potential extinction (McCullough, 1996; Whittaker, 1998).

Heavy vegetative cover along the western, eastern, and northern boundaries of the study area provides an adequate wildlife movement corridor around the project area (Figure 2; Appendix 2, Photos 4-6, 8-10, 12, and 15). Movement for some terrestrial animals may be restricted between the northern and southern portions of the site because of the existing roadway (Del Norte Street) that intersects them.

3.4 Offsite Conditions

Offsite conditions include public facilities, residential development, and vegetated drainages within mixed conifer and deciduous woodland surrounded by urban development including major city streets (Figure 1).

4.0 Regulatory Setting

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of legislative acts. The following section summarizes the federal, State, and local regulations for special-status species, jurisdictional Waters of the U.S. and State of California, and other sensitive biological resources. This section provides a listing and overview of these federal, State and local laws; only select regulations will be applicable to this project.

4.1 Federal Laws

4.1.1 Clean Water Act Sections 404 and 401

Under Section 404 (33 U.S. Code (USC) 1344) of the Clean Water Act (CWA, United States Environmental Protection Agency [EPA], 2002), as amended, the U.S. Army Corps of Engineers (USACE) retains primary responsibility for permits to discharge dredged or fill material into Waters of the U.S (EPA, 1948). All discharges of dredged or fill material into jurisdictional Waters of the U.S. that result in permanent or

temporary losses of Waters of the U.S. are regulated by the USACE. A permit from the USACE must be obtained before placing fill or grading in wetlands or other Waters of the U.S., unless the activity is exempt from CWA Section 404 regulation (for example, certain farming and forestry activities).

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE Environmental Laboratory, 1987). In other words, the USACE defines wetlands by the presence of all three wetland indicators: hydrophytic vegetation, hydric soils, and wetlands hydrology.

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

The USACE is required to consult with the USFWS and/or National Marine Fisheries Service (NMFS) under Section 7 of the Federal Endangered Species Act (FESA) if the action subject to CWA permitting could result in "Take" of federally listed species or an adverse effect to designated critical habitat (USACE/EPA, 1973). The project is within the jurisdiction of the Sacramento District of the USACE.

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

4.1.2 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 USC Sections 661-667e, March 10, 1934, as amended 1936, 1946, 1947, 1948, 1949, 1958, 1965, 1978, and 1995; USFWS, 1934) requires that whenever waters or channel of a stream or other body of water are proposed or authorized to be modified by a public or private agency under a federal license or permit, the federal agency must first consult with the USFWS and/or NMFS and with the head of the agency exercising administration over the wildlife resources of the state where construction will occur (in this case the CDFW), with a view to conservation of birds, fish, mammals, and all other classes of wild animals and all types of aquatic and land vegetation upon which wildlife is dependent.

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

4.1.3 Federal Endangered Species Act

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

The FESA prohibits the "Take" of endangered or threatened wildlife species. A "Take" is defined as harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1531, 50 CFR 17.3; USFWS, 1973). An activity can be defined as a "Take" even if it is unintentional or accidental. Taking can result in civil or criminal penalties. Activities that could result in "Take" of a federally-listed species require an incidental "Take" authorization resulting from FESA Section 7 consultation or FESA Section 10 consultation (USACE/EPA, 1973). Plants are legally protected under the FESA only if "Take" occurs on federal land or from federal actions, such as, issuing a wetland fill permit.

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

Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed endangered or threatened species may be present in the study area and determine whether the proposed project will have a potentially significant impact on such a species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA or result in the destruction or adverse modification of critical habitat designated or proposed to be designated for such species (16 USC 1536[3], [4]; USFWS, 1973). Project-related impacts to species on the FESA endangered or threatened list would be considered significant and thus, would require mitigation.

4.1.4 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in CFR Part 10, including feather or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21; USFWS, 1918). The MBTA also prohibits disturbance and harassment of nesting migratory birds at any time during their breeding

season. The USFWS is responsible for enforcing the MBTA (16 USC 703; USFWS, 1918). The migratory bird nesting season is generally considered to be between March 15 and August 15 within the study region.

4.2 State Laws

4.2.1 California Coastal Act

This project is located outside of the jurisdiction of the California Coastal Act.

4.2.2 Porter-Cologne Water Quality Control Act

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

4.2.3 California Endangered Species Act

The State of California enacted the CESA in 1984. The CESA is similar to the FESA but pertains to state-listed endangered and threatened species. Under the CESA, the CDFW has the responsibility for maintaining a list of threatened and endangered species designated under state law (California Fish and Game Code [CFGC] 2070; CDFW, 1984). Section 2080 of the CFGC prohibits "Take" of any species that the commission determines to be an endangered or threatened species. "Take" is defined in Section 86 of the CFGC as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

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

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

4.2.4 California Environmental Quality Act

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

The CNPS maintains a list of plant species native to California whose populations that are significantly reduced from historical levels, occur in limited distribution, or are otherwise rare or threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS, 2020). Taxa with a CRPR of 1A, 1B, 2A, 2B, and 3 in the CNPS inventory consist of plants that meet the definitions of the CESA of the CFGC, are eligible for state listing, and meet the definition of Rare or Endangered under CEQA Guidelines Sections 15125(c) and 15380(d). Some taxa with a CRPR 4 may meet the definitions of the CESA of the CFGC. CRPR 4 populations may qualify for consideration under CEQA if they are peripheral or disjunct populations; represent the type locality of the species; or exhibit unusual morphology and/or occur on unusual substrates.

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

CEQA Guidelines checklist IV(b) calls for the consideration of riparian habitats and sensitive natural communities. Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. However, these communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies, or regulations, or by CDFW (that is, the CNDDB and VegCAMP programs; CDFW, 2018b) or the USFWS. Impacts to sensitive natural communities and habitats must be considered and evaluated under CEQA (California Code of Regulations [CCR]: Title 14, Div. 6, Chap. 3, Appendix G; CNRA, 1970).

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

As a trustee agency under CEQA, CDFW reviews potential project impacts to biological resources, including wetlands. In accordance with the CEQA thresholds of significance for biological resources, areas that meet the state criteria of wetlands and could be impacted by a project must be analyzed.

Pursuant to CFGC Section 2785, CDFW defines wet areas as "lands which may be covered periodically or permanently with shallow water and which include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, fens, and vernal pools" (CDFW, 1998).

4.2.5 California Fish and Game Code Section 1600

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species are subject to jurisdiction by the CDFW under Sections 1600-1616 of the CFGC (CDFW, 1994). Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake, generally requires a Streambed Alteration Agreement (SAA).

The term "stream," which includes creeks and rivers, is defined in the CCR as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life." This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation (14 CCR 1.72; CNRA, 1987).

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

4.2.6 California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the CFGC it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows [*Passer domesticus*] and European starlings [*Sturnus vulgaris*]). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the "Take" or possession of any migratory non-game bird (CDFW, 1998). Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "Take" by the CDFW.

4.2.7 Fully Protected Species and Species of Special Concern

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

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

Table 2 in Appendix 3 includes potentially-occurring federal and State-listed species and SSC animals that may occur in the study area.

4.2.8 Native Plant Protection Act of 1973

The Native Plant Protection Act (NPPA) of 1973 (Sec.1900-1913 of the CFGC; CDFW, 1998) includes provisions that prohibit the taking of endangered or rare native plants from the wild and a salvage requirement for landowners. The CDFW administers the NPPA and generally regards as "rare" many plant species included on Lists 1A, 1B, 2A, 2B, 3, and 4 of the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2020).

Table 1 in Appendix 3 includes potentially-occurring endangered or rare native plants that may occur in the study area (including CNPS lists).

4.2.9 Natural Community Conservation Planning Act

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

5.0 Special-status Biological Resources

An evaluation was conducted for the potential presence or absence of habitat for special-status plant and animal species. CNDDB RareFind (CDFW, 2020a), BIOS (CDFW, 2020b), and CNPS (CNPS, 2020) searches were completed for the 7.5-minute USGS Eureka quadrangle and all adjacent quadrangles. The aforementioned databases were queried for historical and existing occurrences of State and federally-listed threatened, endangered, and candidate plant and animal species; species proposed for listing; and all plant species listed by the CNPS (Online 2020 inventory). In addition, a list of all federally-listed species that are known to occur or may occur in the vicinity was obtained from the USFWS' IPaC database (USFWS, 2020a).

Table 1 in Appendix 3 includes all plant species reported from the queries, their preferred habitat, and if there is suitable habitat present within the study area for the species. Table 2 includes all animal species reported from the queries, their preferred habitat, and if there is suitable habitat present within

the study area for the species. The potential for occurrence of those species included on the list were then evaluated based on the habitat requirements of each species relative to the conditions observed during the field surveys.

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

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

5.1 Special-status Botanical Species

Based on a review for special-status botanical species, 51 special-status botanical species have been reported from the region consisting of the Eureka quadrangle and the surrounding quadrangles (Appendix 3, Table 1). Of the special-status botanical species reported for the region, 32 botanical species are considered to have low or no potential to occur within the study area, many of the species with low or no potential of occurrence are coastal strand species dependent on conditions found within close proximity to the active shoreline. Nineteen species have a moderate or high potential of occurring within the study area, including one special-status species that was observed within the study area. Species with a moderate or high potential for occurrence or those observed within the study area are described below. The western lily is anticipated to have no potential of occurrence within the study area based on lack of appropriate habitat. However, because CNDDB includes a large polygon covering a portion of the study area as potential habitat, the western lily is also described below.

Twisted horsehair lichen (*Bryoria spiralifera*) is a lichen in the Parameliaceae family. It is neither state nor federally listed, but has a CRPR of 1B.1 and a heritage rank of G3/S1S2. Its elevation range is reported usually from 0 to 30 meters above sea level. This species is reported from north coast coniferous forest and usually grows on conifers. Within the nine-quad search, three Rarefind

occurrences are reported, the closest being approximately 2.47 miles northwest with an observation date in 1974. Although suitable habitat may exist within the study area for this species, it was not detected.

Seaside bittercress (*Cardamine angulata*) is a perennial herb in the Brassicaceae family. It is neither state nor federally listed, but has a CRPR of 2B.1 and a heritage rank of G5/S1. Its elevation range is reported from 90 to 155 meters above sea level. Within its range state-wide, its blooming period is reported as January through July. This species is reported from mesic sites within conifer forests, specifically seeps and streambanks. Within the nine-quad search, one Rarefind occurrence is reported approximately 4.3 miles southeast with an observation date in 1964. Although suitable habitat may exist within the study area for this species, it was not detected.

Pacific golden saxifrage (*Chrysosplenium glechomifolium*) is a perennial herb in the Saxifragaceae family. It is neither state nor federally listed, but has a California Rare Plant Rank (CRPR) of 4.3 and a heritage rank of G5/S3. Its elevation range is reported from 10 to 220 meters above sea level. Within its range state-wide, its blooming period is reported as February through May. This species is reported from riparian and north coast coniferous forests, and is typically found along streambanks, seeps, or along wet roadsides. There is no Rarefind occurrence for this taxon within the nine-quad search, though it has been reported from several locations within 10 miles of the study area through Calflora (Calflora, 2020). Although suitable habitat may exist within the study area for this species, it was not detected.

Coast fawn lily (*Erythronium revolutum*) is a perennial bulbiferous herb in the Liliaceae family. It is neither state nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G4G5/S3. Its elevation range is reported from 60 to 1,405 meters above sea level. Within its range state-wide, its blooming period is reported as March through August. This species is reported from bogs and fens, broadleaved upland forest, and north coast coniferous forests, where it occurs in mesic sites and stream banks. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest report overlapping the study area with an observation date in 1918. Although suitable habitat may exist within the study area for this species, it was not detected.

Minute pocket moss (*Fissidens pauperculus*) is a lichen in the Fissidentaceae family. It is neither state nor federally listed, but is a United States Forest Service (USFS) Sensitive species with a CRPR of 1B.2 and a heritage rank of G3?/S2. Its elevation range is reported from 10 to 1,024 meters above sea level. This species is reported from north coast coniferous forests and coastal riparian habitat, where it occurs on damp soil in streambeds and stream banks. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest approximately 3.8 miles southeast of the study area, with an observation date in 1967. Although suitable habitat may exist within the study area for this species, it was not detected.

Harlequin lotus (*Hosackia gracilis*) is a perennial herb in the Fabaceae family. It is neither state nor federally listed, but has a CRPR of 4.2 and a heritage rank of G3G4/S3. Its elevation range is reported from 0 to 700 meters above sea level. Within its range state-wide, its blooming period is reported as March through July. This species is reported from broadleaved upland forests, coastal bluff scrub, coastal prairie, coastal scrub, meadows, seeps, marshes and swamps, north coast coniferous forests, and valley and foothill grassland habitats. There is no Rarefind occurrence for this taxon within the nine-quad search, though it has been reported from several locations within 10 miles of the study area through Calflora (Calflora, 2020). Although suitable habitat may exist within the study area for this species, it was not detected.

Marsh pea (*Lathyrus palustris*) is a perennial herb in the Fabaceae family. It is neither state nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G5/S2. Its elevation range is reported from 2 to 140 meters above sea level. Within its range state-wide, its blooming period is reported as March through August. This species is reported from bogs and fens, lower montane coniferous forests, marshes and swamps, north coast coniferous forests, coastal prairie, and coastal scrub habitats, primarily from moist coastal areas. Within the nine-quad search, two Rarefind occurrences are reported, the nearest being 2.2 miles southwest of the study area with an observation date in 2003. Although suitable habitat may exist within the study area for this species, it was not detected.

Western lily (*Lilium occidentale*) is a perennial bulbiferous herb in the Liliaceae family. It is both state and federally listed as endangered, and has a CRPR of 1B.1 and a heritage rank of G1/S1. Its elevation range is reported from 2 to 185 meters above sea level. Within its range state-wide, its blooming period is reported as June and July. This species is reported from bogs and fens, coastal bluff scrub, coastal prairie, coastal scrub, freshwater marshes and swamps, and from north coast coniferous forest openings. Within these habitat types, it is most common on well-drained old beach washes overlain with windblown alluvium and organic topsoil, usually near margins of Sitka spruce. This species is very susceptible to soil compaction and texture and is extremely susceptible to herbivory and encroachment by invasive species. Within the nine-quad search, five quads are recorded with non-specific Rarefind occurrences, with the entire Eureka quad highlighted, including the study area. Known populations occur on Table Bluff approximately 8.8 miles southwest of the study area. Although suitable habitat may exist within the study area for this species, it was not detected.

Heart-leaved twayblade (*Listera cordata*) is a perennial herb in the Orchidaceae family. It is neither state nor federally listed, but has a CRPR of 4.2 and a heritage rank of G5/S4. Its elevation range is reported from 5 to 1,370 meters above sea level. Within its range state-wide, its blooming period is reported as February through July. This species is reported from bogs and fens within lower montane coniferous forests and north coast coniferous forests. There is no Rarefind occurrence for this taxon within the nine-quad search, though it has been reported from several locations within 10 miles of the study area through Calflora (Calflora, 2020). Although suitable habitat may exist within the study area for this species, it was not detected.

Running-pine (*Lycopodium clavatum*) is a rhizomatous fern in the Lycopodiaceae family. It is neither state nor federally listed, but has a CRPR of 4.1 and a heritage rank of G5/S3. Its elevation range is reported from 45 to 1,225 meters above sea level. Within its range state-wide, its blooming period is reported as June through September. This species is reported from lower montane coniferous forests and north coast coniferous forests where it occurs in the forest understory, edges, openings, and roadsides, within mesic sites with partial shade and light. Within the nine-quad search, numerous Rarefind occurrences are reported, the nearest is approximately 5 miles east of the study area with an observation date in 1996. Although suitable habitat may exist within the study area for this species, it was not detected.

Ghost pipe (*Monotropa uniflora*) is an achlorophyllous perennial herb in the Ericaceae family. It is neither state nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G5/S2. Its elevation range is reported from 15 to 855 meters above sea level. Within its range state-wide, its blooming period is reported as June through September. This species is reported from broadleaved upland forest and north coast coniferous forest where it is often found under redwood or western hemlock trees. Within the nine-quad search, one Rarefind occurrence is reported, approximately 1.7 miles southeast of

the study area with an observation date in 1971. Although suitable habitat may exist within the study area for this species, it was not detected.

Howell's montia (*Montia howellii*) is an annual herb in the Montiaceae family. It is neither state nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G3G4/S2. Its elevation range is reported from 10 to 1,215 meters above sea level. Within its range state-wide, its blooming period is reported as March through May. This species is reported from vernally mesic meadows and seeps, north coast coniferous forests, and sometimes roadside habitats. Within the nine-quad search, numerous Rarefind occurrences are reported, with the nearest undefined 1-mile area report overlapping the study area with an observation date in 1989. Although suitable habitat may exist within the study area for this species, it was not detected.

California pinefoot (*Pityopus californicus*) is a perennial herb in the Ericaceae family. It is neither state nor federally listed, but has a CRPR of 4.2 and a heritage rank of G4G5/S4. Its elevation range is reported from 15 to 2,225 meters above sea level. Within its range state-wide, its blooming period is reported as March through August. This species is reported from broadleaved upland forest, upper and lower montane forest, and north coast coniferous forests in deep shade, often under a layer of duff. There is no Rarefind occurrence for this taxon within the nine-quad search, though it has been reported from several locations within 10 miles of the study area through Calflora (Calflora, 2020). Although suitable habitat may exist within the study area for this species, it was not detected.

Nodding semaphore grass (*Pleuropogon refractus*) is a perennial rhizomatous grass in the Poaceae family. It is neither state nor federally listed, but has a CRPR of 4.2 and a heritage rank of G4/S4. Its elevation range is reported from 0 to 1,600 meters above sea level. Within its range state-wide, its blooming period is reported as April through August. This species is reported from meadows and seeps, riparian forests, and north coast coniferous forests, primarily in mesic sites along streams and open mesic grassy flats in coastal forests. There is no Rarefind occurrence for this taxon within the nine-quad search, though it has been reported from several locations within 10 miles of the study area through Calflora (Calflora, 2020). Although suitable habitat may exist within the study area for this species, it was not detected.

Trailing black current (*Ribes laxiflorum*) is a shrub in the Grossulariaceae family. It is neither state nor federally listed, but has a CRPR of 4.3 and a heritage rank of G5/S4. Its elevation range is reported from 5 to 1,395 meters above sea level. Within its range state-wide, its blooming period is reported as March through August. This species is reported from north coast coniferous forests and redwood forests, growing on logs and stumps in moist, wet places. There is no Rarefind occurrence for this taxon within the nine-quad search, though it has been reported from several locations within 10 miles of the study area through Calflora (Calflora, 2020). Although suitable habitat may exist within the study area for this species, it was not detected.

Maple-leaved checkerbloom (*Sidalcea malachroides*) is a perennial herb in the Malvaceae family. It is neither state nor federally listed, but has a CRPR of 4.2 and a heritage rank of G3/S3. Its elevation range is reported from 4 to 765 meters above sea level. Within its range state-wide, its blooming period is reported as April through August. This species is reported from broadleaved upland forests, coast prairie, coast scrub, north coast coniferous forests, and riparian habitats, primarily from woodlands and clearings near the coast, often in disturbed areas. Within the nine-quad search, numerous Rarefind occurrences are reported, with the nearest undefined 1-mile area report overlapping the study area

with an observation date in 1921. Although suitable habitat may exist within the study area for this species, it was not detected.

Siskiyou checkerbloom (*Sidalcea malviflora* ssp*. patula*) is a perennial herb in the Malvaceae family. It is neither state nor federally listed, but has a CRPR of 1B.2 and a heritage rank of G5T2/S2. Its elevation range is reported from 5 to 1255 meters above sea level. Within its range state-wide, its blooming period is reported as April through August. This species is reported from broadleaved upland forests, coast prairie, coast scrub, north coast coniferous forests, and riparian habitats, primarily from woodlands and clearings near the coast; often in disturbed areas. Within the nine-quad search, numerous Rarefind occurrences are reported, the nearest is approximately 1.7 miles southwest of the study area, with an observation date in 1944. Suitable habitat exists within the study area for this species and it **was observed during the 2020 floristic survey effort**.

Coast checkerbloom (*Sidalcea oregana* ssp. *eximia*) is a perennial herb in the Malvaceae family. It is neither state nor federally listed, but has a CRPR of 1B.2 and a heritage rank of G5T1/S1. Its elevation range is reported from 5 to 1,805 meters above sea level. Within its range state-wide, its blooming period is reported as June through August. This species is reported from meadows and seeps within north coast and lower montane coniferous forests, typically near meadows in gravelly soils. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest centered approximately 3.9 miles south of the study area with an observation date from 1907. Although suitable habitat may exist within the study area for this species, it was not detected.

Cylindrical trichodon (*Trichodon cylidricus*) is a moss in the Ditrichaceae family. It is neither state nor federally listed, but has a CRPR of 2B.2 and a heritage rank of G4/S2. Its elevation range is reported from 50 to 1,500 meters above sea level. This species is reported from broadleaved upland forest and upper montane coniferous forests, typically in openings on sandy or clay soils. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest centered approximately 9.4 miles north of the study area with an observation date from 1983. Although suitable habitat may exist within the study area for this species, it was not detected.

Methuselah's beard lichen (*Usnea longissima*) is a lichen in the Parmeliaceae family. It is neither state nor federally listed, but has a CRPR of 4.2 and a heritage rank of G4/S4. Its elevation range is reported from 45 to 1,465 meters above sea level. This species is reported from broadleaved upland forest and north coast coniferous forests, in the "redwood zone" on a variety of species of tree branches. Within the nine-quad search, several Rarefind occurrences are reported, with the nearest centered approximately 7.6 miles southeast of the study area with an observation date from 2003. Although suitable habitat may exist within the study area for this species, it was not detected.

5.2 Special-status Animal Species

Based on a review of special-status animal species, 61 special-status animal species have been reported with the potential to occur in the project region consisting of the Eureka quadrangle and the surrounding quadrangles (Appendix 3, Table 2). Of the special-status animal species potentially occurring in the region, 54 animal species are considered to have a no or low potential to occur at the project site and 6 species have a moderate to high potential to occur, and one special-status animal species that was observed within the study area. Species with a moderate or high potential for occurrence within the study area are described below.

5.2.1 Amphibians

The Northern red-legged frog (*Rana aurora*) occupies humid forests, woodlands, grasslands, and stream sides 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.

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

Although this species was not detected, suitable habitat exists for this species in several wet locations within the study area. Avoidance and minimization measures to protect wetlands on the project site, included in Section 7.0 Recommendations, are expected to adequately protect this species as well.

5.2.2 Birds

The Cooper's Hawk (*Accipiter cooperii*) occupies woodlands, open and interrupted and marginal habitats. Nests are primarily in riparian areas with deciduous trees, in canyons bottoms, and also among live oaks.

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

Although this species was not detected, suitable habitat exists for this species within the forested and forest edge portions of the study area. Avoidance and minimization measures for nesting birds prior to construction are included in Section 7.0 Recommendations.

The sharp-shinned hawk (*Accipiter striatus*) is found in pine, oak, and other mixed coniferous forests, riparian areas, and usually nesting within 275 feet of water.

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

Although this species was not detected, suitable habitat exists within the forested portions of the study area for this species. Avoidance and minimization measures for nesting birds prior to construction are included in Section 7.0 Recommendations.

The Vaux's swift (*Chaetura vauxi*) nests in coniferous or mixed forest, foraging in openings, especially above streams. They nest communally, usually in hollow trees.

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

Although this species was not detected, suitable foraging habitat and potentially roosting habitat exists within the study area for this species. Avoidance and minimization measures for nesting birds prior to construction are included in Section 7.0 Recommendations.

The olive-sided flycatcher (*Contopus cooperi*) makes a cup nest near the tip of a horizontal branch and winters near forest openings.
Status: Federal None, State None, Species of Special Concern, Global Rank Apparently Secure, State Rank Apparently Secure.

Although this species was not detected, suitable habitat exists for this species along the forested edges of the study area. Avoidance and minimization measures for nesting birds prior to construction are included in Section 7.0 Recommendations.

Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*) live in grasslands with few trees, tidal salt marshes and estuaries.

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

Although this species was not detected, suitable habitat exists within the study area for this species. Avoidance and minimization measures for nesting birds prior to construction are included in Section 7.0 Recommendations.

The black-capped chickadee (*Poecile atricapillus*) is a bird in the Paridae family. This species inhabits riparian woodlands in Del Norte and northern Humboldt Counties. It is mainly found in deciduous trees, especially willows and alders, along large or small watercourses. The chickadee excavates its nest cavity in rotten wood, or nests in old woodpecker holes.

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

Suitable habitat exists for this species along the riparian corridors within the study area and **it was detected**. Avoidance and minimization measures for nesting birds prior to construction are included in Section 7.0 Recommendations.

5.2.3 Fishes

No special-status fish species have a moderate or high potential to occur within the study area due to lack of surface water connectivity.

5.2.4 Insects

No special-status insect species have a moderate or high potential to occur within the study area due to lack of suitable habitat available.

5.2.5 Mammals

No special-status mammal species have a moderate or high potential to occur within the study area due to lack of suitable habitat available.

5.2.6 Mollusks

No special-status mollusk species have a moderate or high potential to occur within the study area due to lack of suitable habitat available.

5.2.7 Reptiles

No special-status reptile species have a moderate or high potential to occur within the study area due to lack of suitable habitat available.

5.3 Special-status Natural Communities and Habitats

Sensitive natural communities are habitats that are generally defined by vegetation type and geographical location and are increasingly restricted in abundance and distribution. Recognition of natural communities is an ecosystem-based approach to maintaining biodiversity in California. Holland-type CNDDB natural communities are habitat for numerous special-status plant and animal species. CDFW no longer updates their tracking of Holland-type CNDDB natural communities and has since standardized alliance and association-level vegetation nomenclature for California to comply with the National Vegetation Classification System.

5.3.1 Natural Communities

Vegetation communities within the study area reflect suburban wildland interface and relictual forest conditions. Because of the developed nature of the study area, history of disturbance, and isolated nature of the vegetation communities within the City of Eureka, vegetation cover is described down to major vegetation community types and is not isolated to specific vegetation community designations, with the exception of well-developed small fruit bulrush marsh.

The majority of the study area surrounding the athletic facilities is dominated by remnant conifer forest best described as north coast conifer forest (Figure 2; Appendix 2, Photos 4-8 and 10). Three tree species are dominant within the forest with coast redwood displaying the highest cover, followed by Sitka spruce and Douglas fir. Lesser dominants included western red cedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), and grand fir (*Abies grandis*). The dominance by coast redwood, Sitka spruce and Douglas fir do not meet the criteria for a specific vegetation community or alliance but is likely a mix of three natural communities (Redwood forest (*Sequoia sempervirens* Forest Alliance), Sitka spruce forest (*Picea sitchensis* Forest Alliance), and Douglas fir forest (*Pseudotsuga menziesii* Forest Alliance). The mixed conifer forest surrounding the athletic facilities is habitat for a number of botanical and wildlife species that otherwise would not survive in the suburban surroundings.

Cooper Creek supports significant riparian hardwood forest immediately north of Cloney Field (Figure 2; Appendix 2, Photo 15). The area is dominated by red alder, pacific willow, and coast, with lesser dominance by Sitka spruce and Sitka willow (*Salix sitchensis*). The assemblage of vegetation does not meet the definition for a specific vegetation community; however, the area represents habitat for a number of botanical and wildlife species as evidenced by largely intact native species dominated understory. This vegetation community is also directly associated with three-parameter wetland conditions and as such is protected from disturbance.

Small fruit bulrush marsh (*Scirpus microcarpus* Herbaceous Alliance) was observed in several locations within the study area (Figure 2; Appendix 2, Photos 16 and 17). Small fruit bulrush marshes are ranked G4S2, which means that this vegetation community is secure globally, but is uncommon within the state of California. Within the study area the largest, most intact example occurs west of Cloney Field, however smaller occurrences occur west and northwest of the Albee track near the field house (Figure 2). All examples of this vegetation community within the study area are within areas mapped as three-parameter wetlands and display high levels of cover by native vegetation.

The majority of the study area is dominated by a mix of early seral woody vegetation, mixed herbaceous vegetation, ruderal vegetation, and athletic field lawn grass that reflect past disturbance and on-going use of the area for athletic facilities (Appendix 2, Photos 4-6, 13 and 15). Athletic fields within the study area were dominated by non-native grasses and forbs. Dominant species included creeping bentgrass,

Kentucky bluegrass (*Poa pratensis*), annual bluegrass (*Poa annua*), creeping buttercup, English daisy (*Bellis perennis*), and English plantain, among others (Appendix 3, Table 3). These non-native species commonly occur in lawns and developed areas throughout Humboldt County and do not reflect a described vegetation community.

A large wetland complex to the west of Albee Stadium is composed of a mix of herbaceous and woody wetland-dependent vegetation, although non-native hardy fuchsia (*Fuchsia magellanica*) and English ivy dominate the majority of the site (Appendix 2, Photo 12). Other species include skunk cabbage, giant horsetail, small fruit bulrush, montebretia, and western lady fern, among others. The vegetation composition does not meet the criteria for any described vegetation community but is mapped as wetland within the Wetland and Other Waters Delineation Report (SHN, 2020).

Mixed herbaceous and woody vegetation occurs in unmanaged portions of the study area, primarily adjacent to developed areas. Dominant species included coast willow, English holly (*Ilex aquifolium*), short leaf box (*Pittosporum tenuifolium*), California blackberry (*Rubus ursinus*), Himalayan berry (*Rubus armeniacus*), creeping bentgrass, sweet vernal grass, large quaking grass (*Briza maxima*), pampas grass (*Cortaderia jubata*), orchard grass, large bindweed (*Calystegia sylvatica* ssp. *disjuncta*), and English ivy, among others. The mix of species found within this area does not meet the criteria for a natural community, and more accurately reflects past disturbance and a mosaic of wet and dry conditions found within the study area around the athletic facilities. Areas dominated by hydrophytic vegetation were characterized as wetland, as recorded within the Wetland and Other Waters Delineation Report (SHN, 2020).

Himalayan blackberry brambles were observed along the northern border of Cloney Field between the fence and riparian hardwood forest and between the high school parking and the remnant conifer forest (see Figure 2 for Himalayan blackberry thicket extent). Himalayan blackberry brambles are highly invasive and occur within a wide range of habitat areas including pastures, forest plantations, roadsides, streamsides, river flats, floodplains, fence lines, and right-of-way corridors (Sawyer, 2009). In addition, this species was present in lower densities on the slope north of the athletic fields.

Appropriate buffers and best management practices (BMPs) should be established and maintained for the duration of the project to minimize impacts to the S3 and S2 vegetation communities. See Section 7.0 Recommendations for recommended buffers and setbacks from S3 and S2 vegetation communities.

5.3.2 Wetlands and Riparian Habitats

A site-specific wetland delineation was conducted within the study area (SHN, 2020). Many three-parameter wetlands were mapped and documented within the study area around the existing athletic facilities. Extensive wetlands exist along the western, eastern, and northern edges of Cloney Field as well as the western and eastern edges of the Albee Stadium facilities (SHN, 2020). For more details, refer to Figures 2 and 3 and Section 8.0 Discussion and Results in the Wetland and Other Waters Delineation Report (SHN, 2020). Project-related activities will be designed to avoid wetlands as much as is feasibly possible.

Riparian habitat was observed along the northern boundaries of the study area associated with Cooper Creek and are included in the Wetland and other Waters Delineation Report. Several small streams with

Ordinary High Water Marks were present within the study area and are documented within the Wetland and Other Waters Delineation Report (SHN, 2020). For more details, refer to Figures 2 and 3 and Section 8.0 Discussion and Results in the Wetland and Other Waters Delineation Report (SHN, 2020).

5.3.3 Designated Critical Habitat

The USFWS Critical Habitat Portal was queried for habitat designated as critical for species listed under the FESA (USFWS, 2020b). No critical habitat is designated within the study area. The nearest designated critical habitat is for the tidewater goby (*Eucyclogobius newberryi*) over 2 miles northeast of the project site. The proposed project will not impact this critical habitat.

6.0 Conclusions

The purpose of this report was to assess the biological resources and habitat available within the study area,
and to evaluate project-related impacts. The habitat value and availability were assessed for special-status species that could occur within the study area. See Section 7.0 Recommendations for avoiding and mitigating impacts.

6.1 Special-status Botanical Species

Of the 51 special-status botanical species potentially occurring in the Eureka and surrounding quadrangles, 32 are considered to have low or no potential to occur within the project area, and 19 are considered to have a moderate or high potential of occurrence, including one special-status species that was observed. Site investigations were conducted during appropriate seasons for detecting species with moderate or higher potential for occurrence. Siskiyou checkerbloom (*Sidalcea malviflora* ssp*. patula*), a 1B.2 special-status botanical species was observed within the study area during the surveys. No additional special-status botanical species were observed, nor is it likely that additional special-status botanical species occur within the project area due to historical and continued disturbance and use and the presence of non-native species. It is unlikely that any species were missed; however, the findings in this report represent conditions at the time of fieldwork and it is possible that false negative surveys for rare plant species could occur. This report documents the 2020 field investigations, and the findings presented here are based on best professional judgment.

The Siskiyou checkerbloom populations observed within the project area occur on both sides of Del Norte Street near the eastern edge of the study area (see Figure 2). The population on the north side of Del Norte Street was healthy (Appendix 2, Photos 18 and 19), however the population on the South side of Del Norte Street consisted of only a few individuals (Appendix 2, Photo 2). Both populations were in flower. Annual mowing of the Del Norte Street right of way likely allows for the persistence of these populations. A description of the populations is included in Appendix 4.

Avoidance and minimization measures are provided in Section 7.0 Recommendations. With the incorporation of these measures, no impacts to special-status botanical species are expected to occur as a result of this project.

6.2 Special-status Animal Species

Of the 61 special-status animal species reported from the Eureka and surrounding quadrangles, 54 animal species are considered to have a no or a low potential to occur within the study area and 6 species have a moderate to high potential of occurrence based on the available habitat. One special-status wildlife species was observed during the field visit on August 25, 2020. Black-capped chickadee was heard within the riparian corridor along the western boundary of the project site. Considering the managed nature and regular use of the project site, special-status species are expected to choose less disturbed habitat for nesting and roosting, such as the Cooper Gulch Canyon to the north of the project area. However, potential habitat exists for a small number of special-status animals. Therefore, avoidance and minimization measures are provided in Section 7.0 Recommendations. With the incorporation of these measures, no impacts to special-status animal species are expected to occur as a result of this project.

6.3 Sensitive Natural Communities

The following sensitive natural community ranked S3 or lower, was observed adjacent to the project area (Figure 2):

Small fruit bulrush marsh (*Scirpus microcarpus* Herbaceous Alliance) exists within several of the wetland areas mapped on site (Figure 2). Small fruit bulrush marsh has a rarity rank of G4S2 and should be avoided during the life of the project. Impacts to this vegetation community should be mitigated in conjunction with any wetland mitigation required.

While the mixed conifer forest surrounding the athletic facilities does not meet the criteria for a sensitive vegetation community, it is habitat for a number of botanical and wildlife species that otherwise would not survive in the suburban surroundings. As such, the forested portions of the study area should be protected and avoided as much as is feasible. This includes minimizing disturbance to individual trees and replanting a mix of native conifer species in landscaping, restoration, or mitigation areas.

Riparian woodland associated with Cooper Creek north of Cloney Field is sensitive and is strongly associated with wetland conditions found there. Impacts to this vegetation community should be avoided.

6.4 Nesting Birds

All locations with tall grasses or a shrub or tree canopy layer within the study area may provide suitable nesting habitat for a diverse assemblage of migratory birds. See Section 7.0 Recommendations for measures to minimize impacts to the nesting birds on the site.

6.5 Impacts on Wildlife Movement

Wildlife movement corridors within the study area are expected to be concentrated along shrubby and vegetated areas, especially the riparian corridors running along the northwestern and northern boundaries of the study area, adjacent to Cooper Gulch Canyon. The study area is positioned between L and O Streets in the City of Eureka, and between fenced residential properties, which may restrict some

wildlife movement out of the study area. This project is not proposing a change in use or encroachment further into the riparian areas adjacent to the project site. Therefore, it is unlikely that wildlife movement corridors will be significantly impacted by the project.

6.6 Wetlands and Riparian Habitats

Three-parameter wetlands were mapped and are documented within the study area as shown in the Wetland and Other Waters Delineation Report (SHN, 2020). Wetlands occur surrounding the athletic facilities reflecting stormwater catchment and seeps from adjacent slopes. Several small streams occur within the study area with the largest being Cooper Creek, which flows through a culvert under the length of the football and baseball fields. The remaining streams occurring within the study area flow into Cooper Creek. Figure 2 in the above-mentioned Wetland and Other Waters Delineation Report outlines the location of wetlands and other waters within the study area surrounding the existing athletic facilities.

7.0 Recommendations

SHN recommends that the following measures be implemented at the project site to minimize the potential impacts to special-status plant and animal species, sensitive habitat, and waterways:

- Siskiyou checkerbloom populations should be avoided during the construction process. Temporary construction fencing should be installed during the construction process to avoid accidental disturbance of the populations mapped within the study area on Figure 2. The project should be designed so that the Siskiyou checkerbloom populations are not directly impacted by ground disturbance. If avoidance is not feasible, mitigation will need to be developed, which could include population relocation and/or seed collection and establishment of other populations within the study area. This would require the development of a mitigation plan in coordination with CDFW and five years of monitoring. To avoid indirect impacts to Siskiyou checkerbloom populations, the existing mowing and maintenance regime that allows it to persist should be continued.

- Avoid disturbance to wetland areas. Any wetland areas filled should be mitigated at a 3:1 replacement ratio, in coordination with CDFW staff.

- New development should maintain setbacks from wetlands equal to or greater than the setbacks provided by the existing development. Indirect wetland impacts such as reduced development setbacks should incorporate management activities that will enhance the wetland habitat (such as invasive species removal, mowing, etc.).

- Avoid impacts to small fruit bulrush marsh. This vegetation community is strongly associated with wetlands. Therefore, any impacts to this vegetation community would also result in impacts to wetlands. As such, wetland mitigation areas would be restored with this vegetation community to mitigate for impacts to both the wetland area and the small fruit bulrush.

- To avoid potential impacts to nesting birds, in accordance with the MBTA, one of the following shall be implemented:

- Conduct vegetation removal and other ground-disturbance activities associated with any construction activities between late August and mid-March, when birds are not typically nesting, or
- If vegetation removal or ground-disturbing activity is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Pre-construction surveys for nesting pairs, nests, and eggs shall occur within the construction limits and within 100 feet (200 feet for raptors) of the construction limits. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW, and implemented to prevent abandonment of the active nest.

- Project activities within the active channel of Cooper Creek (including but not limited to storm drainpipe rehabilitation and replacement, rock slope protection, headwall development, or similar ground disturbing activities) should occur from July 15 through October 31, to minimize potential impacts to aquatic species such as the northern red-legged frog, among others.
- Avoid constructing fencing and other barriers across riparian areas and retain riparian vegetation as cover to allow wildlife movement along riparian corridors.
- Direct outdoor lighting away from Cooper Gulch to the north of the project site to minimize light disturbance impacts on wildlife.
- Where project construction activities occur within close proximity to special-status resources, these resources should be demarcated by high-visibility construction fencing during the project construction period in a manner sufficient to avoid unintentional impacts.
- Minimize the removal of mature, healthy, native trees. Should removal of mature, healthy, native trees be unavoidable, the school could consider replacement for the removed trees.
- Use native tree species in landscaping plans if possible, to enhance habitat value of the area.
- If revegetation is needed as part of the project, native plant species should be used.
- For habitat improvement purposes, invasive English ivy and other invasive species should be removed.

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NRCS Soil Map 1

Map Scale: 1:3,660 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Humboldt County, Central Part, California
Survey Area Data: Version 6, Jun 1, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 8, 2019—Jun 21, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
212	Urban land-Halfbluff-Redsands complex, 0 to 5 percent slopes	13.1	37.8%
257	Lepoil-Candymountain complex, 2 to 15 percent slopes	21.5	62.2%
Totals for Area of Interest		**34.6**	**100.0%**

Site Photographs 2

Photo 1: Albee Stadium (lower left in photo) in 1946, looking southwest.

Photo 2: Albee Stadium in 1946, looking west.

Photo 3: Eureka High School (Albee Stadium in center) in 1946 looking northeast. Note Cloney Field has not yet been constructed.

Photo 4: Albee Stadium looking southwest. Note athletic facilities and surrounding coniferous forest. Photo taken May 13, 2020.

Photo 5: Albee Stadium looking north toward Del Norte Street. Note developed nature of the area. Photo taken May 13, 2020.

Photo 6: Albee Stadium looking south, note track and bleachers and surrounding coniferous forest. Photo taken May 13, 2020.

Photo 7: One of several pathways from the high school to Albee Stadium through the conifer forest. Photo looing upslope and west. Photo taken May 13, 2020.

Photo 8: Conifer forest surrounding Albee Stadium looking north on the west slope. Note mature conifer trees and invasive ivy as ground cover. Photo taken May 13, 2020.

Photo 9: One of several drainages within the study area. Note invasive English holly, and English ivy dominance. Photo taken May 13, 2020.

Photo 10: South end of Albee Stadium study area, within conifer forest. Note high density of English ivy. Photo taken May 13, 2020.

Photo 11: South end of Albee Stadium, looking west past the field house. Note wetland conditions on slope dominated by small fruit bulrush. Photo taken September 21, 2020.

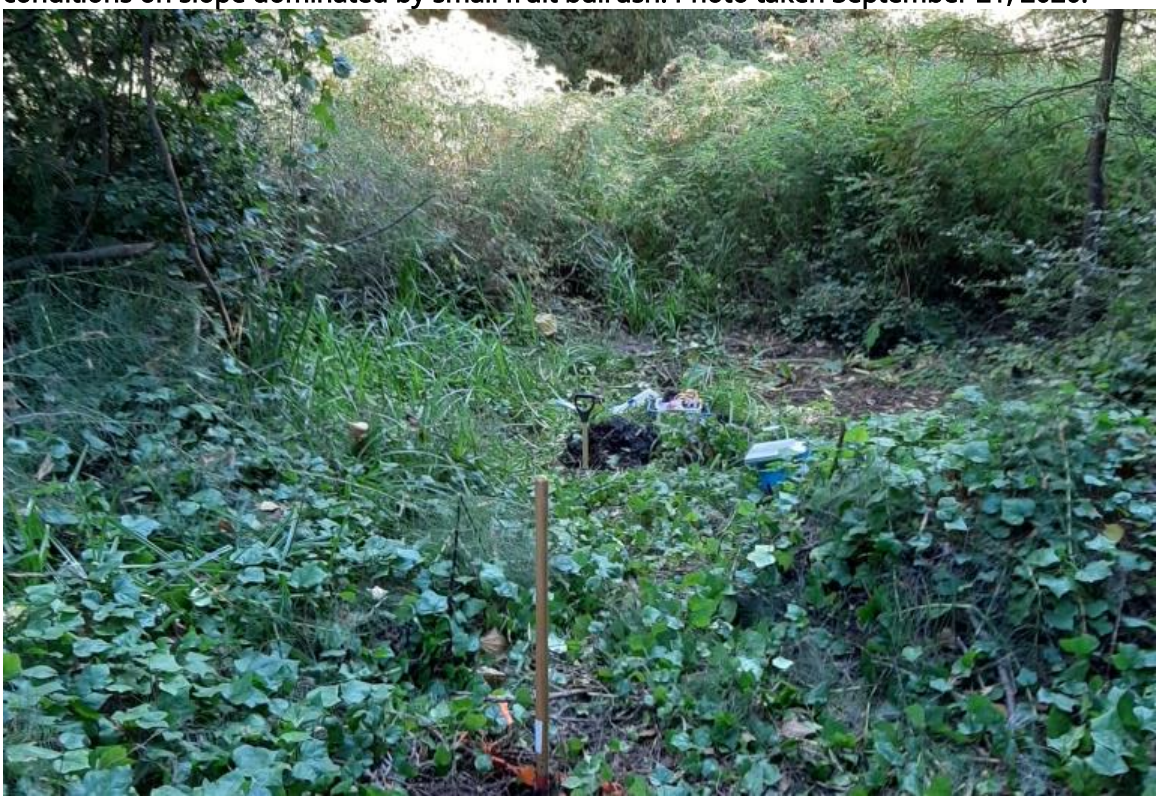

Photo 12: Wetland behind Albee Stadium dominated by a mix of wetland dependent herbaceous and woody species. Note English ivy invading, and hardy fuchsia in background. Photo taken September 23, 2020.

Photo 13: Cloney Field looking south. Note agriculture education facilities and surrounding conifer forest. Photo taken May 15, 2020.

Photo 14: Cloney Field and animal pens looking east. Note developed nature of the area. Photo taken May 15, 2020.

Photo 15: Cloney Field looking east along north end of the field. Note riparian hardwood forest to the left and conifer forest beyond the field. Photo taken September 23, 2020.

Photo 16: Wetland dominated by small fruit bulrush west of Cloney Field. Note dense cover by small fruit bulrush. Photo taken September 14, 2020.

Photo 17: Wetland dominated by small fruit bulrush looking northeast towards batting cages. Note proximity of wetland to developed areas. Photo taken September 15, 2020.

Photo 18: Location of Siskiyou checkerbloom north of Del Norte Street. Note tall non-native grasses. Photo looking east. Photo taken May 15, 2020.

Photo 19: Siskiyou checkerbloom beginning to flower. Northern population. Photo taken May 15, 2020.


Photo 20: Siskiyou checkerbloom in flower southern population. Photo taken May 15, 2020.

Species Lists 3

Table 1
Special-status Plant Species List CNDDB, CNPS, IPaC: Eureka and Surrounding 7.5-minute quadrangles
Albee Stadium Biological Assessment 8/27/2020

Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro-Habitat	Potential of Occurrence
Abronia umbellata var. *breviflora*	pink sand-verbena	Nyctagin-aceae	None	None	G4G5-T2	S1	1B.1	June-Oct.	Coastal dunes and coastal strand.	Foredunes and interdunes with sparse cover. Usually the plant closest to the ocean. 0-10 m.	None
Angelica lucida	sea-watch	Apiaceae	None	None	G5	S3	4.2	May-Sept.	Coastal strand	Coastal bluff scrub, coastal dunes, coastal scrub, coastal salt marshes. 0-150 m	Low
Astragalus pycnostachyus var. *pycnostachyus*	coastal marsh milk-vetch	Fabaceae	None	None	G2T2	S2	1B.2	April-Oct.	Coastal dunes, marshes & swamps, coastal scrub.	Mesic sites in dunes or along streams or coastal salt marshes. 0-155 m.	None
Astragalus rattanii var. *rattanii*	Rattan's milk-vetch	Fabaceae	None	None	G4T4	S4	4.3	April-July	Chaparral, cismontane woodland, lower montane conifer forest.	Open grassy hillsides, gravelly flats in valleys, and gravel bars of stream beds. 30-825 m.	Low
Bryoria pseudocapillaris	false gray horsehair lichen	Parmeli-aceae	None	None	G3	S2	3.2	Lichen	Coastal dunes, N. Coast conifer forest (immediate coast).	Usually on conifers. 0-90 m.	None
Bryoria spiralifera	twisted horsehair lichen	Parmeli-aceae	None	None	G3	S1S2	1B.1	Lichen	North coast conifer forest.	Usually on conifers. 0-30 m.	Moderate
Cardamine angulata	seaside bittercress	Brassic-aceae	None	None	G5	S1	2B.1	Jan.-July	Lower montane, conifer forest, N. coast conifer forest, wetland	Wet areas, streambanks. 90-155 m.	High
Carex arcta	northern clustered sedge	Cyperaceae	None	None	G5	S1	2B.2	June-Sept.	Bogs and fens, north coast conifer forest.	Mesic sites. 60-1405 m.	Low
Carex leptalea	bristle-stalked sedge	Cyperaceae	None	None	G5	S1	2B.2	March-July	Bogs and fens, meadows and seeps, marshes and swamps.	Mostly known from bogs and wet meadows. 3-1395 m.	Low
Carex lyngbyei	Lyngbye's sedge	Cyperaceae	None	None	G5	S3	2B.2	April-August	Marsh & swamp (brackish or freshwater).	0-200 m.	Low

Table 1
Special-status Plant Species List CNDDB, CNPS, IPaC: Eureka and Surrounding 7.5-minute quadrangles
Albee Stadium Biological Assessment 8/27/2020

Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro-Habitat	Potential of Occurrence
Carex praticola	northern meadow sedge	Cyperaceae	None	None	G5	S2	2B.2	May-July	Meadows and seeps.	Moist to wet meadows. 15-3200 m.	Low
Castilleja ambigua var. *humboldtiensis*	Humboldt Bay owl's-clover	Orobanch-aceae	None	None	G4T2	S2	1B.2	April-August	Marshes and swamps.	Coastal saltmarsh with *Spartina, Distichlis, Salicornia, Jaumea*. 0-20 m.	None
Castilleja litoralis	Oregon coast paintbrush	Orobanch-aceae	None	None	G3	S3	2B.2	June	Coastal bluff scrub, coastal dunes, coastal scrub.	Sandy sites. 5-255 m.	None
Chloropyron maritimum ssp. *palustre*	Point Reyes salty bird's-beak	Orobanch-aceae	None	None	G4?T2	S2	1B.2	June-Oct.	Coastal salt marsh.	Usually in coastal salt marsh with *Salicornia, Distichlis, Jaumea, Spartina,* etc. 0-10 m.	None
Chrysosplenium glechomifolium	Pacific golden saxifrage	Saxifrag-aceae	None	None	G5	S3	4.3	Feb.-June	North Coast coniferous forest, riparian forest	Streambanks, sometimes seeps, sometimes roadsides. 10-220 m.	High
Collinsia corymbosa	round-headed Chinese-houses	Plantagin-aceae	None	None	G1	S1	1B.2	April-June	Coastal Dunes	Coastal dunes from 10-30 m.	None
Eleocharis parvula	small spikerush	Cyperaceae	None	None	G5	S4	4.3	July-August	Marsh & swamp, salt marsh, wetland	In coastal salt marshes. 1-3020 m.	Low
Erysimum menziesii	Menzies' wallflower	Brassic-aceae	E	E	G1	S1	1B.1	March-Sept.	Coastal dunes.	Localized on dunes and coastal strand. 0-35 m.	None
Erythronium revolutum	coast fawn lily	Liliaceae	None	None	G4G5	S3	2B.2	March-August	Bogs & fens, broadleaved upland forest, north coast conifer forest.	Mesic sites; streambanks. 60-1405 m.	Moderate

Table 1
Special-status Plant Species List CNDDB, CNPS, IPaC: Eureka and Surrounding 7.5-minute quadrangles
Albee Stadium Biological Assessment 8/27/2020

Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro-Habitat	Potential of Occurrence
Fissidens pauperculus	minute pocket moss	Fissident-aceae	None	None	G3?	S2	1B.2	Lichen	North coast coniferous forest, Redwood.	Moss growing on damp soil along the coast. In dry streambeds and on stream banks. 10-1024 m.	High
Gilia capitata ssp. *pacifica*	Pacific gilia	Polemoni-aceae	None	None	G5T3	S2	1B.2	April-August	Coastal bluff scrub, chaparral, coastal prairie, valley & foothill grassland.	5-1345 m.	Low
Gilia millefoliata	dark-eyed gilia	Polemoni-aceae	None	None	G2	S2	1B.2	April-July	Coastal dunes.	1-60 m.	None
Glehnia littoralis ssp. *leiocarpa*	American glehnia	Apiaceae	None	None	G5T5	S3	4.2	May-August	Coastal Dunes	0-20 m.	None
Hesperevax sparsiflora var. *brevifolia*	short-leaved evax	Asteraceae	None	None	G4T3	S2	1B.2	March-June	Coastal bluff scrub, coastal dunes, coastal prairie.	Sandy bluffs and flats. 0-215 m.	None
Hosackia gracilis	harlequin lotus	Fabaceae	None	None	G4	S3	4.2	March-July	Broadleaved upland forest, coast bluff scrub, coast prairie, coast scrub, closed-cone conifer forest, meadow, seep, marsh & swamp, N. coast conifer forest, valley & foothill grassland.	Wetlands and roadsides. 0-700 m.	Moderate
Lasthenia californica ssp. *macrantha*	perennial goldfields	Asteraceae	None	None	G3T2	S2	1B.2	Jan.-Nov.	Coastal bluff scrub, coastal dunes, coastal scrub.	5-185 m.	None
Lathyrus glandulosus	sticky pea	Fabaceae	None	None	G3	S3	4.3	April-June	Cismontane woodland.	In oak woodlands upland from the coast redwood forests & along roadsides. 300-800 m.	Low

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Lathyrus japonicus	seaside pea	Fabaceae	None	None	G5	S2	2B.1	May-August	Coastal dunes.	3-65 m.	None
Lathyrus palustris	marsh pea	Fabaceae	None	None	G5	S2	2B.2	March-August	Bogs & fens, lower montane conifer forest, marsh & swamp, north coast conifer forest, coastal prairie, coastal scrub.	Moist coastal areas. 2-140 m.	Moderate
Layia carnosa	beach layia	Asteraceae	E	E	G2	S2	1B.1	March-July	Coastal dunes, coastal scrub.	On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 0-30 m.	None
Lilium kelloggii	Kellogg's lily	Liliaceae	None	None	G3	S3	4.3	May-August	Lower montane conifer forest, N. coast conifer forest.	Gaps and roadsides in conifer forest. 3-1300 m.	Low
Lilium occidentale	western lily	Liliaceae	E	E	G1	S1	1B.1	June-July	Coastal scrub, freshwater marsh, bogs & fens, coastal bluff scrub, coast prairie, N. coast conifer forest, marshes and swamps.	Well-drained, old beach washes overlain with wind-blown alluvium and organic topsoil; usually near margins of Sitka spruce. 3-110 m.	None
Listera cordata	heart-leaved twayblade	Orchidaceae	None	None	G5	S4	4.2	Feb.-July	Lower montane conifer forest, north coast conifer forest.	Bogs and fens, 5-1370 m.	Moderate
Lycopodium clavatum	running-pine	Lycopodi-aceae	None	None	G5	S3	4.1	June-Sept.	Lower montane conifer forest, north coast conifer forest, marsh &swamp.	Forest understory, edges, openings, roadsides; mesic sites with partial shade and light. 45-1225 m.	Moderate
Mitellastra caulescens	leafy-stemmed mitrewort	Saxifrag-aceae	None	None	G5	S4	4.2	March-Oct.	Broadleaved upland forest, lower montane conifer forest, meadow & seep, N. coast conifer forest.	Mesic sites. 5-1700 m.	None
Monotropa uniflora	ghost-pipe	Ericaceae	None	None	G5	S2	2B.2	June-Sept.	Broadleaved upland forest, north coast conifer forest.	Often under redwoods or west hemlock. 15-855 m.	Moderate
Montia howellii	Howell's montia	Montiaceae	None	None	G3G4	S2	2B.2	Feb.-May	Meadows and seeps, north coast coniferous forest, vernal pools.	Vernally wet sites; often on compacted soil. 10-1005 m.	High

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Scientific Name	Common Name	Family	FedList	CalList	GRank	SRank	RPlant Rank	Bloom Period	General Habitat	Micro-Habitat	Potential of Occurrence
Oenothera wolfii	Wolf's evening-primrose	Onagraceae	None	None	G2	S1	1B.1	May-Oct.	Coastal bluff scrub, coastal dunes, coastal prairie, low montane conifer forest.	Sandy substrates; usually mesic sites. 0-125 m.	Low
Pityopus californicus	California pinefoot	Ericaceae	None	None	G4G5	S4	4.2	March-August	Broadleaved upland forest, upper montane and, North coast coniferous forest, low montane coniferous forest.	Deep shade. Few understory species, often under layer of duff, in rocky to clay loam soil. 15-2225 m.	Moderate
Pleuropogon refractus	nodding semaphore grass	Poaceae	None	None	G4	S4	4.2	March-August	Meadow & seep, low montane conifer forest, N. coast conifer forest, riparian forest.	Mesic sites along streams, grassy flats in shaded redwood groves. 0-1600 m.	High
Polemonium carneum	Oregon polemonium	Polemoni-aceae	None	None	G3G4	S2	2B.2	April-Sept.	Coast scrub & prairie, low montane conifer forest.	0-1830 m.	Low
Puccinellia pumila	dwarf alkali grass	Poaceae	None	None	G4?	SH	2B.2	July	Marshes and swamps.	Mineral spring meadows and coastal salt marshes. 1-10 m.	None
Ribes laxiflorum	trailing black currant	Grossulari-aceae	None	None	G5	S4	4.3	March-August	N. coast conifer forest, Redwood forests.	Grows over logs and stumps in moist, wet places. 5-1395 m.	Moderate
Sidalcea malachroides	maple-leaved checkerbloom	Malvaceae	None	None	G3	S3	4.2	March-August	Broadleaved upland forest, coast prairie, coast scrub, North coast coniferous forest, riparian.	Woodlands and clearings near coast; often in disturbed areas. 0-730 m.	High
Sidalcea malviflora ssp. *patula*	Siskiyou checkerbloom	Malvaceae	None	None	G5T2	S2	1B.2	May-August	Coastal bluff scrub, coastal prairie, north coast conifer forest.	Open coastal forest; roadcuts. 5-1255 m.	**Present**
Sidalcea oregana ssp. *eximia*	coast checkerbloom	Malvaceae	None	None	G5T1	S1	1B.2	June-August	Meadow & seep, North coast coniferous forest & low montane coniferous forest.	Near meadows, in gravelly soil. 5-1805 m.	Moderate

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Silene scouleri ssp. *scouleri*	Scouler's catchfly	Caryophyll-aceae	None	None	G5T4 T5	S2S3	2B.2	June-August	Coastal bluff scrub, coastal prairie, valley and foothill grassland.	5-315 m.	None
Spergularia canadensis var. *occidentalis*	western sand-spurrey	Caryophyll-aceae	None	None	G5T4	S1	2B.1	June-August	Marshes and swamps (coastal salt marshes).	0-3 m.	None
Trichodon cylindricus	cylindrical trichodon	Ditrichaceae	None	None	G4	S2	2B.2	Moss	Broadleaved upland forest, upper montane coniferous forest.	Moss growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields. 50-1500 m.	Moderate
Usnea longissima	Methuselah's beard lichen	Parmeli-aceae	None	None	G4	S4	4.2	Lichen	North coast coniferous forest, broadleaved upland forest.	In the "redwood zone" on tree branches of a variety of trees, incl. big leaf maple, oaks, ash, Douglas-fir, and bay. 45-1465 m in California.	Moderate
Viola palustris	alpine marsh violet	Violaceae	None	None	G5	S1S2	2B.2	March-August	Coastal scrub, bogs and fens.	Swampy, shrubby places in coastal scrub or coastal bogs. 0-150 m.	Low

1. Species indicator status as assigned by Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and California Department of Fish and Wildlife (CDFW)

C: candidate
CT: candidate threatened
D: delisted
DPS: distinct population segment
E: endangered
ESU: evolutionarily significant unit
FP: fully protected
PT: proposed threatened
SSC: species of special concern
T: threatened
WL: watch list

2. Species Heritage rank as assigned by California Department of Fish and Wildlife (CDFW)

G1/S1: critically imperiled
G2/S2: imperiled
G3/S3: vulnerable
G4/S4: apparently secure
G5/S5: secure

Table 2
Regionally Occurring Special-status Animal Species Scoping List, CNDDB & IPaC
Albee Stadium, Eureka and surrounding USGS 7.5-minute quadrangles
August, 2020

Scientific Name	Common Name	Federal Status	State Status	Other Status	Global Rank	State Rank	Habitats		Potential of occurrence
AMPHIBIANS									
Ascaphus truei	Pacific tailed frog	None	None	SSC	G4	S3S4	Occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats.	Restricted to perennial montane streams. Tadpoles require water below 15 °C.	None
Rana aurora	northern red-legged frog	None	None	SSC	G4	S3	Humid forests, woodlands, grasslands, and streamsides in northwestern CA, 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.	Moderate
Rana boylii	foothill yellow-legged frog	None	Endangered	SSC	G3	S3	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats.	Needs some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	None
Rhyacotriton variegatus	southern torrent salamander	None	None	SSC	G3G4	S2S3	Coastal redwood, Douglas-fir, mixed conifer, montane riparian, & 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.	None
BIRDS									
Accipiter cooperii	Cooper's hawk	None	None	WL	G5	S4	Forests and woodlands, suburban and sometimes urban areas with trees.	Nests in trees in dense woods, usually on flats rather than hillsides.	High
Accipiter striatus	sharp-shinned hawk	None	None	WL	G5	S4	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.	Moderate

Table 2 Regionally Occurring Special-status Animal Species Scoping List, CNDDB & IPaC Albee Stadium, Eureka and surrounding USGS 7.5-minute quadrangles August, 2020									
Scientific Name	**Common Name**	**Federal Status**	**State Status**	**Other Status**	**Global Rank**	**State Rank**	**Habitats**		**Potential of occurrence**
Ardea alba	great egret	None	None	S	G5	S4	Colonial nester in large trees.	Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Low
Ardea herodias	great blue heron	None	None	S	G5	S4	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.	Low
Asio flammeus	short-eared owl	None	None	SSC	G5	S3	Live in large, open areas with low vegetation, including prairie and coastal grasslands, marshes, dunes, and agricultural areas.	Nest on the ground amid grasses and low plants. They usually choose dry sites—often on small knolls, ridges, or hummocks—with enough vegetation to conceal the incubating female.	None
Botaurus lentiginosus	American bittern	None	None	None	G4	S3S4	Breed mainly in freshwater marshes with tall vegetation.	Usually build their nests among thick stands of cattails, bulrushes, and sedges that grow out of shallow water. Less commonly, they nest on dry ground, in grassland areas dense with tall herbaceous plants.	None
Brachyramphus marmoratus	marbled murrelet	Threatened	Endangered	S	G3G4	S1	Feeds near-shore; nests inland along coast from Eureka to OR 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.	None

Table 2 Regionally Occurring Special-status Animal Species Scoping List, CNDDB & IPaC Albee Stadium, Eureka and surrounding USGS 7.5-minute quadrangles August, 2020									
Scientific Name	**Common Name**	**Federal Status**	**State Status**	**Other Status**	**Global Rank**	**State Rank**	**Habitats**		**Potential of occurrence**
Chaetura vauxi	Vaux's swift	None	None	SSC	G5	S2S3	Use mature and old-growth coniferous and mixed forests for nesting, especially those with plenty of hollow trees.	Nest are built in hollows of live or dead large trees, usually coniferous trees, and much less often in chimneys or under rooflines.	Moderate
Charadrius alexandrinus nivosus	western snowy plover	Threatened	None	SSC	G3T3	S2S3	Sandy beaches, salt pond levees & shores of large alkali lakes.	Needs sandy, gravelly or friable soils for nesting.	None
Charadrius montanus	mountain plover	None	None	SSC, S	G3	S2S3	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.	None
Circus hudsonius	northern harrier	None	None	SSC	G5	S3	Coastal salt & 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.	Low
Coccyzus americanus	yellow-billed cuckoo	Threatened	Endangered	S	G5T2T3	S1	The yellow-billed cuckoo use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes.	In the West, nests are often placed in willows along streams and rivers, with nearby cottonwoods serving as foraging sites.	None

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Scientific Name	**Common Name**	**Federal Status**	**State Status**	**Other Status**	**Global Rank**	**State Rank**	**Habitats**		**Potential of occurrence**
Contopus cooperi	olive-sided flycatcher	None	None	SSC	G4	S4	Breed mostly in the boreal forest and in western coniferous forests. They use openings or edges in the forest and are rarely found in deep, closed forest.	Most nests are placed in coniferous trees on a horizontal branch, well away from the trunk and toward the tip.	Moderate
Coturnicops noveboracensis	yellow rail	None	None	SSC	G4	S1S2	Summer resident in eastern Sierra Nevada in Mono County.	Freshwater marshlands, meadows, and seeps.	None
Egretta thula	snowy egret	None	None	None	G5	S4	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.	None
Elanus leucurus	white-tailed kite	None	None	FP, S	G5	S3S4	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low
Empidonax traillii	willow flycatcher	None	Endangered	S	G5	S1S2	Occupy areas with willows or other shrubs near standing or running water.	Females pick a nesting spot within low shrubs and bushes, often near the outer edge.	None
Falco columbarius	merlin	None	None	WL	G5	S3S4	Breed in open and semiopen areas across northern North America. The Pacific Northwest subspecies seems to nest mostly in coastal areas and along rivers.	Lay their eggs in abandoned nests of crows and hawks, in either conifers or deciduous trees of semi-open habitats.	Low

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Scientific Name	**Common Name**	**Federal Status**	**State Status**	**Other Status**	**Global Rank**	**State Rank**	**Habitats**		**Potential of occurrence**
Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP	G4T4	S3S4	Breed in open landscapes with cliffs (or skyscrapers) for nest sites. They are often seen near estuaries hunting shorebirds.	Typically, nest on cliffs from about 25–1,300 feet high, but may also use buildings.	Low
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP, S	G5	S3	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.	None
Numenius americanus	long-billed curlew	None	None	WL			In winter you can find them in wetlands, tidal estuaries, mudflats, flooded fields less than 6 inches deep, and beaches.	Nest in a scrape on the ground in sparse, short grasses, including shortgrass and mixed-grass prairies as well as agricultural fields.	None
Nycticorax nycticorax	black-crowned night heron	None	None	None	G5	S4	Colonial nester, usually in trees, occasionally in tule patches. Riparian forests and wetlands.	Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	Low
Pandion haliaetus	osprey	None	None	WL, S	G5	S4	Ocean shore, bays, freshwater lakes, and larger streams. Riparian forest.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	Low
Passerculus sandwichensis alaudinus	Bryant's savannah sparrow	None	None	SSC	G5T2T3	S2S3	Grasslands with few trees, including meadows, pastures, grassy roadsides, sedge wetlands, and cultivated fields.	Savannah Sparrows hide their nests amid a thick thatch of the prior season's dead grasses in densely vegetated areas.	Moderate

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Pelecanus occidentalis californicus	California brown pelican	Delisted	Delisted	FP	G4T3T4	S3	Live year-round in estuaries and coastal marine habitats.	Nests on the ground or on an exposed tree-top near ocean shores or estuaries.	None
Phalacrocorax auritus	double-crested cormorant	None	None	WL	G5	S4	Colonial nester on coastal cliffs, offshore islands, and along lake margins in the interior of the state. Riparian forest and scrub.	Nests along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.	None
Poecile atricapillus	black-capped chickadee	None	None	WL	G5	S3	Found in deciduous and mixed forests, open woods, parks, willow thickets, cottonwood groves, and disturbed areas.	Nest boxes, small natural cavities, or abandoned Downy Woodpecker cavities; often excavate their own cavities.	**Present**
Rallus obsoletus obsoletus	California Ridgway's rail	Endangered	Endangered	FP	G5T1	S1	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.	None
Riparia riparia	bank swallow	None	Threatened	S	G5	S2	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.	None
Strix occidentalis caurina	Northern Spotted Owl	Threatened	Threatened	S	G3T3	S2S3	Requires unlogged, expansive, mature coniferous forest stands with large trees and a complex array of vegetation types, sizes and ages.	Nest in dense old forest, protected by a dense tree canopy in a broken-off treetop or tree-trunk hollow, a mistletoe tangle, or an old nest left behind.	None

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FISH									
Acipenser medirostris	green sturgeon	Threatened	None	SSC, VU	G3	S1S2	These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, Klamath, & Trinity Rivers.	Spawns at temps between 8-14 ºC. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	None
Entosphenus tridentatus	Pacific lamprey	None	None	SSC, S, VU	G4	S4	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 ºC. Ammocoetes need soft sand or mud.	Low
Eucyclogobius newberryi	tidewater goby	Endangered	None	SSC	G3	S3	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.	None
Lampetra richardsoni	western brook lamprey	None	None	SSC	G4G5	S3S4	Typically found in large coastal rivers and their tributaries. Adult spawners dig nests 15-20 cm long in a gravel substrate.	Larval Brook Lampreys, or ammocoetes, are found in slackwater areas or pools where they burrow tail first into soft substrate.	Low
Oncorhynchus clarkii clarkii	coast cutthroat trout	None	None	SSC, VU	G4T4	S3	Small coastal streams from the Eel River to the Oregon border.	Small, low gradient coastal streams and estuaries. Needs shaded streams with water temperatures <18 ºC, and small gravel for spawning.	Low

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Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	Threatened	Threatened	None	G4T2Q	S2?	Small coastal streams, as well as larger rivers, such as the Klamath River system, where they are currently found as far upstream as Iron Gate Dam and the Shasta River.	Females usually choose spawning sites near the head of a riffle with medium to small gravel substrates.	None
Oncorhynchus mykiss irideus pop. 16	steelhead - northern California DPS	Threatened	None	None	G5T2T3Q	S2S3	Coastal basins from Redwood Creek to the Gualala River, inclusive. Does not include summer-run steelhead.		None
Oncorhynchus mykiss irideus pop. 36	summer-run steelhead trout	None	Candidate Endangered	SSC	G5T4Q	S2	No. CA coastal streams to Middle Fork Eel River. Within range of Klamath Mtns province DPS & No. Calif DPS.	Cool, swift, shallow water & clean loose gravel for spawning & large pools in which to spend the summer.	None
Oncorhynchus tshawytscha pop. 17	chinook salmon - California coastal ESU	Threatened	None	None	G5	S1	South of the Klamath River to and including the Russian River.		None
Spirinchus thaleichthys	longfin smelt	Candidate	Threatened	None	G5	S1	Euryhaline, nektonic & 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.	None
Thaleichthys pacificus	eulachon	Threatened	None	None	G5	S3	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.	None

Table 2
Regionally Occurring Special-status Animal Species Scoping List, CNDDB & IPaC
Albee Stadium, Eureka and surrounding USGS 7.5-minute quadrangles
August, 2020

Scientific Name	Common Name	Federal Status	State Status	Other Status	Global Rank	State Rank	Habitats		Potential of occurrence
				INSECTS					
Bombus caliginosus	obscure bumble bee	None	None	VU	G4?	S1S2	Coastal areas from Santa Barbara county to north to Washington state.	Food plant genera include *Baccharis, Cirsium, Lupinus, Lotus, Grindelia* and *Phacelia*.	Low
Bombus occidentalis	western bumble bee	None	Candidate Endangered	S	G2G3	S1	Once common & widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.		None
Cicindela hirticollis gravida	sandy beach tiger beetle	None	None	None	G5T2	S2	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Coastal dunes.	Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	None
				MAMMALS					
Aplodontia rufa humboldtiana	Humboldt mountain beaver	None	None	None	G5TNR	SNR	Coast Range in SW Del Norte County and NW Humboldt County. Coastal scrub, riparian forest.	Coastal habitats, coastal scrub, riparian forests, typically with open canopy and thickly vegetated understory.	None
Arborimus albipes	white-footed vole	None	None	SSC	G3G4	S2	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.	None
Arborimus pomo	Sonoma tree vole	None	None	SSC	G3	S3	North coast fog belt from OR border to Somona Co. In Douglas-fir, redwood & montane hardwood-conifer forests. Old-growth coniferous forest.	Feeds almost exclusively on Douglas-fir needles. Will occasionaly take needles of grand fir, hemlock or spruce.	None

Table 2 Regionally Occurring Special-status Animal Species Scoping List, CNDDB & IPaC Albee Stadium, Eureka and surrounding USGS 7.5-minute quadrangles August, 2020									
Scientific Name	**Common Name**	**Federal Status**	**State Status**	**Other Status**	**Global Rank**	**State Rank**	**Habitats**		**Potential of occurrence**
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC, S	G3G4	S2	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Low
Erethizon dorsatum	North American porcupine	None	None	None	G5	S3	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
Lasiurus cinereus	hoary bat	None	None	None			Normally roosts alone on trees, hidden in the foliage, but on occasion has been seen in caves with other bats.	It prefers woodland, mainly coniferous forests, but hunts over open areas or lakes.	Low
Martes caurina humboldtensis	Humboldt marten	None	Endangered	SSC	G5T1	S1	Occurs only in the coastal redwood zone from the Oregon border south to Sonoma County. Old-growth conifer forest.	Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	None
Myotis evotis	long-eared myotis	None	None	S	G5	S3	Found in brush, woodland & forest habitats from sea level to about 9,000 ft. Prefers coniferous woodlands and forests.	Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	Low
Pekania pennanti	fisher - West Coast DPS	Endangered	Threatened	SSC, S	G5T2T3Q	S2S3	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.	None

Table 2
Regionally Occurring Special-status Animal Species Scoping List, CNDDB & IPaC
Albee Stadium, Eureka and surrounding USGS 7.5-minute quadrangles
August, 2020

Scientific Name	Common Name	Federal Status	State Status	Other Status	Global Rank	State Rank	Habitats		Potential of occurrence
				MOLLUSKS					
Anodonta californiensis	California floater	None	None	S	G3Q	S2?	Freshwater lakes and slow-moving streams and rivers. Taxonomy under review by specialists.	Generally in shallow water.	None
Margaritifera falcata	western pearlshell	None	None	None	G4G5	S1S2	Aquatic.	Prefers lower velocity waters.	None
				REPTILES					
Emys marmorata	western pond turtle	None	None	SSC, S	G3G4	S3	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
Chelonia mydas	green sea turtle	Endangered	None	None	G3	S1	Fully saltwater aquatic	Open ocean and ocean shores	None

1. Species indicator status as assigned by Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and California Department of Fish and Wildlife (CDFW)

C: candidate
CT: candidate threatened
D: delisted
DPS: distinct population segment
E: endangered
ESU: evolutionarily significant unit
FP: fully protected
PT: proposed threatened
S: sensitive
SSC: species of special concern
T: threatened
WL: watch list
VU: vulnerable

2. Species Heritage rank as assigned by California Department of Fish and Wildlife (CDFW)

G1/S1: critically imperiled
G2/S2: imperiled
G3/S3: vulnerable
G4/S4: apparently secure
G5/S5: secure
Q: Taxonomic questions associated with this species
SNR: State No Ranking
T: Referring to a subspecies
TNR: Subspecies No Ranking

Table 3 Botanical Species Observed 5/13, 5/15, and 7/17/2020 Albee Stadium Renovations Project, Eureka CA			
Scientific Name	**Common Name**	**Family**	**Native?**
Trees			
Abies grandis	grand fir	Pinaceae	Y[a]
Acacia melanoxylon	blackwood acacia	Fabaceae	I[b]
Acer macrophyllum	big-leaf maple	Aceraceae	Y
Acer rubrum	red maple	Aceraceae	N[c]
Alnus rubra	red alder	Betulaceae	Y
Betula papyrifera	paper birch	Betulaceae	N
Eucalyptus globulus	bluegum	Myrtaceae	I
Ficus carica	common fig	Moraceae	I
Frangula purshiana ssp. *purshiana*	cascara	Rhamnaceae	Y
Ilex aquifolium	English holly	Aquifoliaceae	I
Liquidambar styraciflua	liquidamber	Hamamelidaceae	N
Picea sitchensis	Sitka spruce	Pinaceae	Y
Pinus contorta ssp. *contorta*	beach pine	Pinaceae	Y
Pinus radiata	Monterey pine	Pinaceae	N
Pittosporum tenuifolium	short leaf box	Pittosporaceae	N
Platanus x hispanica	London plane	Platanaceae	N
Prunus cerasifera	wild plum	Rosaceae	I
Prunus laurocerasus	English laurel	Rosaceae	N
Prunus x	purple plum	Rosaceae	N
Pseudotsuga menziesii	Douglas fir	Pinaceae	Y
Pyrus calleryana	flowering pear	Rosaceae	I
Pyrus communis	cultivated pear	Rosaceae	N
Robinia pseudoacacia	black locust	Fabaceae	I
Salix hookeriana	coast willow	Salicaceae	Y
Salix lasiandra var. *lasiandra*	pacific willow	Salicaceae	Y
Salix sitchensis	Sitka willow	Salicaceae	Y
Salix x sepulcralis	weeping willow	Salicaceae	N
Sequoia sempervirens	coast redwood	Cupressaceae	Y
Sorbus aucuparia	mountain ash	Rosaceae	N
Thuja plicata	western red cedar	Cupressaceae	Y
Tsuga heterophylla	western hemlock	Pinaceae	Y
Umbellularia californica	California bay laurel	Lauraceae	Y
Shrubs			
Buddleja davidii	butterfly bush	Scrophulariaceae	I
Ceanothus thyrsiflorus var. *thyrsiflorus*	blue blossom	Rhamnaceae	Y
Cotoneaster franchetii	Franchett's cotoneaster	Rosaceae	I
Cotoneaster lacteus	milkflower cotoneaster	Rosaceae	I
Cotoneaster pannosus	wooly cotoneaster	Rosaceae	I
Cotoneaster simonsii	Simon's cotoneaster	Rosaceae	N
Crataegus monogyna	English hawthorne	Rosaceae	I
Cytisus scoparius	Scotch broom	Fabaceae	I
Erica lusitanica	Spanish heather	Ericaceae	I

Table 3 Botanical Species Observed 5/13, 5/15, and 7/17/2020 Albee Stadium Renovations Project, Eureka CA			
Scientific Name	**Common Name**	**Family**	**Native?**
Fuchsia magellanica	hardy fuchsia	Onagraceae	N
Gaultheria shallon	salal	Ericaceae	Y
Juniperus sp.	Juniper cultivar	Cupressaceae	N
Ligustrum ovalifolium	privet	Oleaceae	N
Lonicera involucrata var. *ledebourii*	coast twinberry	Caprifoliaceae	Y
Morella californica	California wax myrtle	Myricaceae	Y
Rhododendron macrophyllum	California rhododendron	Ericaceae	Y
Rhododendron sp.	Rhododendron cultivar	Ericaceae	N
Rubus armeniacus	Himalayan berry	Rosaceae	I
Rubus parviflorus	thimbleberry	Rosaceae	Y
Rubus spectabilis	salmonberry	Rosaceae	Y
Rubus ursinus	California blackberry	Rosaceae	Y
Sambucus racemosa var. *racemosa*	red elderberry	Adoxaceae	Y
Vaccinium ovatum	evergreen huckleberry	Ericaceae	Y
Vaccinium parviflorus	red huckleberry	Ericaceae	Y
Ferns and Allies			
Athyrium filix-femina var. *cyclosorum*	western lady fern	Woodsiaceae	Y
Equisetum arvense	horsetail	Equisetaceae	Y
Equisetum telmateia	giant horsetail	Equisetaceae	Y
Polystichum munitum	sword fern	Dryopteridaceae	Y
Pteridium aquilinum var. *pubescens*	bracken fern	Dennstaedtiaceae	Y
Struthiopteris spicant	deer fern	Blechnaceae	Y
Sedges and Rushes			
Carex harfordii	Harford sedge	Cyperaceae	Y
Carex obnupta	slough sedge	Cyperaceae	Y
Carex tumulicola	foothill sedge	Cyperaceae	Y
Cyperus eragrostis	tall flat sedge	Cyperaceae	Y
Juncus bolanderi	Bolander's rush	Juncaceae	Y
Juncus breweri	Brewer's rush	Juncaceae	Y
Juncus bufonius var. *bufonius*	toad rush	Juncaceae	Y
Juncus effusus ssp. *pacificus*	common rush	Juncaceae	Y
Juncus phaeocephalus var. *phaeocephalus*	brownhead rush	Juncaceae	Y
Juncus xiphioides	iris leaf rush	Juncaceae	Y
Luzula comosa var. *comosa*	hairy woodrush	Juncaceae	Y
Schoenoplectus pungens var. *longispicatus*	common three square	Cyperaceae	Y
Scirpus microcarpus	panicled bulrush	Cyperaceae	Y
Grasses			
Agrostis stolonifera	creeping bentgrass	Poaceae	I

Table 3 Botanical Species Observed 5/13, 5/15, and 7/17/2020 Albee Stadium Renovations Project, Eureka CA			
Scientific Name	**Common Name**	**Family**	**Native?**
Anthoxanthum odoratum	sweet vernal grass	Poaceae	I
Arundo donax	giant reed	Poaceae	I
Avena barbata	wild oat	Poaceae	I
Briza maxima	large quaking grass	Poaceae	I
Briza minor	small quaking grass	Poaceae	N
Bromus catharticus var. *catharticus*	rescue brome	Poaceae	N
Bromus diandrus	rip-gut brome	Poaceae	I
Bromus hordeaceus	soft chess	Poaceae	I
Cortaderia jubata	pampas grass	Poaceae	I
Cynodon dactylon	Bermuda grass	Poaceae	I
Dactylis glomerata	orchard grass	Poaceae	I
Digitaria sanguinalis	crabgrass	Poaceae	N
Festuca arundinacea	tall fescue	Poaceae	I
Festuca myuros	six-weeks grass	Poaceae	I
Festuca perennis	Italian ryegrass	Poaceae	I
Festuca rubra	red fescue	Poaceae	Y
Gastridium phleoides	nitgrass	Poaceae	N
Holcus lanatus	velvet grass	Poaceae	I
Panicum acuminatum var. *fasciculatum*	pacific panic grass	Poaceae	Y
Phalaris arundinacea	canary reedgrass	Poaceae	I
Poa annua	annual bluegrass	Poaceae	N
Poa pratensis	Kentucky bluegrass	Poaceae	I
Polypogon monspeliensis	rabbits' foot	Poaceae	I
Trisetum cernuum	nodding trisetum	Poaceae	Y
Herbs			
Allium triquetrum	white flowered onion	Alliaceae	N
Bellis perennis	English daisy	Asteraceae	N
Brassica nigra	black mustard	Brassicaceae	I
Calystegia silvatica ssp. *disjuncta*	large bindweed	Convolvulaceae	N
Capsella bursa-pastoris	shepherd's purse	Brassicaceae	N
Cardamine oligosperma	bittercress	Brassicaceae	Y
Cerastium fontanum ssp. *vulgare*	common chickweed	Caryophyllaceae	N
Cerastium glomeratum	large mouse ears	Caryophyllaceae	N
Cichorium intybus	chicory	Asteraceae	N
Cirsium vulgare	bull thistle	Asteraceae	I
Claytonia sibirica	spring beauty	Montiaceae	Y
Conium maculatum	poison hemlock	Apiaceae	I
Convolvulus arvensis	field bindweed	Convolvulaceae	N
Crocosmia x crocosmiiflora	montbretia	Iridaceae	I
Daucus carota	Queen Anne's lace	Apiaceae	N
Epilobium ciliatum var. *ciliatum*	willowherb	Onagraceae	Y
Erodium cicutarium	coast heron's bill	Geraniaceae	I
Erodium moschatum	whitestem filaree	Geraniaceae	N

Table 3 Botanical Species Observed 5/13, 5/15, and 7/17/2020 Albee Stadium Renovations Project, Eureka CA			
Scientific Name	**Common Name**	**Family**	**Native?**
Euphorbia peplus	petty spurge	Euphorbiaceae	N
Fallopia japonica	Japanese knotweed	Polygonaceae	I
Galium aparine	cleaver plant	Rubiaceae	Y
Galium parisiense	wall bedstraw	Rubiaceae	N
Geranium dissectum	cutleaf geranium	Geraniaceae	I
Geranium molle	crane's bill geranium	Geraniaceae	N
Geranium robertianum	Robert's geranium	Geraniaceae	N
Helminthotheca echioides	bristly ox-tongue	Asteraceae	I
Hirschfeldia incana	hoary mustard	Brassicaceae	I
Hypochaeris radicata	hairy cat's-ear	Asteraceae	I
Lapsana communis	nipplewort	Asteraceae	N
Lathyrus latifolius	sweet pea	Fabaceae	N
Lepidium didymum	swinecress	Brassicaceae	N
Linum bienne	flax	Linaceae	N
Lotus corniculatus	bird's-foot trefoil	Fabaceae	N
Lysichiton americanus	skunk cabbage	Araceae	Y
Lysimachia arvensis	scarlet pimpernel	Myrsinaceae	N
Lythrum hyssopifolia	Lythrum loosestrife	Lythraceae	I
Maianthemum dilatatum	false lily of the valley	Ruscaceae	Y
Malva parviflora	cheesewheel	Malvaceae	N
Marah oregana	coast man-root	Cucurbitaceae	Y
Matricaria discoidea	pineapple weed	Asteraceae	Y
Medicago lupulina	black medic	Fabaceae	N
Medicago polymorpha	bur clover	Fabaceae	I
Melilotus albus	white sweet clover	Fabaceae	N
Mentha pulegium	pennyroyal	Lamiaceae	I
Oxalis articulata ssp. *rubra*	window box sorrel	Oxalidaceae	N
Oxalis oregana	redwood sorrel	Oxalidaceae	Y
Pectiantia ovalis	coastal miterwort	Saxifragaceae	Y
Plantago lanceolata	English plantain	Plantaginaceae	I
Plantago major	common plantain	Plantaginaceae	N
Polycarpon tetraphyllum var. *tetraphyllum*	allseed	Caryophyllaceae	N
Polygonum aviculare ssp. *depressum*	prostrate knotweed	Plygonaceae	N
Potentilla anserina ssp. *pacifica*	pacific silverweed	Asteraceae	Y
Prosartes smithii	large flower fairybells	Liliaceae	Y
Prunella vulgaris var. *lanceolata*	selfheal	Lamiaceae	Y
Prunus vulgaris var. *vulgaris*	selfheal	Lamiaceae	N
Pseudognaphalium luteoalbum	Jersey cudweed	Asteraceae	N
Ranunculus repens	creeping buttercup	Ranunculaceae	I
Raphanus sativus	wild radish	Brassicaceae	I
Rumex acetosella	sheep sorrel	Polygonaceae	I
Rumex crispus	curly dock	Polygonaceae	I
Sagina procumbens	pearlwort	Caryophyllaceae	Y
Senecio vulgaris	common groundsel	Asteraceae	N

Table 3 Botanical Species Observed 5/13, 5/15, and 7/17/2020 Albee Stadium Renovations Project, Eureka CA			
Scientific Name	**Common Name**	**Family**	**Native?**
Sidalcea malviflora* ssp. *patula	**Siskiyou checkerbloom**	**Malvaceae**	**Y**
Sisyrinchium californicum	yellow-eyed grass	Iridaceae	Y
Soleirolia soleirolii	baby's tears	Urticaceae	N
Sonchus oleraceus	sow thistle	Asteraceae	N
Spergula arvensis	corn spurry	Caryophyllaceae	N
Spergularia rubra	pink sand spurry	Caryophyllaceae	N
Stachys ajugoides var. *rigida*	bugle hedgenettle	Lamiaceae	Y
Stachys chamissonis	hedge nettle	Lamiaceae	Y
Stellaria media	chickweed	Caryophyllaceae	N
Taraxacum officinale ssp. *officinale*	common dandelion	Asteraceae	N
Trifolium dubium	shamrock clover	Fabaceae	N
Trifolium fragiferum	strawberry clover	Fabaceae	N
Trifolium repens	white clover	Fabaceae	N
Trifolium subterraneum	subterranean clover	Fabaceae	N
Vancouveria planipetala	inside-out-flower	Berberidaceae	Y
Veronica americana	American speedwell	Plantaginaceae	Y
Veronica arvensis	speedwell	Plantaginaceae	N
Vicia sativa ssp. *sativa*	spring vetch	spring vetch	N
Vicia tetrasperma	four-seeded vetch	Fabaceae	N
Viola sempervirens	redwood violet	Violaceae	Y
Zantedeschia aethiopica	calla lily	Araceae	I
Vines			
Hedera helix	English ivy	Araliaceae	I
Lonicera hispidula	pink honeysuckle	Caprifoliaceae	Y
Symphoricarpos albus var. *laevigatus*	creeping snowberry	Caprifoliaceae	Y
Vitis vinifera	cultivated grape	Vitaceae	N
Lichens and Bryophytes			
Kindbergia praelonga	common feather moss	Brachytheciaceae	Y
188 Species			**38% Native**

[a] Y: Native species
[b] I: Invasive species
[c] N: Non-native species

Table 4 Animals Observed 8/25/20 & 9/23/20 Albee Stadium Renovations Project, Eureka, CA				
Scientific Name	**Common Name**	**Family**	**Nesting Habit**	**Status**
Birds				
Bombycilla cedrorum	Cedar Waxwing	Bombycillidae	Nests in the fork of a horizontal branch, anywhere from 3 to 50 feet high. Many tree species are used.	NL[a]
Calypte anna	Anna's hummingbird	Trochilidae	Horizontal branch of a tree or shrub near a source of nectar.	NL
Certhia americana	Brown creeper	Certhiidae	In trees usually between the trunk and a loose piece of bark, in forested areas.	NL
Colaptes auratus	Northern Flicker	Picidae	Cavities in dead or dying trees in woodlands, parks, and suburbs.	NL
Columba livia	Rock pigeon	Columbidae	Nooks and crannys in cliffs or human-made structures.	NL
Corvus corax	Common raven	Corvidae	On cliffs, in trees, and on human-made structures in a variety of habitats.	NL
Cyanocitta stelleri	Steller's jay	Corvidae	Horizontal branch of a tree or shrub in forested areas.	NL
Passer domesticus	House Sparrow	Passeridae	Holes of buildings and other human-made structures including bird houses.	NL
Poecile atricapillus	Black-capped chickadee	Paridae	Tree cavities in deciduous or mixed woodlands.	SSC[b]
Poecile rufescens	Chestnut-backed chickadee	Paridae	Tree cavities or nest boxes in forested areas.	NL
Regulus satrapa	Golden-crowned Kinglet	Regulidae	Tops of conifers in forested areas.	NL
Sayornis	Black phoebe	Tyrannidae	Sheltered rock faces, streamside boulders, and tree hollows as well as human-made structures	NL

Table 4 Animals Observed 8/25/20 & 9/23/20 Albee Stadium Renovations Project, Eureka, CA				
Scientific Name	**Common Name**	**Family**	**Nesting Habit**	**Status**
Insects				
Anax junius	Common green darner	Aeshnidae	Eggs laid on stems or leaves of aquatic plants.	NL
Culicidae spp.	Mosquito	Culicidae	Eggs are laid in water, larvae, and then pupae form, then adults emerge from the water. The entire life cycle can take from as little as four days to as much as four months.	NL
Unknown	bee spp.	Apidae	Unknown species. Variable by species.	N/A[c]
Mammals				
Tamiasciurus douglasii	Douglas squirrel	Sciuridae	Forks of limbs in trees in forested areas, parks, and suburbs.	NL
Thomomys bottae	Botta's Pocket Gopher	Geomyidae	(signs found - mounds & excavated tunnel entrances) Underground burrows.	NL
Urocyon cinereoargenteus	Gray Fox	Canidae	(Signs found - scat) Dens in caves, rocky crevices, trees and hollow logs.	NL
Mollusks				
Ariolimax californicus	Banana slug	Ariolimacidae	Eggs laid on logs or leaves in damp forested areas.	NL

[a] NL: Not listed
[b] SSC: Species of Special Concern (CDFW)
[c] N/A: Not applicable

CNDDB Report 4

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code SAL20F0008
Quad code 4012472
Occ. no. _____
EO index no. _____
Map index no. _____

Scientific name: *Sidalcea malviflora ssp. patula*

Common name: Siskiyou checkerbloom

Date of field work (mm-dd-yyyy): 05-15-2020

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Joseph L. Saler

Affiliation:

Address: 1511 D St. , Eureka, CA 95501

Email: jsaler@shn-engr.com

Phone: (707) 837-6147

Other observers:

DETERMINATION

Keyed in: Jepson manual (Baldwin 2012)

Compared w/ specimen at:

Compared w/ image in: Calflora

By another person:

Other:

Identification explanation:

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort: Protocol level Botanical survey

Total number of individuals: 15

Collection? **Collection number:**

Museum/Herbarium:

PLANT INFORMATION

Phenology:

vegetative	flowering	fruiting
50 %	50 %	0 %

SITE INFORMATION

Habitat description: Mowed, herbaceous dominated roadside. Remnant conifer forest adjacent, non-native/invasive herbaceous species dominant within immediate surroundings.

Slope: 30%

Land owner/manager: Eureka City Schools

Aspect: west

Site condition + population viability: Fair

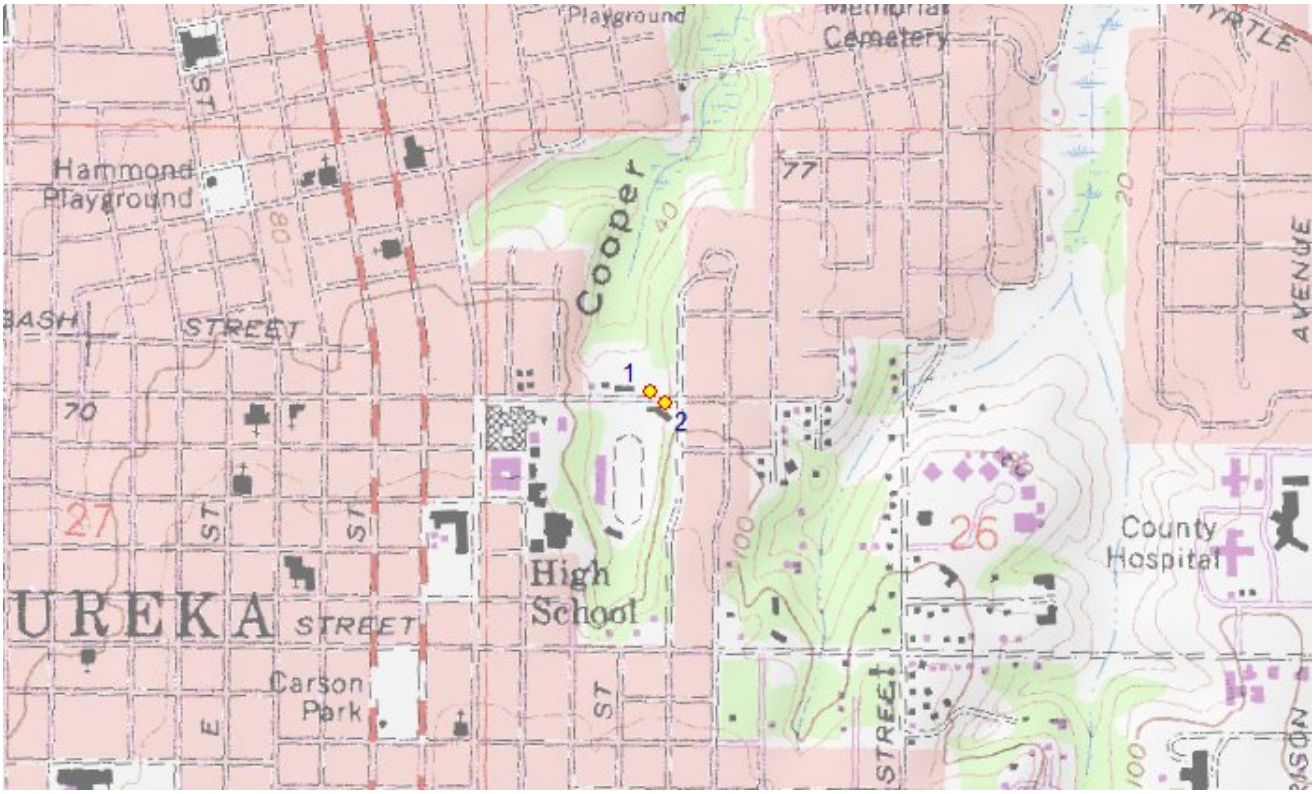
Immediate & surrounding land use: Athletic facilities and Agricultural program facilities for Eureka High School

Visible disturbances: Mowing, invasive species dominance, atheletic facility use.

Threats: Invasive species, roadside disturbance.

General comments: Mowing of invasive species likely maintains this population.

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Humboldt	Eureka	78	40.79050	-124.15492	402562	4516143	10
1	**Public Land Survey**	**Feature Comment**						
	H T05N R01W 26							

ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Humboldt	Eureka	83	40.79032	-124.15460	402588	4516122	10
2	**Public Land Survey**	**Feature Comment**						
	H T05N R01W 26							

The mapped feature is accurate within: 5 m

Source of mapped feature: CNDDB online field survey tool

Mapping notes:

Location/directions comments: two populations within 2 m of Del Norte Street.

Attachment(s):

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