

Wetland and Other Waters Delineation Report

Eureka High School Athletic Facilities
Assessor's Parcel Numbers: 005-132-008,
005-131-008, 005-243-003, 005-243-004,
005-246-004, 011-121-001, and 011-131-005
Eureka, California

Prepared for:

Eureka City Schools

November 2020

020069.100



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Prepared for:

Eureka City Schools

Prepared by:



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November 2020

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Reference: 020069.100

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Abbreviations and Acronyms

Units of Measure

in.	inches
in/hr	inches per hour

Additional Terms

APN	Assessor's Parcel Number
CDEC	California Data Exchange Center
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	United States Environmental Protection Agency
FAC	facultative wetland plant species
FACU	facultative upland plant species
FACW	facultative wetland plant species
Ksat	most limiting layer to transmit water
NGTOC	National Geospatial Technical Operations Center
NL	not listed wetland plant status
NR	no reference
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	obligate wetland plant species
OHWM	ordinary high water mark
Q	sedimentary rock
PF01C	Palustrine forested, broad-leaved deciduous, seasonally flooded
redox	redoximorphic
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
TP	test pit
UPL	upland plant species
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey
WDRs	Waste Discharge Requirements
WETS	Climate Analysis for Wetlands Tables
WoS	Waters of the State
WoUS	Waters of the United States



1.0 Introduction

SHN has prepared this wetland and other waters delineation report for Eureka City Schools. Fieldwork was performed by an SHN soil scientist and an SHN wetland ecologist, with 18 years of combined wetland and other waters delineation experience.

1.1 Purpose

The purpose of this report is to identify the presence or absence of potential wetlands and other waters of the State (WoS) or United States (WoUS) within the study area (Figure 1), as defined by the United States Army Corps of Engineers (USACE) three-parameter and ordinary high water mark (OHWM) methods. The delineation of these features will help determine setbacks and potential impacts to three-parameter wetland areas and other waters occurring within the project vicinity. The delineation will also aid in project design to minimize impacts to potential wetland resources.

1.2 Study Area

The study area (site) exists within seven parcels (Assessor's Parcel Numbers [APNs] 005-132-008, 005-131-008, 005-243-003, 005-243-004, 005-246-004, 011-121-001, and 011-131-005) which contain the Eureka High School Athletic facilities, stadium, agricultural program buildings, and woodshop and welding shop buildings. 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). The study area covers 21.2 acres, which is primarily mowed lawn for the football, softball, and baseball fields; however remnant conifer forest dominates the steep slopes surrounding the fields and associated facilities (Figures 2 and 3, and Appendix 1, Photos 1-3). The study area is located within the City of Eureka, California, within the grounds of Eureka High School. Del Norte Street bisects the study area, with the softball field, football field, track, and stadium situated south of Del Norte Street (Figure 2) and the baseball field and associated facilities, woodshop, welding shop, and the agricultural program facilities situated north of Del Norte street (Figure 3). 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° (USGS, 2020).

2.0 Project Description

This wetland delineation was conducted by SHN for Eureka City Schools to determine wetland boundaries within the existing athletic facilities to aid in site design to minimize impacts to wetlands that may occur as a result of the construction of proposed athletic facility improvements.

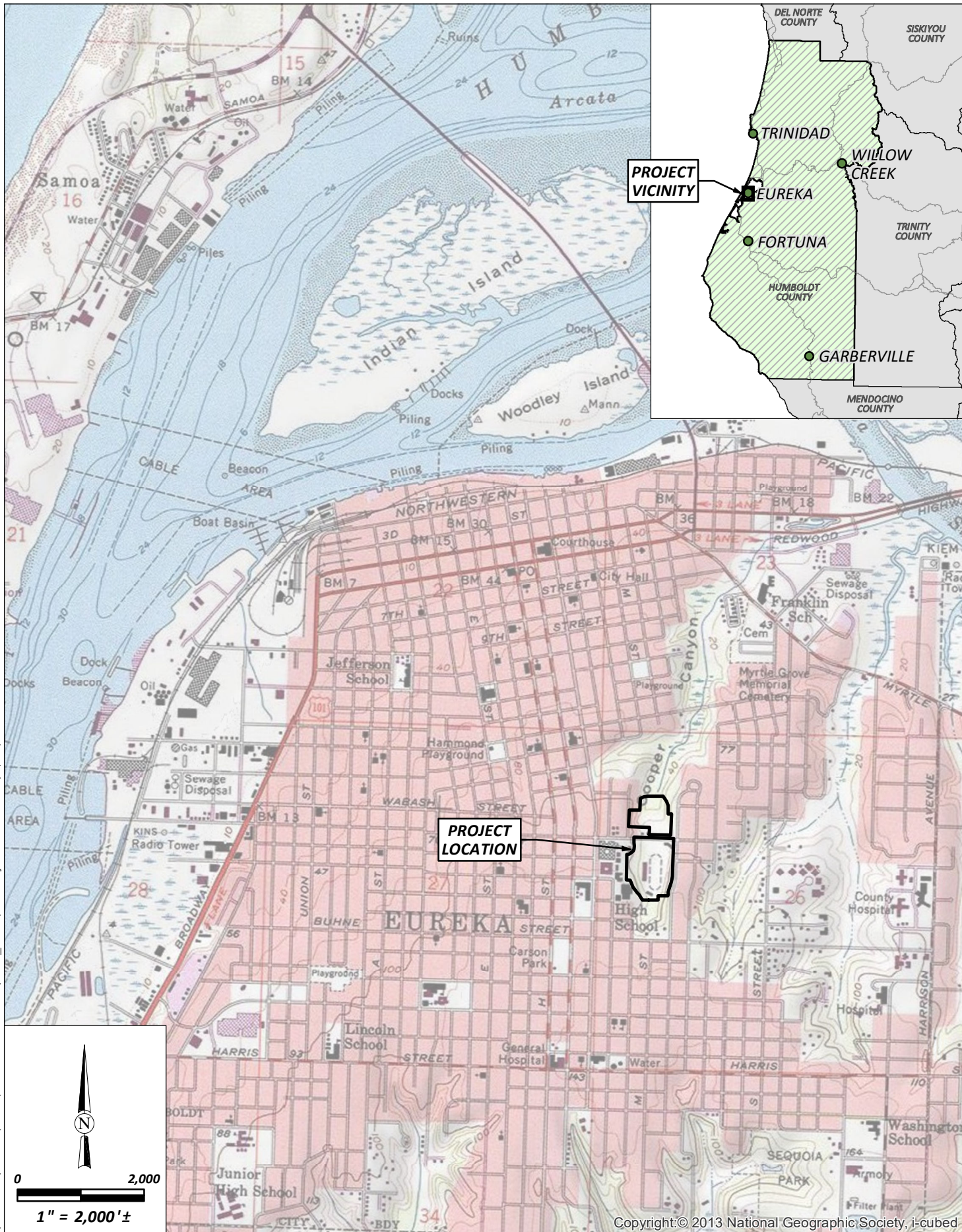
3.0 Environmental Setting

3.1 Site Uses

The site is currently developed with athletic facilities, agricultural program facilities, and a woodshop and welding shop for Eureka High School. Athletic facilities consist of a baseball field with associated fencing, dugouts, batting cage and access routes, a softball field with associated fencing, dugouts and access routes, and a football field encircled by an all-weather track with associated infrastructure, including a stadium with bleachers, all weather access paths, parking lot, team building, out buildings, and concession facilities. The study area is surrounded by residential development to the south, east,



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Eureka City Schools
EHS Athletic Facility Wetland Delineation
Eureka, California

Project Location

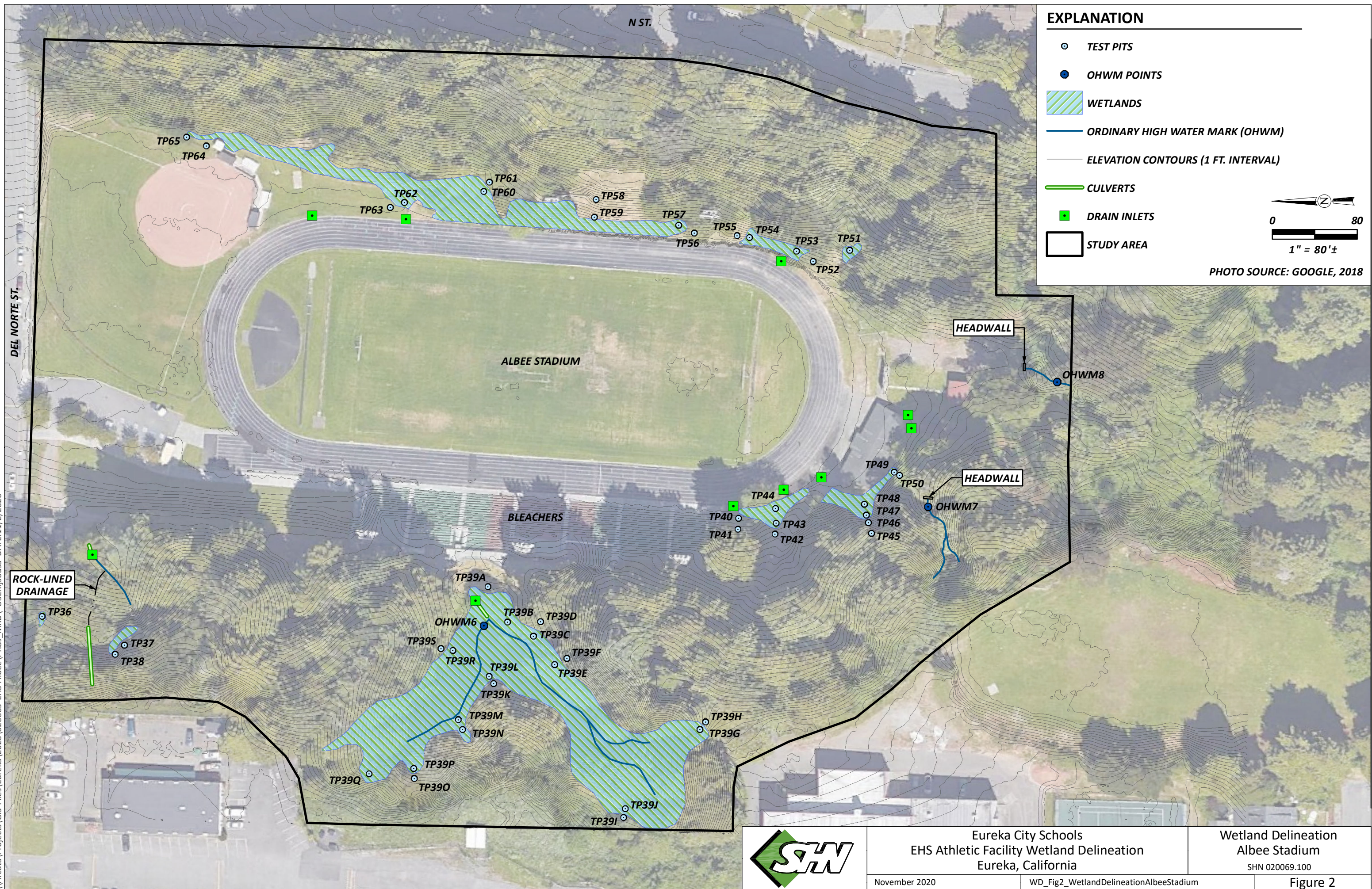
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November 2020

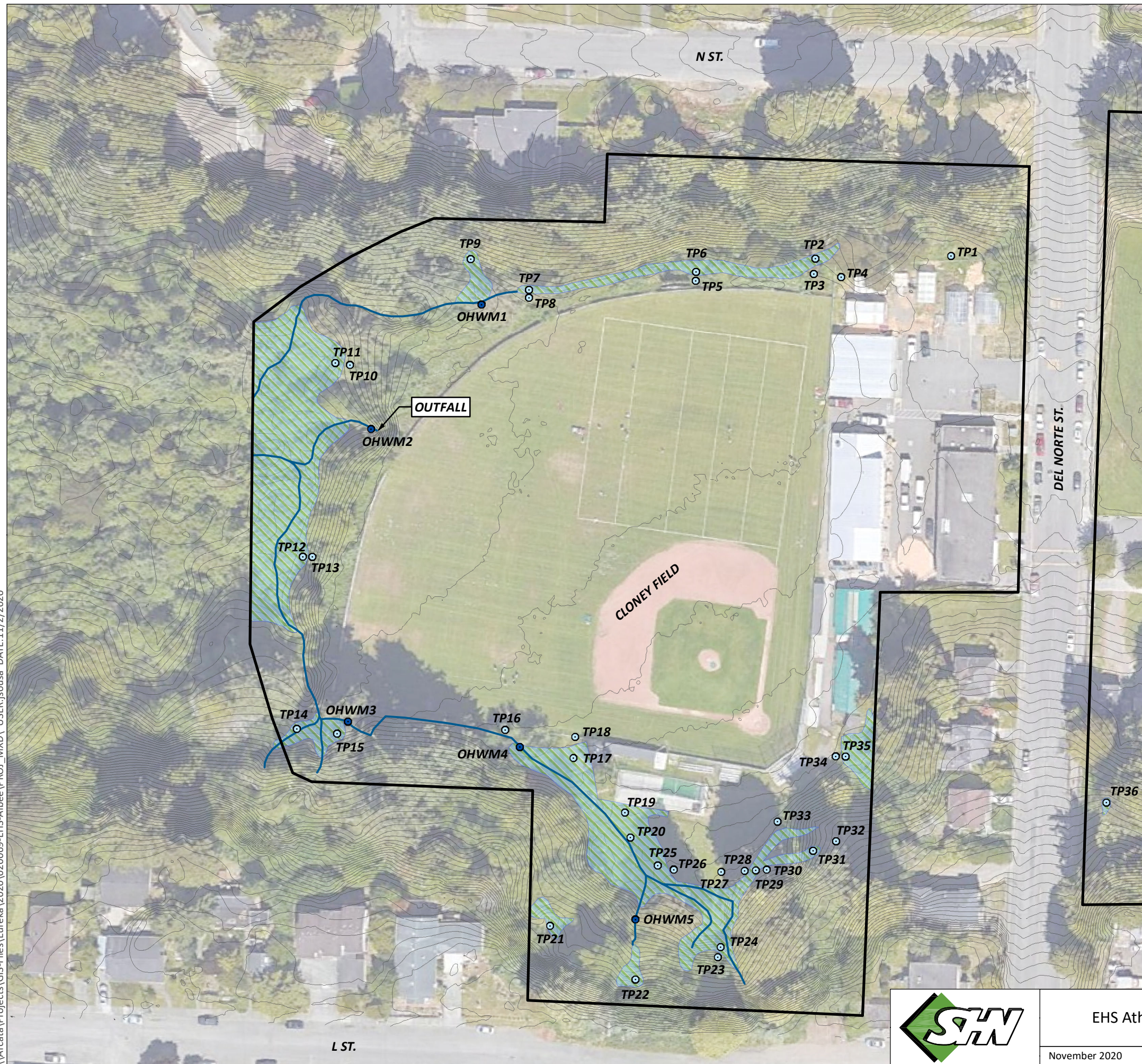
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Figure 1

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EXPLANATION

- TEST PITS
- OHWM POINTS
- WETLANDS
- ORDINARY HIGH WATER MARK (OHWM)
- ELEVATION CONTOURS (1 FT. INTERVAL)
- CULVERTS
- DRAIN INLETS
- STUDY AREA

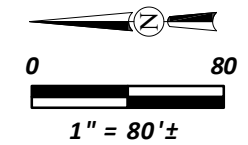


PHOTO SOURCE:
USGS NAIP, 2018



Eureka City Schools
EHS Athletic Facility Wetland Delineation
Eureka, California

Wetland Delineation
Cloney Field
SHN 020069.100

November 2020

WD_Fig3_WetlandDelineationCloneyField

Figure 3

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 (Figures 2 and 3; Appendix 1, Photos 1-3).

3.2 Site Hydrology

The United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) Climate Analysis for Wetlands Table (WETS) method was used to review rainfall conditions for the previous three months prior to the test pit (TP) investigations (or the same month and two months prior if after the 15th; Table 1; USDA-NRCS, 2020a). The TP investigation occurred on August 19, 24, and 28, 2020 and September 14-17 and 21-24, 2020. The current 2020 rainfall data for June, July, August, and September (National Oceanic and Atmospheric Administration, 2020) were compared to the 30-year rainfall average at the Woodley Island Weather Forecast Office in Eureka, California (1971-2000 data) for the same months. If the current rainfall of each month is between 30% and 70% of the 1971-2000 precipitation average, it is "normal" rainfall; if above 70%, it is ranked "wetter-than-normal" rainfall; if below 30%, it is ranked "drier-than-normal" rainfall. The rainfall for the August field work is considered "drier-than-normal" (Table 1) and the late September field work is considered "normal" (Table 2).

**Table 1. WETS Rainfall Data, August 2020, Hydrological Analysis
Eureka, Humboldt County, California**

Month	WETS Condition	<30%	> 70%	Rainfall (in.) ^a	Condition Value	Weight	Product Value
June 2020	Dry	0.29	0.79	0.20	1	1	1
July 2020	Dry	0.05	0.17	0.03	1	2	2
August 2020	Normal	0.07	0.35	0.08	2	3	6
Total^b							DRIER THAN NORMAL 9

^a in.: inches

^b A sum of 6-9 prior to site investigation is considered a drier than normal rainfall.

10-14 prior to site investigation is considered a normal rainfall.

15-18 prior to site investigation is considered a wetter than normal rainfall.

Sources: CDEC, 2020; USDA-NRCS, 2020a

The WETS data indicates that the 2020 summer season, just prior to the August field work portion of the delineation, averaged "drier-than-normal" rainfall.



Table 2. WETS Rainfall Data, September 2020, Hydrological Analysis
Eureka, Humboldt County, California

Month	WETS Condition	<30%	> 70%	Rainfall (in.) ^a	Condition Value	Weight	Product Value
July 2020	Dry	0.05	0.17	0.03	1	1	1
August 2020	Normal	0.07	0.35	0.08	2	2	4
September 2020	Normal	0.20	0.91	0.74	2	3	6
Total^b							NORMAL
							11

^a in: inches

^b A sum of 6-9 prior to site investigation is considered a drier than normal rainfall.
10-14 prior to site investigation is considered a normal rainfall.
15-18 prior to site investigation is considered a wetter than normal rainfall.

Sources: CDEC, 2020; USDA-NRCS, 2020a

The WETS data indicates that the 2020 summer season, just prior to the September field work portion of the delineation, averaged “normal” rainfall.

3.3 National Wetlands Inventory

The United States Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) website maps the study area as upland. The adjacent freshwater forested/shrub wetland to the north is mapped as PFO1C – Palustrine Forested Broad-leaved Deciduous Seasonally Flooded (Appendix 2). This general categorization by the NWI is not intended for planning purposes because of the lack of ground-truthing. In the “Data Limitations, Exclusions and Precautions” disclaimer, it states that:

“The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high-altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.” (USFWS, 2020)

The intention of this study was to verify NWI mapping using site-specific soil, hydrology, and vegetation analysis.

4.0 Vegetation

The wetland indicator status of plant species for this investigation was based on the *Western Mountains, Valleys, and Coast 2018 Regional Wetland Plant List* (USACE, 2018). Synonyms were checked for species that did not appear on the USACE wetland plant list. Plant species were classified as:



- Obligate (OBL)—almost always occurs in wetlands
- Facultative-wetland (FACW)—usually occurs in wetlands, but may occur in non-wetlands
- Facultative (FAC)—occurs in wetlands and non-wetlands
- Facultative-upland (FACU)—usually occurs in non-wetlands, but may occur in wetlands
- Upland (UPL)—almost never occurs in wetlands
- Not listed (NL)—scored as an upland plant and calculated as such on wetland determination forms

During the August and September 2020 wetland investigation, observed botanical species were recorded (Appendix 3). The study area is on historically placed loamy fill and native soil materials, which sits on the slopes and toe slopes surrounding the Cooper Creek valley in which the sports complex was constructed. Soils throughout the study area have been disturbed and compacted in numerous locations (Appendix 1, Photo 10). Non-native vegetation cover dominates the TP locations on the lawn areas, while the TPs along the slopes and within the forest were dominated by a mix of native and non-native species. Dominant species within the study area varied widely between forested and open habitat and developed and non-developed areas. Forested areas were dominated by coast redwood (*Sequoia sempervirens*), Douglas fir (*Pseudotsuga menziesii*), and Sitka spruce (*Picea sitchensis*) in the canopy, and English ivy (*Hedera helix*), evergreen huckleberry (*Vaccinium ovatum*), and fairy bells (*Prosartes smithii*), among others. Forested wetland areas were dominated by skunk cabbage (*Lysichiton americanus*), 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. Wetlands within open areas were dominated by small-fruited bullrush (*Scirpus microcarpus*), creeping buttercup (*Ranunculus repens*), giant horse tail (*Equisetum telmateia*), common horsetail (*Equisetum arvense*), and monte bretia (*Crocsmia x crocosmiflora*), among others (Appendix 1, Photos 6, 12, 13, and 16-18). Developed/disturbed areas were dominated by ruderal species such as English plantain (*Plantago lanceolata*) and allseed (*Polycarpon tetraphyllum* var. *tetraphyllum*), among others.

It should be noted that several invasive species dominate large portions of the study area and in many cases obscured wetland conditions, specifically hydrophytic vegetation dominance. These species included English ivy, black acacia (*Acacia melanoxylon*), pampas grass (*Cortaderia jubata*), and English holly (*Ilex aquifolium*) (Appendix 1, photos 8, 10, 19, and 20).

A list of plants observed within the vicinity of the wetland test pits is compiled in Appendix 3.

5.0 Geologic and Soil Composition

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 (California Department of Conservation, 2010). Proximity to the coast indicates these are likely uplifted marine deposits.

The underlying soils in the study area have the USDA-NRCS soil map unit designation 257—Lepoil-Candymountain complex, 2 to 15 percent slopes, as described below. Soils were characterized by loamy and sandy textures (Appendix 1, Photos 4 and 5). The site-specific soil description at each exploratory soil TP is included in the USACE Wetland Determination Data Forms found in Appendix 4, with photos in Appendix 1.



257—Lepoil-Candymountain complex, 2 to 15 percent slopes

Map Unit Composition

Lepoil and similar soils: 45 percent

Candymountain and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Lepoil

Setting

Landform: Marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Mixed marine deposits derived from sedimentary rock

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 16 inches: loam

Bt - 16 to 69 inches: clay loam

2CBt - 69 to 75 inches: very fine sandy loam

2C - 75 to 83 inches: fine sand

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: High (about 11.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: Redwood-Sitka spruce/salal-California huckleberry/western swordfern, marine terraces, marine deposits, sandy loam an (F004BX121CA)

Hydric soil rating: No



Description of Candymountain

Setting

Landform: Marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Mixed marine deposits derived from sedimentary rock

Typical profile

Oi - 0 to 4 inches: slightly decomposed plant material

A - 4 to 15 inches: fine sandy loam

Bw - 15 to 31 inches: fine sandy loam

BC - 31 to 45 inches: fine sandy loam

C - 45 to 60 inches: very fine sand

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: Redwood-Sitka spruce/salal-California huckleberry/western swordfern, marine terraces, marine deposits, sandy loam an (F004BX121CA)

Hydric soil rating: No
(USDA-NRCS, 2020b)

6.0 Regulatory Setting

6.1 Federal Laws

6.1.1 Section 401 and 404 of the Clean Water Act

Under Section 404 of the Clean Water Act (CWA; 33 U.S. Code [USC] 1344; U.S. Code of Federal Regulations (CFR), 1986), as amended, the USACE and the Environmental Protection Agency (EPA) retain primary responsibility for regulating discharge of dredged or fill material into “navigable waters of the



United States.” All discharges of dredged or fill material into jurisdictional WoUS that result in permanent or temporary losses of WoUS are regulated by the USACE. A permit from the USACE must be obtained before placing fill or grading in wetlands or other WoUS, unless the activity is exempt from CWA Section 404 regulation (for example, certain farming and forestry activities).

In summary, the definition of WoUS as defined by 33 CFR Section 328.3 includes:

1. waters used for commerce,
2. interstate wetlands,
3. all other waters (including lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds),
4. impoundments of water,
5. tributaries to aforementioned waters,
6. territorial seas, and
7. wetlands adjacent to waters.

Under 33 CFR 328.3, WoUS do not include prior converted cropland or waste treatment systems.

In 2008, the EPA and USACE released a guidance memorandum implementing the Supreme Court's decision in the cases of the Rapanos v. U.S. and Carabell v. U.S. Because of these cases, the agencies will apply a significant nexus standard to the following categories of waterbodies to determine if it meets the definition of WoUS:

- Non-navigable tributaries that are not relatively permanent
- Wetland adjacent to non-navigable tributaries that are not relatively permanent
- Wetland adjacent to but that does not directly abut a relatively permanent tributary

Section 401 of the CWA (33 USC 1341) requires that applicants for a federal license or permit obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards (EPA, 1986). The certification is obtained 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. 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).

6.1.2 Rivers and Harbors Appropriation Act of 1899

The River and Harbors Appropriation Act of 1899 addresses activities that involve the construction of dams, bridges, dikes, and other structures across any navigable water. Placing obstructions to navigation outside established federal lines and excavating from or depositing material in such waters require permits from the USACE. Section 10 of the Rivers and Harbors Appropriation Act (33 USC 403) prohibits the unauthorized obstruction or alteration of any navigable WoUS.



6.2 State Laws

6.2.1 California Coastal Act

This site is outside of the California Coastal Act jurisdiction.

6.2.2 Porter-Cologne Water Quality Control Act

The State of California maintains independent regulatory authority over the placement of waste, including fill, into WoS under the Porter-Cologne Water Quality Control Act. WoS are defined by the Porter-Cologne Water Quality Control Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The SWRCB protects all waters in its regulatory scope but has special responsibility for isolated wetlands and headwaters. WoS 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 a USACE permit, or fall under other federal jurisdiction, and have the potential to impact WoS 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 to WoS, then the local RWQCB has the option to regulate such activities under its state authority in the form of waste discharge requirements (WDRs) or certification of WDRs. Water Quality Order No. 2004-0004-DWQ specifies general WDRs for dredge or fill discharges to waters deemed by the USACE to be outside of federal jurisdiction under Section 404 of the CWA.

7.0 Methods

Wetland delineation fieldwork commenced on August 19, 2020 and proceeded through September 24, 2020. Wetland delineation methods described in *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) and *The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACE, 2010) were used to identify potential wetlands and other waters. The routine method for wetland delineation described in the Environmental Laboratory 1987 manual was used to identify potential wetlands within the study area. The USACE method relies on a three-parameter approach, in which criteria for hydrophytic vegetation, hydric soils, and wetland hydrology must each be met (present at the point of field investigation) to conclude that an area qualifies as a wetland. The study area is within the City of Eureka outside of the Coastal Zone, which relies on a three-parameter wetland definition for determining the presence and extent of wetland. Mapping reflects USACE and non-coastal City of Eureka requirements by showing areas meeting three parameters.

Hydrophytic vegetation refers to plant species known to be adapted to wetland sites. To classify the hydrophytic plants onsite, the most recent *Western Mountains, Valleys, and Coast 2018 Regional Wetland Plant List* was used (USACE, 2018). Hydric soils are those formed under saturated conditions, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile (USDA-NRCS, 2018). Wetland hydrology is demonstrated through direct evidence (primary indicators) or indirect evidence (secondary indicators) of flooding, ponding, or saturation for a significant portion of the growing season (USACE, 2010).

Prior to conducting the field investigation, SHN staff reviewed the USGS topographic quadrangle map (Figure 1); Google Earth (Google Earth, 2020); USDA-NRCS Web Soil Survey website (USDA-NRCS, 2020b);



and NWI map (USFWS, 2020; Appendix 2). Visual inspection of the site prior to TP excavation was performed to identify appropriate TP locations and potential wetland locations and boundaries. During the TP subsurface investigation, sample points were characterized at each pit for the botanical, hydrological, and soil parameters. Wetland TP locations were selected to:

- achieve appropriate coverage and characterization of wetland and upland habitats,
- document potential changes in the vegetative community (such as a shift in the dominant species), and
- determine the approximate boundary line between wetlands and uplands by evaluating the extent of key wetland criteria (hydrology, hydric soils, and hydrophytic vegetation).

TP locations were mapped using a 300-foot tape measure triangulated from fixed locations onsite. TPs were typically located in paired plots around the site to appropriately document wetland and upland boundaries, conditions, and wetland extent.

7.1 Vegetation Methods

Prior to the wetland field investigation (August through September, 2020), a review of plant species reported to be within the study area was performed by querying the “Consortium of California Herbaria” (Consortium of California Herbaria, 2020) database records and “Calflora” (Calflora, 2020) observations. It was determined that the site investigation was performed during a drier than normal rainfall period In August and early September, and a normal rainfall period for the late September work, by reviewing rainfall data (see Section 3.2 Site Hydrology, Tables 1 and 2). Absolute percent cover of each plant species was visually estimated within the sample point and within each vegetation stratum. The tree stratum was inspected at a 30-foot radius centered on the sample point, and the herb and sapling/shrub strata, at a 5-foot radius. Botanical nomenclature follows *The Jepson Manual, Vascular Plants of California* (Baldwin et al., 2012) in addition to the online Jepson Interchange (University of California, Berkeley, 2020) for verification of species whose taxonomy may have changed since its publication.

The 50/20 method¹ was applied to each stratum to determine the dominant plant species within the vicinity of the test pit. Hydrophytic vegetation criteria requires dominance by hydrophytic vegetation. If hydric soils and wetland hydrology were present, the prevalence index² was applied. The occurrence and type of plant cover determine whether jurisdictional areas are identified as satisfying the vegetation criteria of a wetland. Sites displaying wetland hydrology and hydric soil but with little or no plant cover, or other sites not capable of supporting hydrophytic plant communities in normal circumstances, may be wetlands as defined by the state of California. Those sites with little or no plant cover, or other sites not capable of supporting hydrophytic plant communities in normal circumstances are identified as other waters, provided they have an OHWM.

1 The 50/20 rule: for each stratum of the plant community, dominant species are the most abundant species that (when ranked in descending order of abundance and cumulatively totaled) immediately exceed 50% of total dominance measure for the stratum, plus any additional species that individually comprise 20% or more of the total dominance measure for the stratum (USACE, 2010).

2 The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot or other sampling unit, where each indicator status category is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5) and weighting is by abundance (absolute percent cover).



7.2 Soils Methods

Soils were examined for the presence or absence of hydric indicators. All TPs were manually excavated using hand tools to a minimum depth of 24 inches when possible. The thickness of each soil horizon was measured. The Munsell Soil Color Chart (Munsell, 2009) was referenced to determine the colors of the moist soil matrix and redoximorphic (redox) features (if present). Hydric soil indicators were field verified as defined by the NRCS "Field Indicators of Hydric Soils in the United States" (USDA-NRCS, 2018).

7.3 Hydrology Methods

Observations for wetland hydrology were made during TP excavations in August and September 2020. Wetland hydrology is determined by the presence of surface and/or ground water in addition to indirect hydrologic indicators (such as, water marks, drift deposits, sediment deposits, drainage patterns, geomorphic position, water-stained leaves, and similar features). Indicators of extended periods of saturation would include oxidized rhizospheres surrounding living roots or the presence of reduced iron or sulfur in the soil profile. A site must contain at least one primary indicator or two secondary indicators to qualify for the hydrology parameter (Section 3.2 Site Hydrology). All test pits were excavated to a minimum 24-inch depth to determine the presence or absence of a dry-season water table. In addition, aerial imagery was reviewed that may show past inundation, seasonal inundation patterns, or changes onsite that may have influenced hydrology.

7.4 Ordinary High Water Mark Methods

For purposes of Section 404 of the CWA, the lateral limits of federal jurisdiction over non-tidal water bodies in the absence of adjacent wetlands extend to the OHWM. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. For purposes of Sections 9 and 10 of the Rivers and Harbors Act of 1899, the lateral extent of federal jurisdiction, which is limited to the traditional navigable waters of the United States, extends to the OHWM, whether or not adjacent wetlands extend landward of the OHWM (USACE, 2014).

USACE regulations define the term OHWM for the purposes of the CWA lateral jurisdiction as follows:

"The term "ordinary high water mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas at 33 CFR 328.3(e)."

The OHWM in non-perennial streams corresponds with the boundaries of the active channel, which are typically expressed by some combination of three primary indicators: a topographic break in slope, change in sediment characteristics, and change in vegetation characteristics (USACE, 2014). The following supporting features should be considered when making an OHWM determination, to the extent that they can be identified and are deemed reasonably reliable (USACE, 2014):



- Drift/wrack
- Erosion/scour
- Bank undercutting
- Root exposure
- Point bars
- Water staining
- Litter removal
- Silt deposits
- Shelving
- Headcut/knickpoint
- Macroinvertebrates

8.0 Discussion and Results

Wetland field investigations were conducted between August 19 and September 22, 2020. Visual inspection of the study area prior to TP excavation revealed a range from well-drained relatively undisturbed upland to highly manipulated soils with fills soil and materials. Poorly drained areas with loamy sand textures saturated by groundwater were observed throughout the site. Plant cover included a mix of upland and hydrophytic species across the study area (Appendix 1, Photos 6, 7, 12-14, and 17-21). Slopes ranged from approximately 1 to 120 percent. Eighty-three TPs were excavated by hand (Figures 2 and 3), and data for each TP was recorded for soils, vegetation, and hydrology on USACE Wetland Determination Data Forms (Appendix 4). The investigation occurred during a drier-than-normal rainfall period within the growing season for this region (Section 3.2 Site Hydrology). Normal circumstances were considered present at most TPs, with abnormal circumstances observed at nine TPs. Hydrophytic vegetation presence was determined using the Dominance Test or the Prevalence Index where appropriate. See the discussion sections below for TPs, which describe the physical features and considerations of the site, followed by a data section that summarizes information from the completed USACE Wetland Determination Data Forms. Representative TPs have been selected to describe the different habitat types found across the study area. Maps of the study area are included as Figures 2 and 3, and photos of the study area are presented in Appendix 1.

8.1 Upland (Non-jurisdictional Area)

8.1.1 Normal Circumstances Present, 0-2 Parameters

Representative Site: TP5 (43 test pits in total)

Similar TPs in Group: TP1, TP3, TP4, TP8, TP10, TP13, TP16, TP18, TP23, TP24, TP26, TP27, TP28, TP30, TP32, TP34, TP37, TP38, TP39A, TP39C, TP39F, TP39H, TP39I, TP39K, TP39M, TP39P, TP39S, TP40, TP41, TP42, TP45, TP46, TP49, TP52, TP55, TP56, TP58, TP59, TP61, TP63, TP64, TP65

Discussion

TP5 was excavated in the central portion of the eastern side of the baseball field, approximately 8.5 feet southeast of the scoreboard, representing upland within the lower elevations of the project area (Figure 3). No wetland parameters were observed; therefore, it is not considered a wetland site (Appendix 1, Photo 8).

While the remaining TPs ranged from zero to two parameters, these locations represent upland or transition between upland and wetland characteristics across the study area. These TPs included 1, 3, 4, 8, 10, 13, 16, 18, 23, 24, 26, 27, 28, 30, 32, 34, 37, 38, 39A, 39C, 39F, 39H, 39I, 39K, 39M, 39P, 39S, 40, 41, 42, 45, 46, 49, 52, 55, 56, 58, 59, 61, 63, 64, and 65. Of these TPs, eight contained hydric soil indicators, three of which had wetland hydrology but no hydrophytic vegetation dominance and one of which also



had hydrophytic vegetation but no wetland hydrology. An additional four upland TPs had wetland hydrology with no hydric soils, two of which also had hydrophytic vegetation. Hydrophytic vegetation was observed with no other wetland parameters at thirteen TPs (see Appendix 1, Photos 4 and 5 for upland soil examples)

Data

TP5 vegetation contained the tree, sapling/shrub, and herb strata. The dominant tree species was coastal willow (*Salix hookeriana* [FACW]) with 50-percent cover, followed by 30-percent California blackberry (*Rubus ursinus* [FACU]) cover in the sapling/shrub stratum. Dominant herbaceous species included common horsetail [FAC] with 25-percent cover and pampas grass [FACU] with 25-percent cover. This plant combination met the dominance test for upland vegetation. No hydrology or hydric soil indicators were observed. See Appendix 4 data forms for additional vegetation.

8.2 Wetland (Jurisdictional Area)

8.2.1 Normal Circumstances Absent

Representative Site: TP2 (9 test pits in total)

Similar TPs in Group: TP7, TP15, TP22, TP39E, TP39G, TP39O, TP47, TP48

Discussion

TP2 was one of nine TPs where indicators for only two wetland parameters were observed, but the missing parameter was inferred because of abnormal conditions. These abnormal conditions included problematic vegetation or soils at nine TPs, including TPs 2, 7, 15, 22, 39E, 39G, 39O, 47, and 48. Of these TPs, 47 and 48 had problematic soils, while the remainder contained problematic vegetation. TP2 was excavated near the southwestern corner of the baseball field approximately 16 feet northeast of the agriculture facility's northeastern fence corner (Figure 3; Appendix 1, Photos 9, 10, and 11). Vegetation at this TP did not meet the Dominance Test or the Prevalence Index. However, invasive, non-native English ivy [FACU] covered the site, creating false dominance by upland vegetation. This TP was also surrounded by invasive, non-native black acacia [NL], providing additional false upland dominance in the tree stratum. With multiple hydric soil and wetland hydrology indicators observed at this TP, the invasive nature and ability of these two non-native plant species to grow in or near wetland areas indicates normal circumstances were absent, which qualified the plant cover as problematic hydrophytic vegetation.

This wetland was conspicuous during visual reconnaissance due to the dominance of common horsetail in the herbaceous stratum. Organic surface soil, gley colors, high water table, and saturation to the surface indicated this location was a wetland. This location had soil with high value and low chroma and prominent redox concentrations indicating saturation within the upper 12 inches of profile. Since problematic hydrophytic vegetation was determined, the TP is considered a wetland site that reflects natural wetland conditions degraded by invasive species.

Data

TP2 vegetation contained tree, sapling/shrub, herbaceous, and woody vine strata. The dominant species within the tree stratum were black acacia [NL] with 47-percent cover and Pacific willow (*Salix lasiandra* var. *lasiandra* [FACW]) with 15-percent cover. Dominant species in the sapling/shrub stratum included California blackberry with 25-percent cover and Himalayan blackberry (*Rubus armeniacus* [FAC]) with 15-percent cover. The dominant species in the herb stratum was common horsetail with 25-percent cover. The dominant species in the woody vine stratum was English ivy with 60-percent cover. This vegetation did not meet the Dominance Test or the Prevalence Index.



The hydric soil indicators Histic Epipedon (A2) and Depleted Matrix (F3) were both observed at this location. Wetland hydrology indicators included High Water Table (A2), Saturation (A3), Dry-Season Water Table (C2), and Geomorphic Position (D2).

Two wetland parameters were directly observed while hydrophytic vegetation parameter was determined to be present due to abnormal conditions. This was the only TP that exhibited this combination of indicators. See Appendix 4 data forms for additional information.

8.2.2 Normal Circumstances Present

Representative Site: TP43 (31 test pits in total)

Similar TPs in Group: TP6, TP9, TP11, TP12, TP14, TP17, TP19, TP20, TP21, TP25, TP29, TP31, TP33, TP35, TP36, TP39B, TP39D, TP39J, TP39L, TP39N, TP39Q, TP39R, TP44, TP50, TP51, TP53, TP54, TP57, TP60, TP62

Discussion

TP43 was one of 31 TPs where all three wetland indicators were recorded under normal conditions. Similar locations included TPs 6, 9, 11, 12, 14, 17, 19, 20, 21, 25, 29, 31, 33, 35, 36, 39B, 39D, 39J, 39L, 39N, 39Q, 39R, 44, 50, 51, 53, 54, 57, 60, 62. TP43 was excavated near the southwestern corner of the football field approximately 65 feet south of the southwestern corner of the bleachers (Figure 2; Appendix 1, Photos 14 and 16). This TP was the middle pit in a small transect of three TPs excavated to determine the wetland boundary on a small-fruited bulrush colony that contrasted sharply with surrounding vegetation. TP 42 was a nearby upland pit, while TP44 represented a wetter location with a water table at 10 inches and a higher density of small-fruited bulrush (Appendix 1, photo 15). Vegetation at TP43 met the Dominance Test. All three wetland parameters were recorded at this TP, so it is considered a wetland site that reflects natural wetland conditions. See Appendix 4 data forms for additional information.

Data

TP43 vegetation contained tree, sapling/shrub, and herbaceous stratus. The dominant species for the tree stratum was 30-percent red alder (*Alnus rubra* [FAC]). Dominant species in the sapling/shrub stratum included 2-percent California blackberry, which was not counted since it was under 5-percent. The dominant species in the herb stratum were 20-percent common horsetail and 50-percent small-fruited bulrush. This vegetation met the Dominance Test for hydrophytic vegetation.

The hydric soil indicator Redox Dark Surface (F6) was observed at this location. Wetland hydrology indicators included Saturation (A3) and secondary indicator FAC-Neutral Test (D5).

All three wetland parameters were observed.

8.23 Ordinary High Water Mark (OHWM)

Eight OHWMs were described around the study area (Figures 2 and 3). These OHWM delineation transects were all conducted within small channels draining the slopes encircling the project area. At these points, the texture differed between the sediments above and below the OHWMs. Other evidence included drift/wrack, erosion/scour, bank undercutting, shelving, and litter removal. These features are classified as "other waters." See Appendix 4 for data forms describing OHWM and stream conditions and Appendix 1, Photo 19 for OHWM 2, Photo 20 for OHWM 3, and Photo 21 for OHWM 7.



9.0 Conclusions

This region experienced drier-than-normal and normal seasonal rainfall volume in the three months preceding the August and September 2020 field work (Section 3.2 Site Hydrology). Based on topography, management, and soil conditions, the study area characteristics recorded and described in this report are representative of site upland and wetland conditions, despite the drier-than-normal rainfall period for the August and early September work. Freshwater forested/shrub wetlands were mapped intermittently throughout the study area, outside of the sports fields. These wetlands are classified as PFO1C – Palustrine Forested Broad-leaved Deciduous Seasonally Flooded (Figures 2 and 3). Figures 2 and 3 indicate the jurisdictional wetland boundaries, TP locations, and OHWM transects within the study area.

Eighty-three TPs were excavated across the site to clearly delineate the wetland boundaries. TPs were generally located to determine wetland boundaries using a step-out method with paired or small transects of three TPs. This method produced 43 upland test pits and 40 wetland TPs, with nine of the wetland TPs exhibiting abnormal conditions with either problematic vegetation or soils.

10.0 Limitations

The results in this report represent conditions observed at the time of fieldwork. It is possible that some species were not observable at the time of the fieldwork and that conditions have changed since field work was completed. This report documents the investigation by using the best professional judgment of SHN's wetland ecologist and soil scientist. The conclusions should be verified by the USACE through receipt of a jurisdictional determination letter.

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Site Photographs

1



Photo 1: Looking north along track and western edge of football field from TP40 location. Note water weeping from concrete retaining wall near TP40. Photo taken September 21, 2020.



Photo 2: Looking east across track from TP40. Note mixed coniferous forest on eastern slope of site with dense small-fruited bulrush stands above the green retaining wall.
Photo taken September 21, 2020.



Photo 3: Looking southeast across the baseball diamond toward the agricultural facilities at the south end of the field. Photo taken September 15, 2020.



Photo 4: Typical dark sandy loam from upland TP56. Photo taken September 22, 2020.





Photo 5: Loamy sand typical of many subsurface horizons across the site. This gleyed horizon was too deep to meet hydric soil indicators at TP61. Photo taken September 22, 2020.



Photo 6: Dense stand of native hydrophytic vegetation with small-fruited bulrush dominance at TP17. Photo taken September 14, 2020.





Photo 7: Upland location (TP 1) displaying mostly non-native upland vegetation.
Photo taken September 16, 2020.



Photo 8: Upland TP5 with pampas grass. Note flagpole base at top left. Photo taken September 16, 2020.





Photo 9: Muck soils over a depleted matrix at TP2. Note water table with saturation to the surface.
Photo taken September 16, 2020.



Photo 10: Problematic vegetation (English ivy) at wetland TP2. Photo taken September 16, 2020.





Photo 11: Muck found in upper eight inches at TP2. Photo taken September 16, 2020.



Photo 12: Wetland conditions on the western edge of the baseball field adjacent to the batting cage and dugout looking SW. TP17 in center of photo. Note dominance of hydrophytic vegetation. Photo taken September 15, 2020.





Photo 13: Batting cage west of the baseball field with adjacent wetlands looking west. TP 16 in center of photo immediately west of concrete. Photo taken September 15, 2020.



Photo 14. Location of TP43 showing dark surface soil, small-fruited bulrush, and horsetail. Photo taken September 17, 2020.





Photo 15. TP44, which is like TP43 but further downhill with higher density of small-fruited bulrush. Note water table and saturation. Photo taken September 17, 2020.



Photo 16: Location of TPs 40-44 between the field house and bleachers. Wetlands extend from the retaining wall to midway upslope. Note red alder within wetlands. Photo taken September 17, 2020.





Photo 17: Wetlands adjacent to the field house south of the Albee stadium football field and track looking east. TPs 49 and 50 are in the center of the photo marked by the shovel and bucket.
Photo taken September 17, 2020.



Photo 18: Wetlands adjacent to the field house south of the Albee stadium football field and track looking SW. TPs 45-48 are in the center of the photo heading up the hillslope. Photo taken September 17, 2020.





Photo 19: OHWM2 at the primary outfall point for the culvert that extends under the football and baseball fields looking south toward outfall which is obscured by vegetation. Note steep fill slopes that extend down from the baseball field. Also note Himalayan blackberry and concrete debris in stream channel. Photo taken August 24, 2020.



Photo 20: OHWM3 within a deeply incised undercut channel. The small stream drains the western side of the baseball field. Photo taken September 14, 2020.



Photo 21: OHWM7 showing surface flow and bare surface from scour and sedimentation. Note shadow along upper left showing bank undercutting. Photo taken September 21, 2020.

National Wetlands Inventory

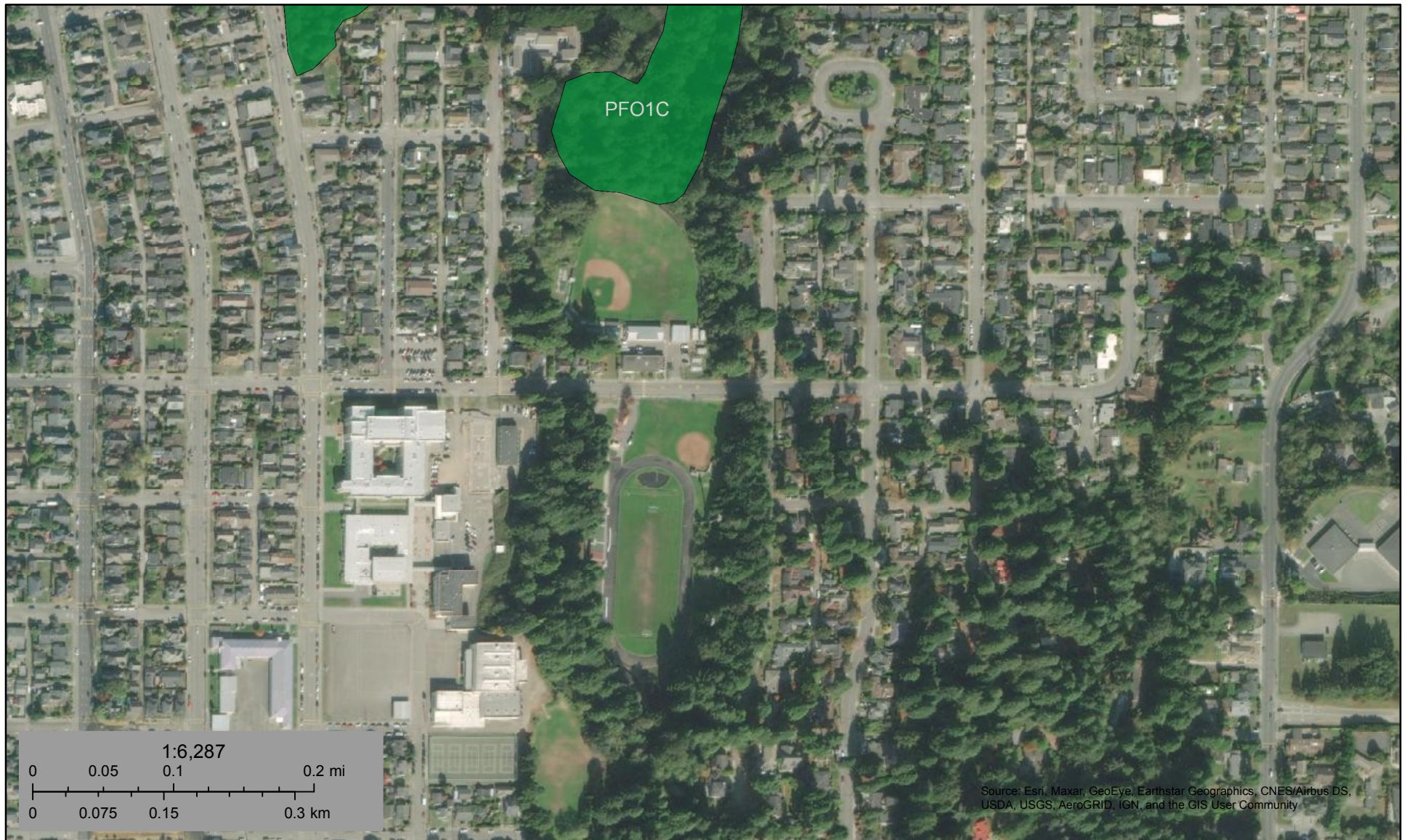
2



U.S. Fish and Wildlife Service

National Wetlands Inventory

Albee Stadium NWI Map



August 19, 2020

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Observed Botanical List

3

**Botanical Species Observed
Eureka High School Athletic Facilities,
Eureka, CA**

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



Botanical Species Observed Eureka High School Athletic Facilities, Eureka, CA			
Scientific Name	Common Name	Family	Native?
<i>Juniperus</i> sp.	Juniper cultivar	Cupressaceae	N
<i>Ligustrum ovalifolium</i>	privet	Oleaceae	N
<i>Lonicera involucrata</i> var. <i>ledebourii</i>	coast twinberry	Caprifoliaceae	Y
<i>Morella californica</i>	California wax myrtle	Myricaceae	Y
<i>Rhododendron macrophyllum</i>	California rhododendron	Ericaceae	Y
<i>Rhododendron</i> sp.	Rhododendron cultivar	Ericaceae	N
<i>Rubus armeniacus</i>	Himalayan berry	Rosaceae	I
<i>Rubus parviflorus</i>	thimbleberry	Rosaceae	Y
<i>Rubus spectabilis</i>	salmonberry	Rosaceae	Y
<i>Rubus ursinus</i>	California blackberry	Rosaceae	Y
<i>Sambucus racemosa</i> var. <i>racemosa</i>	red elderberry	Adoxaceae	Y
<i>Vaccinium ovatum</i>	evergreen huckleberry	Ericaceae	Y
<i>Vaccinium parviflorus</i>	red huckleberry	Ericaceae	Y
Ferns and Allies			
<i>Athyrium filix-femina</i> var. <i>cyclosorum</i>	western lady fern	Woodsiaceae	Y
<i>Equisetum arvense</i>	horsetail	Equisetaceae	Y
<i>Equisetum telmateia</i>	giant horsetail	Equisetaceae	Y
<i>Polystichum munitum</i>	sword fern	Dryopteridaceae	Y
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	bracken fern	Dennstaedtiaceae	Y
<i>Struthiopteris spicant</i>	deer fern	Blechnaceae	Y
Sedges and Rushes			
<i>Carex harfordii</i>	Harford sedge	Cyperaceae	Y
<i>Carex obnupta</i>	slough sedge	Cyperaceae	Y
<i>Carex tumulicola</i>	foothill sedge	Cyperaceae	Y
<i>Cyperus eragrostis</i>	tall flat sedge	Cyperaceae	Y
<i>Juncus bolanderi</i>	Bolander's rush	Juncaceae	Y
<i>Juncus breweri</i>	Brewer's rush	Juncaceae	Y
<i>Juncus bufonius</i> var. <i>bufonius</i>	toad rush	Juncaceae	Y
<i>Juncus effusus</i> ssp. <i>pacificus</i>	common rush	Juncaceae	Y
<i>Juncus phaeocephalus</i> var. <i>phaeocephalus</i>	brownhead rush	Juncaceae	Y
<i>Juncus xiphioides</i>	iris leaf rush	Juncaceae	Y
<i>Luzula comosa</i> var. <i>comosa</i>	hairy woodrush	Juncaceae	Y
<i>Schoenoplectus pungens</i> var. <i>longispicatus</i>	common three square	Cyperaceae	Y
<i>Scirpus microcarpus</i>	panicled bulrush	Cyperaceae	Y
Grasses			
<i>Agrostis stolonifera</i>	creeping bentgrass	Poaceae	I
<i>Anthoxanthum odoratum</i>	sweet vernal grass	Poaceae	I
<i>Arundo donax</i>	giant reed	Poaceae	I
<i>Avena barbata</i>	wild oat	Poaceae	I
<i>Briza maxima</i>	large quaking grass	Poaceae	I



Botanical Species Observed Eureka High School Athletic Facilities, Eureka, CA			
Scientific Name	Common Name	Family	Native?
<i>Briza minor</i>	small quaking grass	Poaceae	N
<i>Bromus catharticus</i> var. <i>catharticus</i>	rescue brome	Poaceae	N
<i>Bromus diandrus</i>	rip-gut brome	Poaceae	I
<i>Bromus hordeaceus</i>	soft chess	Poaceae	I
<i>Cortaderia jubata</i>	pampas grass	Poaceae	I
<i>Cynodon dactylon</i>	Bermuda grass	Poaceae	I
<i>Dactylis glomerata</i>	orchard grass	Poaceae	I
<i>Digitaria sanguinalis</i>	crabgrass	Poaceae	N
<i>Festuca arundinacea</i>	tall fescue	Poaceae	I
<i>Festuca myuros</i>	six-weeks grass	Poaceae	I
<i>Festuca perennis</i>	Italian ryegrass	Poaceae	I
<i>Festuca rubra</i>	red fescue	Poaceae	Y
<i>Gastridium phleoides</i>	nitgrass	Poaceae	N
<i>Holcus lanatus</i>	velvet grass	Poaceae	I
<i>Panicum acuminatum</i> var. <i>fasciculatum</i>	pacific panic grass	Poaceae	Y
<i>Phalaris arundinacea</i>	canary reedgrass	Poaceae	I
<i>Poa annua</i>	annual bluegrass	Poaceae	N
<i>Poa pratensis</i>	Kentucky bluegrass	Poaceae	I
<i>Polypogon monspeliensis</i>	rabbits' foot	Poaceae	I
<i>Trisetum cernuum</i>	nodding trisetum	Poaceae	Y
Herbs			
<i>Allium triquetrum</i>	white flowered onion	Alliaceae	N
<i>Bellis perennis</i>	English daisy	Asteraceae	N
<i>Brassica nigra</i>	black mustard	Brassicaceae	I
<i>Calystegia silvatica</i> ssp. <i>disjuncta</i>	large bindweed	Convolvulaceae	N
<i>Capsella bursa-pastoris</i>	shepherd's purse	Brassicaceae	N
<i>Cardamine oligosperma</i>	bittercress	Brassicaceae	Y
<i>Cerastium fontanum</i> ssp. <i>vulgare</i>	common chickweed	Caryophyllaceae	N
<i>Cerastium glomeratum</i>	large mouse ears	Caryophyllaceae	N
<i>Cichorium intybus</i>	chicory	Asteraceae	N
<i>Cirsium vulgare</i>	bull thistle	Asteraceae	I
<i>Claytonia sibirica</i>	spring beauty	Montiaceae	Y
<i>Conium maculatum</i>	poison hemlock	Apiaceae	I
<i>Convolvulus arvensis</i>	field bindweed	Convolvulaceae	N
<i>Crocsmia x crocosmiiflora</i>	montbretia	Iridaceae	I
<i>Daucus carota</i>	Queen Anne's lace	Apiaceae	N
<i>Epilobium ciliatum</i> var. <i>ciliatum</i>	willowherb	Onagraceae	Y
<i>Erodium cicutarium</i>	coast heron's bill	Geraniaceae	I
<i>Erodium moschatum</i>	whitestem filaree	Geraniaceae	N
<i>Euphorbia peplus</i>	petty spurge	Euphorbiaceae	N
<i>Fallopia japonica</i>	Japanese knotweed	Polygonaceae	I
<i>Galium aparine</i>	cleaver plant	Rubiaceae	Y
<i>Galium parisiense</i>	wall bedstraw	Rubiaceae	N
<i>Geranium dissectum</i>	cutleaf geranium	Geraniaceae	I
<i>Geranium molle</i>	crane's bill geranium	Geraniaceae	N



**Botanical Species Observed
Eureka High School Athletic Facilities,
Eureka, CA**

Scientific Name	Common Name	Family	Native?
<i>Geranium robertianum</i>	Robert's geranium	Geraniaceae	N
<i>Helminthotheca echioides</i>	bristly ox-tongue	Asteraceae	I
<i>Hirschfeldia incana</i>	hoary mustard	Brassicaceae	I
<i>Hypochaeris radicata</i>	hairy cat's-ear	Asteraceae	I
<i>Lapsana communis</i>	nipplewort	Asteraceae	N
<i>Lathyrus latifolius</i>	sweet pea	Fabaceae	N
<i>Lepidium didymum</i>	swinecress	Brassicaceae	N
<i>Linum bienne</i>	flax	Linaceae	N
<i>Lotus corniculatus</i>	bird's-foot trefoil	Fabaceae	N
<i>Lysichiton americanus</i>	skunk cabbage	Araceae	Y
<i>Lysimachia arvensis</i>	scarlet pimpernel	Myrsinaceae	N
<i>Lythrum hyssopifolia</i>	Lythrum loosestrife	Lythraceae	I
<i>Maianthemum dilatatum</i>	false lily of the valley	Ruscaceae	Y
<i>Malva parviflora</i>	cheesewheel	Malvaceae	N
<i>Marah oregana</i>	coast man-root	Cucurbitaceae	Y
<i>Matricaria discoidea</i>	pineapple weed	Asteraceae	Y
<i>Medicago lupulina</i>	black medic	Fabaceae	N
<i>Medicago polymorpha</i>	bur clover	Fabaceae	I
<i>Melilotus albus</i>	white sweet clover	Fabaceae	N
<i>Mentha pulegium</i>	pennyroyal	Lamiaceae	I
<i>Oxalis articulata</i> ssp. <i>rubra</i>	window box sorrel	Oxalidaceae	N
<i>Oxalis oregana</i>	redwood sorrel	Oxalidaceae	Y
<i>Pectiantia ovalis</i>	coastal miterwort	Saxifragaceae	Y
<i>Plantago lanceolata</i>	English plantain	Plantaginaceae	I
<i>Plantago major</i>	common plantain	Plantaginaceae	N
<i>Polycarpon tetraphyllum</i> var. <i>tetraphyllum</i>	allseed	Caryophyllaceae	N
<i>Polygonum aviculare</i> ssp. <i>depressum</i>	prostrate knotweed	Polygonaceae	N
<i>Potentilla anserina</i> ssp. <i>pacifica</i>	pacific silverweed	Asteraceae	Y
<i>Prosartes smithii</i>	large flower fairybells	Liliaceae	Y
<i>Prunella vulgaris</i> var. <i>lanceolata</i>	selfheal	Lamiaceae	Y
<i>Prunus vulgaris</i> var. <i>vulgaris</i>	selfheal	Lamiaceae	N
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	Asteraceae	N
<i>Ranunculus repens</i>	creeping buttercup	Ranunculaceae	I
<i>Raphanus sativus</i>	wild radish	Brassicaceae	I
<i>Rumex acetosella</i>	sheep sorrel	Polygonaceae	I
<i>Rumex crispus</i>	curly dock	Polygonaceae	I
<i>Sagina procumbens</i>	pearlwort	Caryophyllaceae	Y
<i>Senecio vulgaris</i>	common groundsel	Asteraceae	N
<i>Sidalcea malviflora</i> ssp. <i>patula</i>^d	Siskiyou checkerbloom	Malvaceae	Y
<i>Sisyrinchium californicum</i>	yellow-eyed grass	Iridaceae	Y
<i>Soleirolia soleirolii</i>	baby's tears	Urticaceae	N
<i>Sonchus oleraceus</i>	sow thistle	Asteraceae	N
<i>Spergula arvensis</i>	corn spurry	Caryophyllaceae	N
<i>Spergularia rubra</i>	pink sand spurry	Caryophyllaceae	N
<i>Stachys ajugoides</i> var. <i>rigida</i>	bugle hedgenettle	Lamiaceae	Y
<i>Stachys chamissonis</i>	hedge nettle	Lamiaceae	Y



Botanical Species Observed Eureka High School Athletic Facilities, Eureka, CA			
Scientific Name	Common Name	Family	Native?
<i>Stellaria media</i>	chickweed	Caryophyllaceae	N
<i>Taraxacum officinale</i> ssp. <i>officinale</i>	common dandelion	Asteraceae	N
<i>Trifolium dubium</i>	shamrock clover	Fabaceae	N
<i>Trifolium fragiferum</i>	strawberry clover	Fabaceae	N
<i>Trifolium repens</i>	white clover	Fabaceae	N
<i>Trifolium subterraneum</i>	subterranean clover	Fabaceae	N
<i>Vancouveria planipetala</i>	inside-out-flower	Berberidaceae	Y
<i>Veronica americana</i>	American speedwell	Plantaginaceae	Y
<i>Veronica arvensis</i>	speedwell	Plantaginaceae	N
<i>Vicia sativa</i> ssp. <i>sativa</i>	spring vetch	spring vetch	N
<i>Vicia tetrasperma</i>	four-seeded vetch	Fabaceae	N
<i>Viola sempervirens</i>	redwood violet	Violaceae	Y
<i>Zantedeschia aethiopica</i>	calla lily	Araceae	I
Vines			
<i>Hedera helix</i>	English ivy	Araliaceae	I
<i>Lonicera hispidula</i>	pink honeysuckle	Caprifoliaceae	Y
<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	creeping snowberry	Caprifoliaceae	Y
<i>Vitis vinifera</i>	cultivated grape	Vitaceae	N
Lichens and Bryophytes			
<i>Kindbergia praelonga</i>	common feather moss	Brachytheciaceae	Y
188 Species			38% Native

^a Y: Native species

^b I: Invasive species

^c N: Non-native species

^d Special-status species



**Wetland
Determination
Data Forms**

4

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 1
 Investigator(s): Sam Polly, Joseph Saker Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch, Fill Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A-MLRA, 4B Lat: 40.790645° Long: -124.154803° Datum: WGS84
 Soil Map Unit Name: 212 Urban Land-Halfbluff-Redsands Complex 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks: <u>6ft east of Ag-face, 28 ft NE of Ag corner.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Acacia melanoxylon black acacia</u>	<u>25</u>	<u>✓</u>	<u>NL</u>
2. <u>Salix hookeriana</u>	<u>40</u>	<u>✓</u>	<u>FACW</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>65</u> = Total Cover		<u>32.5</u>	<u>13</u>
Sapling/Shrub Stratum (Plot size: <u> </u>)			
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u> = Total Cover		<u> </u>	<u> </u>
Herb Stratum (Plot size: <u>5 ft</u>)			
1. <u>Lotus corniculatus</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>
2. <u>Trifolium repens</u>	<u>18</u>	<u> </u>	<u>FAC</u>
3. <u>Equisetum arvense</u>	<u>10</u>	<u> </u>	<u>FAC</u>
4. <u>Helianthus lanatus</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>
5. <u>Ranunculus repens</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>
6. <u>Festuca perennis</u>	<u>1</u>	<u> </u>	<u>FAC</u>
7. <u>Anthoxanthum odoratum</u>	<u>2</u>	<u> </u>	<u>FACW</u>
8. <u>Phalaris arundinacea</u>	<u>2</u>	<u> </u>	<u>FACW</u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>103</u> = Total Cover		<u>51.5</u>	<u>20.6</u>
Woody Vine Stratum (Plot size: <u> </u>)			
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u> = Total Cover		<u> </u>	<u> </u>
% Bare Ground in Herb Stratum <u>0</u>			
Remarks: <u> </u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u> </u>	x 1 = <u> </u>
FACW species <u> </u>	x 2 = <u> </u>
FAC species <u> </u>	x 3 = <u> </u>
FACU species <u> </u>	x 4 = <u> </u>
UPL species <u> </u>	x 5 = <u> </u>
Column Totals: <u> </u> (A)	<u> </u> (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 5 - Wetland Non-Vascular Plants¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes X No

SOIL

Sampling Point: TP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100	—	—	—	—	L	60% sawdust
4-8	10YR 2/2	100	—	—	—	—	L	fill w/ bright red rust covers
8-15	2.5Y 4/1	55	10YR 5/4	5	C	M	L	
—	—	—	10YR 2/1	25	C	M	—	
—	—	—	5YR 3/4	15	C	M	—	
15-24+	10YR 2/1	60	5Y 4/2	20	D	M	L	
—	—	—	2.5YR 2.5/4	10	C	PL	—	
—	—	—	10YR 4/6	10	C	M	—	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

- | | | |
|--|-----------------------|----------------------------|
| Surface Water Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Saturation Present?
(includes capillary fringe) | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 08/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP2
 Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4, Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): A MLRA-4B Lat: 40.790988° Long: -124.154790° Datum: NAD83
 Soil Map Unit Name: 257 Lepoil-Candy Mtn Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation X, Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>33.5 ft NE of Baseball fence corner, 16 ft NE of Ag fence corner</u> <u>see veg remarks</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Salix hookeriana</u>	<u>5</u>	<u> </u>	<u>FACW</u>	
2. <u>Acacia melanoxylon</u>	<u>47</u>	<u> </u>	<u>NL</u>	
3. <u>Salix lasiantha</u>	<u>15</u>	<u> </u>	<u>FACW</u>	
4. <u> </u>	<u>67</u>	<u> </u>	<u> </u>	
= Total Cover <u>33.5</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>1</u> x 1 = <u>1</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>47</u> x 3 = <u>141</u> FACU species <u>85</u> x 4 = <u>340</u> UPL species <u>52</u> x 5 = <u>260</u> Column Totals: <u>205</u> (A) <u>782</u> (B) Prevalence Index = B/A = <u>3.8</u>
1. <u>Rubus armeniacus</u>	<u>15</u>	<u> </u>	<u>FAC</u>	
2. <u>Rubus ursinus</u>	<u>25</u>	<u> </u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover <u>40</u>				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ <u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Calystegia silvatica</u>	<u>5</u>	<u> </u>	<u>NL</u>	
2. <u>Athyrium filix-femina</u>	<u>7</u>	<u> </u>	<u>FAC</u>	
3. <u>Equisetum arvense</u>	<u>25</u>	<u> </u>	<u>FAC</u>	
4. <u>Holcus lanatus</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
5. <u>Scirpus microcarpus</u>	<u>1</u>	<u> </u>	<u>OBL</u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover <u>43</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>60</u>	<u> </u>	<u>FACU</u>	
2. <u> </u>	<u>60</u>	<u> </u>	<u> </u>	
= Total Cover <u>60</u>				
% Bare Ground in Herb Stratum <u>57%</u>				
Remarks: <u>* Invasive Hedera helix and Acacia melanoxylon creating false dominance by upland vegetation</u>				

SOIL

Sampling Point: TP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-8	10YR 2/2	100					MD	
8-16	5Y 4/1	80	2.5Y 3/1	5	C	M	SCL	
			5Y 4/3	10	D	M		
			5YR 3/4	5	C	PL		
16-24	2.5Y 3/1	65	10YR 3/6	5	C	PL	VGr SCL	
			5Y 3/2	5	D	M		
			5Y 5/3	5	C	M		
			5Y 4/1	20	D	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input checked="" type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input checked="" type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☒ No ☐ Depth (inches): 9 in

Saturation Present? Yes ☒ No ☐ Depth (inches): Surface

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: _____

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP3
 Investigator(s): Sam Polly, Joseph Sater Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A, MLRA-4B Lat: 40.790974° Long: -124.154861° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>TP3 is 8ft west of TP2, 26ft NE of baseball fence corner, 13ft N of Ag fence corner.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Acacia melanoxylon</u>	<u>75%</u>	<u>✓</u>	<u>NL</u>	
2. <u>Salix hookeriana</u>	<u>20</u>	<u>✓</u>	<u>FACW</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>95</u> = Total Cover <u>95%</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: (A) <u> </u> (B) <u> </u> Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>35</u>	<u>✓</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>50</u> = Total Cover <u>50%</u>				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Equisetum arvense</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
2. <u>Ranunculus repens</u>	<u>4</u>	<u> </u>	<u>FAC</u>	
3. <u>Holcus lanatus</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
4. <u>Crocus x crocosmiflora</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Athyrium filix-femina var. cyclosum</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
6. <u>Galium aparine</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
7. <u>Calystegia silvatica ssp. disjuncta</u>	<u>2</u>	<u> </u>	<u>NL</u>	
8. <u>Scirpus microcarpus</u>	<u>3</u>	<u> </u>	<u>OBL</u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>45</u> = Total Cover <u>45%</u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>40</u> = Total Cover <u>40%</u>				
% Bare Ground in Herb Stratum <u>55</u>				
Remarks:				

SOIL

Sampling Point: TP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100					LS	Dense root mat
4-8	2.5Y 3/1	85	7.5YR 3/3	15	G	PL	LS	
8-15	10YR 4/4	75	2.5Y 4/1	5	D	M	SL	
			2.5Y 5/4	10	C	M		
			7.5YR 4/4	10	C	M		
15-24+	2.5Y 4/2	60	5YR 4/6	10	C	M	SCL	
			10YR 2/1	5	C	M		
			5YR 3/3	10	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

7.5YR 4/6 15% CM

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

- | | | |
|------------------------|---|----------------------------|
| Surface Water Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): <u>N/A</u> |
| Saturation Present? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Depth (inches): <u>N/A</u> |

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP4
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, H8M
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A, MLRA-46 Lat: 40.790917° Long: -124.154874° Datum: WGS 84
 Soil Map Unit Name: 212 Urban Land-Half bluff-Redsands complex 0-5% NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: <u>Inside Ag Compound near Shed in scirpus sward 8 ft from fence corner (NE), 20 ft from fence corner (NW)</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)																
1. <u>Acacia melanoxylon</u>	<u>30</u>	<u>✓</u>	<u>NL</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>) 1. <u>Rubus armeniacus</u> <u>5</u> <u>✓</u> <u>FAC</u> 2. <u>Rubus urinus</u> <u>2</u> <u>✓</u> <u>FACU</u> 3. _____ 4. _____ 5. _____				Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
Herb Stratum (Plot size: <u>5 ft</u>) 1. <u>Scirpus microcarpus</u> <u>40</u> <u>✓</u> <u>OBL</u> 2. <u>Equisetum arvense</u> <u>8</u> <u>✓</u> <u>FAC</u> 3. <u>Holcus lanatus</u> <u>10</u> <u>✓</u> <u>FAC</u> 4. <u>Calystegia silvatica ssp. disjuncta</u> <u>7</u> <u>✓</u> <u>NL</u> 5. <u>Lotus corniculatus</u> <u>8</u> <u>✓</u> <u>FAC</u> 6. <u>Anthoxanthum odoratum</u> <u>5</u> <u>✓</u> <u>FACU</u> 7. <u>Ranunculus repens</u> <u>15</u> <u>✓</u> <u>FAC</u> 8. <u>Agrostis stolonifera</u> <u>10</u> <u>✓</u> <u>FAC</u> 9. <u>Trifolium repens</u> <u>6</u> <u>✓</u> <u>FAC</u> 10. _____ 11. _____																				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover _____																				
% Bare Ground in Herb Stratum <u>0</u> = Total Cover _____																				
Remarks:																				

Hydrophytic Vegetation Present? Yes _____ No X

SOIL

Sampling Point: JP 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/1	100					Gr L	Moist not sat
10-12	5Y 3/1	85	5Y 5/3	10	C	M	LS	
			2.5YR 4/6	5	C	PL		
12-24+	10Y 4/1	85	5Y 5/3	10	C	M	LS	
			5YR 4/6	5	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No XRemarks: Missed A12 by 0.5 value = transitional point

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/AWater Table Present? Yes _____ No X Depth (inches): N/ASaturation Present? Yes _____ No X Depth (inches): N/A
(includes capillary fringe)Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 08/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TPS
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): None Slope (%): 1-2
 Subregion (LRR): A, MLRA, 4B Lat: 40.791217° Long: -124.154906° Datum: WGS84
 Soil Map Unit Name: 257 Lepoil Candy Mtn Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: <u>B7 flag pole @ field sign 7.5ft east of BO fence, 8.5ft SE of Scanner scoreboard.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Salix hookeriana</u>	<u>50</u>	<u>✓</u>	<u>FACW</u>	
2. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>50</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Rubus armeniacus</u>	<u>10</u>	_____	<u>FAC</u>	
2. <u>Rubus ursinus</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>40</u> = Total Cover <u>2%</u>				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. <u>Equisetum arvense</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Ranunculus repens</u>	<u>12</u>	_____	<u>FAC</u>	
3. <u>Salix aparinæ</u>	<u>1</u>	_____	<u>FACU</u>	
4. <u>Cortaderia jubata</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
5. <u>Agrostis stolonifera</u>	<u>2</u>	_____	<u>FAC</u>	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>65</u> = Total Cover <u>32.5%</u>				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>35*</u> = Total Cover				
% Bare Ground in Herb Stratum <u>35*</u>				
Remarks: <u>* Litter</u>				

SOIL

Sampling Point: TP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					SL	Fill
4-13	2.5Y 3/2	90	2.5Y 3/3	10	C	M	SL	Fill
13-24	5Y 3/1	80	7.5YR 3/4	20	C	PL	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): NAWater Table Present? Yes _____ No X Depth (inches): N/ASaturation Present? Yes _____ No X Depth (inches): 13 in
(includes capillary fringe)Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 6
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): None Slope (%): 1
 Subregion (LRR): A, MLRA-4B Lat: 40.791221° Long: -124.154873° Datum: WGS 84
 Soil Map Unit Name: 257 Lepoil-Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	
Remarks: <u>6.5 ft east of TP 5, 14 ft east of BB face, 14 ft SE of corner of scoreboard</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rubra</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
2. <u>Salix lasiandra var lasiandra</u>	<u>25</u>	<u>✓</u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u>Salix hookeriana</u>	<u>30</u>	<u>✓</u>	<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
4. <u> </u>	<u>60</u>	<u> </u>	<u> </u>	
<u>60</u> = Total Cover <u>12</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Rubus ursinus</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>5</u>	<u> </u>	<u>FAC</u>	OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u> </u> x 4 = <u> </u>
<u>30</u> = Total Cover <u>15</u>				UPL species <u> </u> x 5 = <u> </u>
<u>30</u>				Column Totals: <u> </u> (A) <u> </u> (B)
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index = B/A = <u> </u>
1. <u>Equisetum arvense</u>	<u>18</u>	<u> </u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Cortaderia jubata</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Ranunculus repens</u>	<u>15</u>	<u> </u>	<u>FAC</u>	
4. <u>Coccoloba x coccoloba</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Athyrium filix-femina</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>103</u> = Total Cover <u>51.5</u> <u>20.6</u>				
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>				
Remarks:				

SOIL

Sampling Point: TP 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/2	85	10YR 4/4	10	C	M	L	
			10YR 4/6	5	C	M		
10-16	10Y 3/1	95	10YR 3/4	5	C	PL	LS	
16-24+	N 3/1	100					LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☐ No ☒ Depth (inches): N/A

Saturation Present? Yes ☒ No ☐ Depth (inches): 10 in

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

surface water 5 ft from pit

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 7
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): A MLRA 4b Lat: 40.791612 Long: -124.154958 Datum: NAD83
 Soil Map Unit Name: 257- Lepid Candy Mtn Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation X, Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>see Veg remarks</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Picea sitchensis</u>	<u>70</u>	<u>✓</u>	<u>FAC</u>
2. <u>Ilex aquifolium</u>	<u>10</u>	<u> </u>	<u>FACU</u>
3. <u>Salix hookeriana</u>	<u>15</u>	<u> </u>	<u>FACW</u>
4. <u>Beudanticia Mexicana</u>	<u>5</u>	<u> </u>	<u>FACU</u>
	<u>100</u> = Total Cover	<u>88</u>	

Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus ursinus</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>20</u> = Total Cover		

Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Equisetum arvense</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>
2. <u>Cortaderia jubata</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>
3. <u>Dactylis glomerata</u>	<u>2</u>	<u> </u>	<u>FACU</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>32</u> = Total Cover	<u>16.4</u>	

Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>20</u> = Total Cover		

% Bare Ground in Herb Stratum 68%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>15</u>	x 2 = <u>30</u>
FAC species <u>90</u>	x 3 = <u>270</u>
FACU species <u>67</u>	x 4 = <u>268</u>
UPL species <u> </u>	x 5 = <u> </u>
Column Totals: <u>172</u> (A)	<u>568</u> (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

X 5 - Wetland Non-Vascular Plants¹

X Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes X No

Remarks: Hedera helix and Cortaderia jubata are invasive opportunists and are giving false upland vegetation dominance.

SOIL

Sampling Point: TP 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	7.5 YR 2.5/2	60	10 YR 2/1	40	C	M	Mu	
8-16	N 2.5/	100					LS	
16-24+	5GY 3/1	100					CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☒ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☒ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☒ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☒ Inundation Visible on Aerial Imagery (B7)
☒ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☒ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☒ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? Yes ☒ No _____ Depth (inches): SurfaceWetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/19/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 8
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4, Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch, fill Local relief (concave, convex, none): None Slope (%): 3%
 Subregion (LRR): A, MLRA-48 Lat: 40.791609° Long: -124.154980 Datum: WGS 84
 Soil Map Unit Name: 257- Lepail Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>4 ft west of TP 7</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Picea sitchensis</u>	<u>70</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Salix hookeriana</u>	<u>15</u>		<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. <u>Ilex aquifolium</u>	<u>3</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)
4. <u> </u>	<u>88</u>			
<u>88</u> = Total Cover <u>44</u> <u>77%</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Rubus ursinus</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>				OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>				FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>				FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
<u>25</u> = Total Cover				UPL species <u> </u> x 5 = <u> </u>
				Column Totals: <u> </u> (A) <u> </u> (B)
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index = B/A = <u> </u>
1. <u>Cortaderia jubata</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Equisetum variegatum</u>	<u>10</u>		<u>FAC</u>	
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>5</u>			
<u>5</u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>				
Remarks: <u> </u>				

Sampling Point: TP 8

HYDROLOGY

Primary Indicators (minimum of one required; check all that apply)

- Secondary Indicators (2 or more required)**

- ___ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (**LRR A**)
- ___ Frost-Heave Hummocks (D7)

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☐ No ☒ Depth (inches): N/A

Saturation Present? Yes ☐ No ☒ Depth (inches): N/A
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 08/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP9
 Investigator(s): Sam Polley, Joseph Sator Section, Township, Range: NW 1/4, Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 6%
 Subregion (LRR): A, MLRA-4B Lat: 40.791861° Long: -124.154904° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>NE corner of baseball field near green 4" pipe discharging to storm</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Ilex aquifolium</u>	<u>5</u>		<u>FACU</u>	
2. <u>Sequoia sempervirens</u>	<u>5</u>		<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u>Alnus rubra</u>	<u>60</u>	<u>✓</u>	<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
4. <u>Frangula purshiana</u>	<u>10</u>		<u>FAC</u>	
5. <u>Picea sitchensis</u>	<u>15</u>		<u>FAC</u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	<u>95</u>	<u>✓</u>	<u>FACU</u>	
1. <u>Rubus ursinus</u>	<u>5</u>		<u>FACU</u>	
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
Herb Stratum (Plot size: <u>5ft</u>)	<u>5</u>	<u>✓</u>	<u>FACU</u>	
1. <u>Equisetum telmateia</u>	<u>15</u>		<u>FACW</u>	
2. <u>Stratiotris spicata</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	<u>25</u>	<u>✓</u>	<u>FACU</u>	
1. <u>Hedera helix</u>	<u>60</u>		<u>FACU</u>	
2. <u> </u>				
% Bare Ground in Herb Stratum <u>75%*</u>	<u>60</u>	<u>✓</u>	<u>FACU</u>	
Remarks: <u>Hedera most ground cover.</u> <u>* Hedera helix is incredibly invasive and is giving false upland vegetation dominance</u>				Dominance Test worksheet: Total % Cover of: <u>0</u> x 1 = <u>0</u> FACW species: <u>15</u> x 2 = <u>30</u> FAC species: <u>45</u> x 3 = <u>135</u> FACU species: <u>70</u> x 4 = <u>280</u> UPL species: <u>5</u> x 5 = <u>25</u> Column Totals: <u>185</u> (A) <u>620</u> (B) Prevalence Index = B/A = <u>3.35</u> Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

SOIL

Sampling Point: TP9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-11	10YR 2/1	100				MuSL	
11-13	N 3/1	55	5Y 3/1	45	D	M	
13-24	10YR 4/4	85	10YR 2/1	5	C	PL	
			10Y 4/1	10	C	M	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☒ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☐ No ☒ Depth (inches): 22 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): Surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 08/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP10
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4, Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Fill slope Local relief (concave, convex, none): slope Slope (%): 8
 Subregion (LRR): A, MLRA-4B Lat: 40.791876° Long: -124.155084° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Condy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>photo w/ 10 is TP11, TP10, then down #2</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u>Alnus rubra</u>	<u>45</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Sambucus racemosa</u> <u>40</u> <u>✓</u> <u>FACU</u> 2. <u>Rubus ursinus</u> <u>15</u> <u>✓</u> <u>FACU</u> 3. <u>Ilex aquifolium</u> <u>8</u> <u> </u> <u>FACU</u> 4. <u>Rubus parviflorus</u> <u>10</u> <u> </u> <u>FAC</u> 5. <u> </u> <u> </u> <u> </u> <u> </u>				Prevalence Index worksheet: Total % Cover of: <u>73</u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Polystichum munitum</u> <u>15</u> <u>✓</u> <u>FACU</u> 2. <u>Athyrium filix-femina</u> <u>20</u> <u>✓</u> <u>FAC</u> 3. <u>Calystegia silvatica</u> <u>4</u> <u> </u> <u>NL</u> 4. <u>Equisetum arvense</u> <u>5</u> <u> </u> <u>FAC</u> 5. <u> </u> <u> </u> <u> </u> <u> </u>				
Woody Vine Stratum (Plot size: <u>5ft</u>) 1. <u>Hedera helix</u> <u>55</u> <u>✓</u> <u>FACU</u> 2. <u> </u> <u> </u> <u> </u> <u> </u>				
% Bare Ground in Herb Stratum <u>66%*</u> <u>55</u> = Total Cover <u>88</u>				
Remarks: <u>Hedera and litter</u>				

Sampling Point: TP10

HYDROLOGY

Western Mountains, Valleys, and Coast – Version 2.0

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 8/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP11
 Investigator(s): Sam Rilly, Joseph Saler Section, Township, Range: NW 1/4, Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gully Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A-MLRA-4B Lat: 40.791894° Long: -124.155054° Datum: WGS84
 Soil Map Unit Name: 257- Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: PF01C
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
1. <u>Alnus rubra</u>	<u>80</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>35</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Ilex aquifolium</u>	<u>8</u>	<u> </u>	<u>FACU</u>	
3. <u>Lonicera involucrata</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
Herb Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Equisetum telmateia</u>	<u>7</u>	<u> </u>	<u>FACW</u>	
2. <u>Ranunculus repens</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Veronica americana</u>	<u>3</u>	<u> </u>	<u>OBL</u>	
Woody Vine Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Calystegia silvatica</u>	<u>12</u>	<u>✓</u>	<u>NL</u>	
2. <u>Crocodylia x crocodyliiflora</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Athyrium filix-femina</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
% Bare Ground in Herb Stratum <u>38%</u>				

SOIL

Sampling Point: TP11

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>N/A</u>		
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>22 in</u>		
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>Surface</u>		
(includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 08/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP12
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Gulch fill Local relief (concave, convex, none): None Slope (%): 3
 Subregion (LRR): A, MLRA-4B Lat: 40.792060 Long: -124.155627 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% Slopes NWI classification: PFO1C
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rubra</u>	<u>5</u>		<u>FAC</u>	
2. <u>Picea sitchensis</u>	<u>95</u>	<u>✓</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
3. <u>Salix lasiocarpa</u>	<u>3</u>		<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71%</u> (A/B)
4. <u> </u>	<u>103</u>			
= Total Cover <u>51.5/20.6</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Lonicera involucrata</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Rubus ursinus</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>	OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>				FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>				FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>				FACW species <u> </u> x 4 = <u> </u>
= Total Cover <u>12.5/5</u>				UPL species <u> </u> x 5 = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals: <u> </u> (A) <u> </u> (B)
1. <u>Carex obnupta</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>	Prevalence Index = B/A = <u> </u>
2. <u>Athyrium filix-femina</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Lysichiton americanus</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>	
4. <u>Calystegia silvatica</u>	<u>8</u>		<u>NL</u>	
5. <u>Equisetum arvense</u>	<u>5</u>		<u>FAC</u>	
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>25</u>			
= Total Cover <u>29/9.6</u>				
% Bare Ground in Herb Stratum <u> </u>				
Remarks:				

SOIL

Sampling Point: TP 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/1	100	—	—	—	—	Mu	
8-14	N 3/1	95	10YR 3/4	5	C	PL	SCL	
14-24+	10Y 4/1	90	10YR 3/4	10	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input checked="" type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☒ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☒ No ☐ Depth (inches): 10 in

Saturation Present? Yes ☒ No ☐ Depth (inches): Surface

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 08/28/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 12
 Investigator(s): Joseph Saler, Sam Polk Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Fill slope Local relief (concave, convex, none): Slope, none Slope (%): 20
 Subregion (LRR): A, MLRA-4B Lat: 40.792046° Long: -124.155625° Datum: WGS 84
 Soil Map Unit Name: 257- Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: PFO1C
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>mixed maturity present</u> <u>8ft south of TP 12</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Alnus rubra</u>	<u>98</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>98</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>60</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Lonicera involucrata</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>70</u> = Total Cover <u>33</u>				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Calystegia silvatica</u>	<u>20</u>	<u>✓</u>	<u>NL</u>	
2. <u>Equisetum arvense</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Polygonum maritimum</u>	<u>2</u>	<u> </u>	<u>FACU</u>	
4. <u>Athyrium filix-femina</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
5. <u>Carex obovata</u>	<u>5</u>	<u> </u>	<u>OBL</u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>50</u> = Total Cover <u>25</u>				
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>50</u> = Total Cover				
% Bare Ground in Herb Stratum <u>50</u>				
Remarks: <u> </u>				

Sampling Point: TP 13

HYDROLOGY

Wetland Hydrology Indicators:Western Mountains, Valleys, and Coast – Version 2.0

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/14/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 14
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): A, MLRA-4B Lat: 40.792106° Long: -124.156186° Datum: WGS84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: PFO 1C
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Fraxinus purshiana</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Ilex aquifolia</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. <u>Alnus rubra</u>	<u>10</u>		<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
4. <u> </u>	<u>60</u>			
= Total Cover <u>30</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Rubus ursinus</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Lonicera involucrata</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	OBL species <u> </u> x 1 = <u> </u>
3. <u> </u>				FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>				FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
= Total Cover <u>30</u>				UPL species <u> </u> x 5 = <u> </u>
= Total Cover <u>15</u>				Column Totals: <u> </u> (A) <u> </u> (B)
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index = B/A = <u> </u>
1. <u>Lysichiton americanus</u>	<u>75</u>	<u>✓</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Athyrium filix-femina</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Equisetum telmateia</u>	<u>1</u>		<u>FACW</u>	
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
= Total Cover <u>96</u>				
= Total Cover <u>15</u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>2*</u>		<u>FACU</u>	
2. <u> </u>				
= Total Cover <u>2</u>				
% Bare Ground in Herb Stratum <u>4%</u>				
Remarks: <u>*less than 5% cover, not considered dominant.</u>				

SOIL

Sampling Point: TP14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-13	10YR 2/2	100					MS	
13-24	2.5Y 4/1	65	7.5YR 3/4	35	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☒ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☒ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 0.25 in
 Water Table Present? Yes ☒ No ☐ Depth (inches): 1 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): Surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/14/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP15
 Investigator(s): Joseph Salor, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 10
 Subregion (LRR): A, MLRA-4B Lat: 40.791996° Long: -124.156189° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation X, Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ilex aquifolium</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>
2. <u>Picea sitchensis</u>	<u>60</u>	<u>✓</u>	<u>FAC</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>100</u> = Total Cover <u>50%</u>			
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus ursinus</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>10</u> = Total Cover			
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Stachys albugoides</u>	<u>6</u>	<u>✓</u>	<u>OBL</u>
2. <u>Equisetum telmateia</u>	<u>20</u>	<u>✓</u>	<u>FACW</u>
3. <u>Scirpus microcarpus</u>	<u>1</u>	<u> </u>	<u>OBL</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>27</u> = Total Cover <u>13.5%</u>			
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>70</u>	<u>✓</u>	<u>FACU</u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u>70</u> = Total Cover			
% Bare Ground in Herb Stratum <u>73%</u>			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 6 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>7</u>	x 1 = <u>7</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>60</u>	x 3 = <u>180</u>
FACU species <u>120</u>	x 4 = <u>480</u>
UPI species <u> </u>	x 5 = <u> </u>
Column Totals: <u>207</u> (A)	<u>707</u> (B)

 Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
X 5 - Wetland Non-Vascular Plants¹
X Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: Invasive Hedera helix and Ilex aquifolium giving false upland vegetation dominance

SOIL

Sampling Point: TP 15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	2.5Y 2.5/1	65	7.5YR 2.5/2	5	C	PL	SL	
			10YR 2/1	30	C	M		
4-13	7.5YR 2.5/1	60	7.5Y 2.5/3	40	C	M	LS	
13-	2.5Y 3/1	60	2.5YR 2.5/3	5	C	PL	SL	
			10YR 2/1	35	C	no	muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☒ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☐ No ☒ Depth (inches): N/A
 Saturation Present? Yes ☒ No ☐ Depth (inches): 4
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

SOIL

Sampling Point: TP16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	7.5YR 2.5/1	100					SL	
6-15	2.5Y 3/2	70	10YR 3/3	10	C	M	LS	
			10YR 3/4	20	C	M	LS	
15-24	5Y 2.5/2	100					LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

- | | | |
|--|-----------------------|----------------------------|
| Surface Water Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Saturation Present?
(includes capillary fringe) | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/14/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 17
 Investigator(s): Sam Polly, Joseph Saker Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Fill Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A, MLRA-4B Lat: 40.791468° Long: -124.156256° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>14 ft N of Conex box, 15 ft west of fence.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>Salix lasioandra</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Salix sitchensis</u>	<u>4</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Salix hookeriana</u>	<u>5</u>	<u>✓</u>	<u>FACW</u>	
4. <u> </u>	<u>24</u>	<u> </u>	<u> </u>	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> = Total Cover <u> </u>				
Herb Stratum (Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Cyperus eragrostis</u>	<u>3</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Scirpus microcarpus</u>	<u>20</u>	<u>✓</u>	<u>OBL</u>	
3. <u>Ranunculus repens</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Tritolium repens</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Calystegia silvatica</u>	<u>4</u>	<u> </u>	<u>NL</u>	
6. <u>Festuca perennis</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
7. <u>Holcus lanatus</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
8. <u>Galium aparine</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
9. <u>Agrostis stolonifera</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
10. <u>Festuca arundinacea</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
11. <u>Equisetum telmateia</u>	<u>8</u>	<u> </u>	<u>FACW</u>	
<u>Veronica americana</u>	<u>1</u>	<u> </u>	<u>OBL</u>	
= Total Cover <u>121</u>				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Rumex crispus</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
2. <u>Taraxacum officinale</u>	<u>2</u>	<u> </u>	<u>FACU</u>	
= Total Cover <u>60.5</u>				
% Bare Ground in Herb Stratum <u>0</u>	<u>121</u>	<u>60.5</u>	<u>24.2</u>	
Remarks:				

SOIL

Sampling Point: TP 17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/2	100	—	—	—	—	L	
2-6	5Y 4/2	100	—	—	—	—	VG-GSL	
6-24+	5Y 3/1	100	—	—	—	—	S	Mixed fill at top of horizon

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Positive A-A-D @ 4in

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☒ No ☐ Depth (inches): 7 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): Surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 18
Investigator(s): Sam Polley, Joseph Saker Section, Township, Range: NW 1/4, Sec. 25, T4N, R1W, HBM
Landform (hillslope, terrace, etc.): Athletic field fill Local relief (concave, convex, none): None Slope (%): 0-1
Subregion (LRR): A, MLRA - 4B Lat: 40.791459° Long: -124.156206° Datum: WGS 84
Soil Map Unit Name: 257-Lepid Candy Mtn. Complex 2-15% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: within mowed baseball field					

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Status	
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
				= Total Cover _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____
				= Total Cover _____
Herb Stratum (Plot size: <u>5ft</u>)				
1. <u>Ranunculus repens</u>	<u>65</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Rumex crispus</u>	<u>1</u>		<u>FAC</u>	
3. <u>Agrostis Sclerifera</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Trifolium repens</u>	<u>1</u>		<u>FAC</u>	
5. <u>Bellis perenne</u>	<u>1</u>		<u>NL</u>	
6. <u>Holcus lanatus</u>	<u>2</u>		<u>FAC</u>	
7. <u>Plantago Major</u>	<u>2</u>		<u>FAC</u>	
8. <u>Taraxacum officinale</u>	<u>1</u>		<u>FACU</u>	
9. <u>Prunella vulgaris</u> self-seed	<u>8</u>		<u>FACU</u>	
10. _____	_____	_____	_____	_____
11. _____	_____	_____	_____	_____
				<u>101</u> = Total Cover <u>50.5</u> <u>20.2</u>
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
				= Total Cover _____
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: <u>Veg reflects irrigated baseball field conditions</u>				

Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100%</u> (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____
Prevalence Index = B/A = _____	
Hydrophytic Vegetation Indicators:	
<u>X</u> 1 - Rapid Test for Hydrophytic Vegetation	
<u>X</u> 2 - Dominance Test is >50%	
_____ 3 - Prevalence Index is ≤3.0 ¹	
_____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
_____ 5 - Wetland Non-Vascular Plants ¹	
_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Hydrophytic Vegetation Present? Yes <u>X</u> No _____	

SOIL

Sampling Point: TP18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	2.5Y 3/1	100					Ex Gr Co LS	Gravel fill
3-8	7.5YR 3/1	60	7.5YR 3/2	40	C	PL	SL	Topsoil fill
8-12	10Y 3/1	55	10YR 3/1	45	C	M	LS	Drainage sand fill
12-24+	10Y 3/1	100					S	Fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

All horizons have abrupt, clear boundaries (photo taken to document)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A
 Water Table Present? Yes _____ No X Depth (inches): N/A
 Saturation Present? Yes _____ No X Depth (inches): N/A
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP19
Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
Landform (hillslope, terrace, etc.): Athletic Facility Fill Local relief (concave, convex, none): None Slope (%): 0
Subregion (LRR): A, MLRA-4B Lat: 40.791344° Long: -124.156401° Datum: WGS84
Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Remarks: 16in. west of booby cage foundation					

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		= Total Cover		
Herb Stratum (Plot size: _____)				
1.	<i>Paspalum dilatatum</i>	13		FAC
2.	<i>Ranunculus repens</i>	19	✓	FAC
3.	<i>Holcus lanatus</i>	4		FAC
4.	<i>Equisetum telmateia</i>	8		FACW
5.	<i>Juncus effusus</i>	9		FACW
6.	<i>Cyperus eragrostis</i>	5		FACW
7.	<i>Agrostis stolonifera</i>	40	✓	FAC
8.	<i>Trifolium repens</i>	5		FAC
9.	<i>Juncus phaeocephalus</i>	1		FACW
10.	<i>Lotus corniculatus</i>	1		FAC
11.	<i>Cerastium glomeratum</i>	1		FACW
		108		54 21.6
		= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
		= Total Cover		
% Bare Ground in Herb Stratum 20				

Remarks: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants¹

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes X No _____

Sampling Point: TP 19

HYDROLOGY

Primary Indicators (minimum of one required; check all that apply)

- Secondary Indicators (2 or more required)**

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Surface Water Present? Yes X No X Depth (inches): N/A
 Water Table Present? Yes X No Depth (inches): 5 in
 Saturation Present? Yes X No Depth (inches): Surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP20
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): fill Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A, MLRA-4B Lat: 40.791358° Long: -124.156473 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>3</u>	<u> </u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover				
Herb Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Scirpus microcarpus</u>	<u>45</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Ranunculus repens</u>	<u>22</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Equisetum telmateia</u>	<u>24</u>	<u>✓</u>	<u>FACW</u>	
4. <u>Lotus corniculatus</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
5. <u>Salix glauca sylvatica</u>	<u>3</u>	<u> </u>	<u>NL</u>	
6. <u>Phalaris arundinacea</u>	<u>2</u>	<u> </u>	<u>FACW</u>	
7. <u>Stachys ajacoides</u>	<u>4</u>	<u> </u>	<u>OBL</u>	
8. <u>Agrostis stolonifera</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
9. <u>Crocasmia x crocosmiflora</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
10. <u>Galium aparine</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
= Total Cover <u>108</u>				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover <u>53</u>				
% Bare Ground in Herb Stratum <u>0</u>				

Remarks: Rubus ursinus less than 5% cover and is not considered dominance

SOIL

Sampling Point: TP20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-3	7.5YR2.5/1	100					MuL
3-11	2.5Y3/1	97	2.5YR2.5/3	3	C	PL	GrSL
11-24+	5G4/1	100					S

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>10 in</u>
Saturation Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>Surface</u>

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: _____

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 21
 Investigator(s): Joseph Saleri, Sam Polity Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%
 Subregion (LRR): A, MLRA-4B Lat: 40.791537° Long: -124.156800° Datum: WGS84
 Soil Map Unit Name: 212-Urbanland-Halfbluff-Redsands Complex 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
1. <u>Salix hookeriana</u>	<u>50</u>	<u>✓</u>	<u>FACW</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rubus ursinus</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Scirpus microcarpus</u>	<u>27</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Stachys adnigrifolia</u>	<u>10</u>	<u> </u>	<u>OBL</u>	
3. <u>Equisetum telmateia</u>	<u>15</u>	<u> </u>	<u>FACW</u>	
4. <u>Crocus x crocosmiflora</u>	<u>18</u>	<u> </u>	<u>FAC</u>	
5. <u>Athyrium filix-femina</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
6. <u>Calystegia silvatica</u>	<u>10</u>	<u> </u>	<u>NL</u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>3</u>	<u> </u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>5%</u>				
Remarks: <u>Hedera helix has less than 5% cover and is not considered dominant.</u>				

SOIL

Sampling Point: TP21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	93	7.5YR 2.5/2	5	C	PL	L	Extremely high organic content
			7.5YR 2.5/3	2	C	PL		
6-13	10YR 3/1	93	5Y 4/1	2	D	M	L	
			2.5YR 2.5/4	5	C	PL		
13-24+	5Y 4/1	60	5Y 2.5/1	2	C	M	SL	
			10YR 4/4	33	C	M		
			5YR 3/4	5	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/AWater Table Present? Yes ☐ No ☒ Depth (inches): N/ASaturation Present? Yes ☒ No ☐ Depth (inches): 12 inWetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP22
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 8%
 Subregion (LRR): A, MLRA - 4B Lat: 40.791367° Long: -124.156867° Datum: WGS 84
 Soil Map Unit Name: 212 Urban Land - Halfbluff - Red sands Complex 0-5% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ✓ (If no, explain in Remarks.)
 Are Vegetation ✓, Soil ✓, or Hydrology ✓ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No X
 Are Vegetation X, Soil ✓, or Hydrology ✓ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u>✓</u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>✓</u>
Hydric Soil Present?	Yes <u>X</u> No <u>✓</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u>✓</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Alnus rubra</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>
2. <u>Ilex aquifolium</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>
3. <u>Sorbus laucuparia</u>	<u>3</u>		<u>NL</u>
4. _____			
<u>18</u> = Total Cover			<u>9.3%</u>
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus armeniacus</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>
2. <u>Rubus ursinus</u>	<u>5</u>		<u>FACU</u>
3. <u>Sambucus racemosa</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>
4. <u>Berberis darwinii</u>	<u>12</u>		<u>NL</u>
5. _____			
<u>87</u> = Total Cover			<u>43.5%</u>
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lysichiton americanus</u>	<u>15</u>	<u>✓</u>	<u>OBL</u>
2. <u>Eleocharis palustris</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
3. <u>Phlox aquifolium</u>	<u>2</u>		<u>FACU</u>
4. <u>Athyrium filix-femina</u>	<u>5</u>		<u>FAC</u>
5. <u>Crocodylus x crocodyliformis</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>
6. <u>Calystegia silvatica</u>	<u>2</u>		<u>NL</u>
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
<u>59</u> = Total Cover			<u>29.5%</u>
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
2. _____			
<u>20</u> = Total Cover			<u>11.8%</u>
% Bare Ground in Herb Stratum <u>45%*</u>			
Remarks: <u>*litter</u> <u>- Invasive Hedera helix and Ilex aquifolium have given false upland dominance</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>15</u>	x 1 = <u>15</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>45</u>	x 3 = <u>135</u>
FACU species <u>82</u>	x 4 = <u>328</u>
UPL species <u>17</u>	x 5 = <u>85</u>
Column Totals: <u>179</u> (A)	<u>603</u> (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants¹

X Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ✓

SOIL

Sampling Point: TP22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	100					L	
6-12	10YR 3/1	78	10YR 3/6	20	C	PL	L	
			7.5YR 4/4	2	C	PL		
12-18	5Y 4/2	65	10YR 3/6	10	C	M	SL	Saturated
			5YR 4/6	5	C	PL		
			2.5Y 4/6	20	C	M		
18-24+	2.5Y 4/2	50	2.5Y 4/6	45	C	m	L5	fat
			5YR 4/6	5	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
☒ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/AWater Table Present? Yes _____ No ☒ Depth (inches): 18 inSaturation Present? Yes ☒ No _____ Depth (inches): 12 in

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Saturated @ 12"

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 23
 Investigator(s): Joseph Saler, Sam Pally Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 85
 Subregion (LRR): A MLRA - 4B Lat: 40.791149° Long: -124.156769° Datum: WGS84
 Soil Map Unit Name: 257 Lepoil - Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	
2. <u>Salix lasioandra</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>35</u> = Total Cover <u>12.5%</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPI species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>2</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Sambucus racemosa</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Ligustrum ovalifolium</u>	<u>5</u>	<u>✓</u>	<u>NL</u>	
4. <u>Rubus spectabilis</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>47</u> = Total Cover <u>23.5%</u>				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Polystichum nudum</u>	<u>35</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Crocasmia xerocasmiflora</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Athyrium filix-femina</u>	<u>18</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Halocnemum</u>	<u>1</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Equisetum telmateia</u>	<u>2</u>	<u>✓</u>	<u>FACW</u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>86</u> = Total Cover <u>43%</u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>3</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>3</u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>				
Remarks: <u>Hedera helix not considered dominant, less than 5% cover</u>				

SOIL

Sampling Point: TP23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					LS	
5-12	2.5Y 4/4	100					LS	
12-21	5Y 5/2	70	2.5Y 4/4	30	C	M	LS	
21-21	5Y 5/2	70	2.5Y 4/4	30	C	M	LS	Super saturated, liquified

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Indicators for Problematic Hydric Soils³:

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): <u>24</u>	
Saturation Present? (includes capillary fringe)	Yes _____ No <u>X</u>	Depth (inches): <u>12.5</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 24
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 75%
 Subregion (LRR): A, MLRA - 4B Lat: 40.791149° Long: -124.156753° Datum: WGS84
 Soil Map Unit Name: 257 Lepoil-Candy Mtn. Complex, 2-15% Slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: <u>4 ft NE of TP 23</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	
2. <u>Salix lasiantha</u>	<u>12</u>	<u>✓</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Sambucus racemosa</u> <u>10</u> <u>✓</u> <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>2</u> x 1 = <u>2</u> FACW species <u>17</u> x 2 = <u>34</u> FAC species <u>38</u> x 3 = <u>114</u> FACU species <u>40</u> x 4 = <u>160</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>127</u> (A) <u>460</u> (B) Prevalence Index = B/A = <u>3.6</u>
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Crocodylia x crocodyliiflora</u> <u>30</u> <u>✓</u> <u>FAC</u> 2. <u>Polystichum munitum</u> <u>30</u> <u>✓</u> <u>FACU</u> 3. <u>Athyrium filix-femina</u> <u>10</u> <u>✓</u> <u>FAC</u> 4. <u>Equisetum telmateia</u> <u>5</u> <u>✓</u> <u>FACW</u> 5. <u>Scirpus microcarpus</u> <u>2</u> <u>✓</u> <u>OBL</u> 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ % Bare Ground in Herb Stratum <u>25%</u> = Total Cover <u>37.5</u> / <u>15</u>				
Remarks: _____				

Hydrophytic Vegetation Present? Yes _____ No X

SOIL

Sampling Point: **TP 24**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 3/2	100					L	
5-14	2.5Y 5/3	98	5YR 4/4	2	C	PL	LS	
14-21	5Y 5/3	70	7.5YR 4/4	30	C	M	LS	Saturated
21-24+	10YR 5/1	95	10YR 4/3	5	C	PL	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Positive AAD reaction @ 8 in

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>11.5</u>
Saturation Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>5 in</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP25
 Investigator(s): Sam Polly, Joseph Siler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Alluvial fan Local relief (concave, convex, none): None Slope (%): 3
 Subregion (LRR): A, MLRA-4B Lat: 40.791319° Long: -124.156540 Datum: WGS 84
 Soil Map Unit Name: Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <u>31 ft SW of TP 20, 13 ft N of TP 26</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
= Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
= Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5ft</u>)				
1. <u>Scirpus microcarpus</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. <u>Cyperus eragrostis</u>	<u>3</u>		<u>FACW</u>	
3. <u>Echinochloa crusgalli</u>	<u>1</u>		<u>FAC</u>	
4. <u>Rhynchospora alba</u>	<u>12</u>		<u>FAC</u>	
5. <u>Agrostis stolonifera</u>	<u>8</u>		<u>FAC</u>	
6. <u>Calystegia silvatica</u>	<u>3</u>		<u>NL</u>	
7. <u>Holcus lanatus</u>	<u>1</u>		<u>FAC</u>	
8. <u>Equisetum telmateia</u>	<u>5</u>		<u>FACW</u>	
9. <u>Stachys ajacoides</u>	<u>2</u>		<u>OBL</u>	
= Total Cover <u>105</u>				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

SOIL

Sampling Point: TP 25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	100					L	
8-16	2.5Y 3/2	95	5YR 3/4	5	C	PL	SL	
16-18	N 2.5/	87	5GY 3/1	3	D	M	SL	
			7.5YR 4/6	10	C	M		
18-24+	10Y 3/1	100					S	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>	
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>18 in</u>	
Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>16 in</u>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP26
Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
Landform (hillslope, terrace, etc.): Fill Local relief (concave, convex, none): None Slope (%): 2
Subregion (LRR): A, MLRA - 4B Lat: 40.791306° Long: -124.156541° Datum: WGS84
Soil Map Unit Name: Lepoi - Candy Mtn. Complex, 2-15% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: 37 ft N of TP 27	

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		= Total Cover		
Herb Stratum (Plot size: <u>5ft</u>)				
1.	<u>Scirpus micocarpus</u>	<u>45</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2.	<u>Equisetum telmateia</u>	<u>10</u>		<u>FACW</u>
3.	<u>Festuca perennis</u>	<u>12</u>		<u>FAC</u>
4.	<u>Agrostis stylanthera</u>	<u>10</u>		<u>FAC</u>
5.	<u>Festuca arundinacea</u>	<u>13</u>		<u>FAC</u>
6.	<u>Ranunculus repas</u>	<u>22</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
		<u>112</u>	= Total Cover <u>56</u>	
Woody Vine Stratum (Plot size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
		= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: _____				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants¹

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes ☒ No ☐

SOIL

Sampling Point: TP26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100	—	—	—	—	GrSL	Hydrophobic
4-17	10YR 2/1	100	—	—	—	—	SL	
17-24+	10Y 2.5/1	85	10YR 3/4	15	C	PL	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

- | | | |
|------------------------|-----------------------|----------------------------|
| Surface Water Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Saturation Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP27
 Investigator(s): Joseph Sader, Sam Polley Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Alluvial from hillslope Local relief (concave, convex, none): None Slope (%): 3
 Subregion (LRR): A: MLRA-4B Lat: 40.791153° Long: -124.156550° Datum: WGS 84
 Soil Map Unit Name: Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			
Remarks: <u>18 ft N of TP28</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>) 1. <u>Rubus armeniacus</u> <u>2</u> <u>FAC</u>				
2. _____				
3. _____				
4. _____				
= Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5 ft</u>) 1. <u>Scirpus microcarpus</u> <u>16</u> <u>✓</u> <u>OBL</u>				
2. <u>Festuca perennis</u> <u>30</u> <u>✓</u> <u>FAC</u>				
3. <u>Dactylis glomerata</u> <u>10</u> <u>FACU</u>				
4. <u>Agrostis stolonifera</u> <u>13</u> <u>FAC</u>				
5. <u>Ranunculus repens</u> <u>14</u> <u>✓</u> <u>FAC</u>				
6. <u>Equisetum arvense</u> <u>5</u> <u>FAC</u>				
7. <u>Taraxacum officinale</u> <u>1</u> <u>FACU</u>				
8. <u>Holcus lanatus</u> <u>3</u> <u>FAC</u>				
9. <u>Hypochaeris radicata</u> <u>2</u> <u>FACU</u>				
10. <u>Festuca arundinacea</u> <u>7</u> <u>FAC</u>				
11. <u>Calystegia silvatica</u> <u>1</u> <u>NL</u>				
= Total Cover <u>51</u>				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ = Total Cover _____				
% Bare Ground in Herb Stratum <u>0</u> = Total Cover _____				
Remarks: <u>Rubus armeniacus not considered dominant, less than 5% cover.</u>				

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: TP 27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100	—	—	—	—	Gr SL	Hydrophobic
4-17	10YR 2/1	100	—	—	—	—	SL	
17-24+	10Y 2.5/1	85	10YR 3/4	15	C	PL	L3	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- | | | | |
|--|-----------------------|-----------------|-----------|
| Surface Water Present? | Yes _____ No <u>X</u> | Depth (inches): | <u>NA</u> |
| Water Table Present? | Yes _____ No <u>X</u> | Depth (inches): | <u>NA</u> |
| Saturation Present?
(includes capillary fringe) | Yes _____ No <u>X</u> | Depth (inches): | <u>NA</u> |

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/15/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 28
 Investigator(s): Joseph Saler Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, H8M
 Landform (hillslope, terrace, etc.): fill slope Local relief (concave, convex, none): None Slope (%): 3
 Subregion (LRR): A, MLRA-4B Lat: 40.791114° Long: -124.156550 Datum: WGS 84
 Soil Map Unit Name: 257-Lepid Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>	
Remarks: <u>near trail base where 2 channels meet below peninsula w/ road on it</u> <u>within meadow ~ 7' N. of stream</u> <u>8 ft N. of TP 29</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>25</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <u> </u> = Total Cover				
Herb Stratum (Plot size: <u>5 ft</u>) 1. <u>Ranunculus repens</u> <u>30</u> <u>✓</u> <u>FAC</u> 2. <u>Scirpus microcarpus</u> <u>20</u> <u> </u> <u>OBL</u> 3. <u>Stachys arvensis</u> <u>5</u> <u> </u> <u>OBL</u> 4. <u>Polcus lanatus</u> <u>3</u> <u> </u> <u>FAC</u> 5. <u>Galium aparine</u> <u>1</u> <u> </u> <u>FACU</u> 6. <u>Agrostis J. lanifera</u> <u>50</u> <u>✓</u> <u>FAC</u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u> <u>109</u> = Total Cover <u>51.5</u> <u>21.8</u>				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u> = Total Cover				
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>				
Remarks: <u> </u>				

SOIL

Sampling Point: TP28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 2/2	100					L	
9-20	10YR 3/1	91	10YR 3/3	5	C	PL	SL	Fill
	10YR 4/6	2						
	5YR 3/4	2						
20-24+	2.5Y 2.5/1	98	10YR 3/6	2	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/AWater Table Present? Yes _____ No ☒ Depth (inches): 18 inSaturation Present? Yes _____ No ☒ Depth (inches): 16 in
(includes capillary fringe)Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 29
 Investigator(s): Joseph Siler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Bottom of hill slope Local relief (concave, convex, none): Concave Slope (%): 0-1
 Subregion (LRR): A, MLRA - 4B Lat: 40.791099° Long: -124.156566 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: <u>4 ft N of TP 30 in stream near base of Uds' trail through Rndr</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>70</u>	<u>✓</u>	<u>NL</u>	
2. _____				
3. _____				
4. _____				
<u>70</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: _____) 1. <u>Stachys ajacoides</u> <u>18</u> <u>✓</u> <u>OBL</u> 2. <u>Equisetum telmateia</u> <u>35</u> <u>✓</u> <u>FACW</u> 3. <u>Athyrium filix-femina</u> <u>6</u> <u>✓</u> <u>FAC</u> 4. <u>Scirpus microcarpus</u> <u>20</u> <u>✓</u> <u>OBL</u> 5. <u>Ranunculus repens</u> <u>11</u> <u>✓</u> <u>FAC</u> 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ <u>90</u> = Total Cover <u>45%</u>				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
% Bare Ground in Herb Stratum <u>10%</u> = Total Cover				
Remarks: <u>Muck</u>				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				

SOIL

Sampling Point: TP29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-7	10YR 2/2	100						
7-14	5Y 3/1	75	10YR 2/1	20	C	M	SL	
			10G 4/1	5	D	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>2 in</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>Surface</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (includes capillary fringe)	Depth (inches): <u>Surface</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP30
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 20
 Subregion (LRR): A, MLRA - 4B Lat: 40.791081° Long: -124.156584° Datum: WGS 84
 Soil Map Unit Name: 257- Lepoil Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: <u>4' uphill of stream in Equisetum bed @ base of kids' trail down through Redwood in SW corner of area (W. of trail)</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>75</u>	<u>✓</u>	<u>NL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>75</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Equisetum telmateia</u> <u>50</u> <u>✓</u> <u>FACW</u> 2. <u>Scirpus microcarpus</u> <u>25</u> <u>✓</u> <u>OBL</u> 3. <u>Holcus lanatus</u> <u>5</u> <u>✓</u> <u>FAC</u> 4. <u>Athyrium filix-femina</u> <u>5</u> <u>✓</u> <u>FAC</u> 5. <u>Crocus x crocosmiflorus</u> <u>2</u> <u>✓</u> <u>FAC</u> 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____ <u>87</u> = Total Cover <u>93.5</u> <u>17.4</u>				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
% Bare Ground in Herb Stratum <u>13*</u> _____ = Total Cover				
Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				
Remarks: <u>Redwood duff</u>				

SOIL

Sampling Point: TP30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	5YR 4/6	100	/	/	/	/	Rocks	Thick redwood root mat
5-7	2.5Y 3/3	100	/	/	/	/	S	
7-12	10YR 2/1	100	/	/	/	/	L	
12-18	10YR 3/1	100	/	/	/	/	L	Large volume of decomposing fine Redwood roots
18-24+	2.5Y 3/1	80	5YR 3/3	20	C	PL	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Decomposing Redwood roots 2.5YR 2.5/4 in 12-18 horizon

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☒ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes _____ No X Depth (inches): N/A - 25"

Saturation Present? Yes _____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP31
 Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 50
 Subregion (LRR): A, MLRA-4B Lat: 40.790429° Long: -124.156510° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>Way uphill of Rwd on peninsula, at base of Douglas fir</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
1. <u>Pseudotsuga menziesii</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Sequoia sempervirens</u>	<u>15</u>	<u>✓</u>	<u>NL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				
1. <u>Rubus arcticus</u>	<u>6</u>	<u>✓</u>	<u>FAC</u>	Total Cover <u>45</u> = <u>22.5</u> <u>9</u>
2. <u>Rubus ursinus</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Herb Stratum (Plot size: <u>5ft</u>)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Cover <u>11</u> = <u>5.5</u> <u>2.2</u>
1. <u>Scirpus microcarpus</u>	<u>75</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Equisetum telmateia</u>	<u>10</u>	<u> </u>	<u>FACW</u>	Total Cover <u>105</u> = <u>52.5</u> <u>21</u>
3. <u>Aphyrium filix-femina</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
4. <u>Crocasmia x crocosmiflora</u>	<u>18</u>	<u> </u>	<u>FAC</u>	Woody Vine Stratum (Plot size: <u>5ft</u>)
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Cover <u>15</u> = <u>7.5</u> <u>3</u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Remarks: <u> </u>				

SOIL

Sampling Point: **TP 31**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-10	10YR 2/1	100					Much	
10-25+	2.5Y 3/1	90	5YR 3/4	5	C	PL	SCL	
			10YR 3/6	5	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☒ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☐ No ☒ Depth (inches): 20
 Saturation Present? Yes ☒ No ☐ Depth (inches): 8 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: still weeping from pit walls btwn 8-20' under on 9/17/20, very wet

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP32
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 15
 Subregion (LRR): A, MLRA - 4B Lat: 40.790903 Long: -124.156495 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: <u>Further up hill under D.I.F.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Psuedotsuga menziesii</u>	<u>57</u>	<u>✓</u>	<u>FACU</u>	
2. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)				
1. <u>Rubus ursinus</u>	<u>4</u>	_____	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5 ft</u>)				
1. <u>Scirpus microcarpus</u>	<u>18</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Crocodylia x crocosmiflora</u>	<u>6</u>	_____	<u>FAC</u>	
3. <u>Equisetum telmateia</u>	<u>17</u>	<u>✓</u>	<u>FACW</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: <u>5 ft</u>)				
1. <u>Hedera helix</u>	<u>77</u>	<u>✓</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
% Bare Ground in Herb Stratum _____				
Remarks: <u>@ upper edge of S. microcarpus/E. telmateia stand</u> <u>Rubus ursinus not considered dominant, less than 5% cover.</u>				
Hydrophytic Vegetation Present? Yes _____ No <u>X</u>				

SOIL

Sampling Point: **TP32**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	2.5Y 3/1	100					LS	Extremely dense roots
5-13	2.5Y 3/3	100					LS	Hydrophobic
13-17	2.5Y 4/4	100					LS	
17-24+	2.5Y 2.5/1	90	7.5YR 2.5/1	10	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No **X**

Remarks: 0-5" mostly roots w/ yellow sand - roots ~70% volume very hydrophobic

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No **X** Depth (inches): **N/A**

Water Table Present? Yes _____ No **X** Depth (inches): **N/A**

Saturation Present? Yes _____ No **X** Depth (inches): **N/A**
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No **X**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 33
 Investigator(s): Sam Polly, Josh Sater Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Base of hill slope Local relief (concave, convex, none): None Slope (%): 0-2
 Subregion (LRR): A, MLRA - 4B Lat: 40.791029° Long: -124.156429° Datum: WGS84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>Due south of batting pad under W. side of willow clump</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83%</u> (A/B)
1. <u>Salix hookeriana</u>	<u>50</u>	<u>✓</u>	<u>FACW</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Lonicera involucrata</u> <u>25</u> <u>✓</u> <u>FAC</u> 2. <u>Rubus armeniacus</u> <u>15</u> <u>✓</u> <u>FAC</u> 3. <u>Rubus ursinus</u> <u>18</u> <u>✓</u> <u>FACU</u> 4. <u> </u> 5. <u> </u>				Prevalence Index worksheet: Total % Cover of: <u>58</u> = Total Cover <u>29/11.6</u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Crocosmia x crocosmiflora</u> <u>10</u> <u> </u> <u>FAC</u> 2. <u>Scirpus microcarpus</u> <u>20</u> <u>✓</u> <u>OBL</u> 3. <u>Equisetum telmateia</u> <u>25</u> <u>✓</u> <u>FACW</u> 4. <u>Stachys ajugoides</u> <u>2</u> <u> </u> <u>OBL</u> 5. <u>Ranunculus repens</u> <u>6</u> <u> </u> <u>FAC</u> 6. <u>Athyrium filix-femina</u> <u>1</u> <u> </u> <u>FAC</u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u>				
Woody Vine Stratum (Plot size: <u>5ft</u>) 1. <u>Hedera helix</u> <u>2</u> <u> </u> <u>FACU</u> 2. <u> </u>				
% Bare Ground in Herb Stratum <u>36*</u> <u>2</u> = Total Cover				
Remarks: <u>* Litter</u> <u>Hedera helix not counted as dominant, less than 5% cover</u>				

Hydrophytic Vegetation Present? Yes X No

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
 - X 2 - Dominance Test is >50%
 - 3 - Prevalence Index is ≤3.0¹
 - 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 - 5 - Wetland Non-Vascular Plants¹
- ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Sampling Point: TP 33

HYDROLOGY

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 34
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4 Sec 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Base of hill slope Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A, MLRA-4B Lat: 40.790901° Long: -124.156240° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% Slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks: <u>32 ft south of backstop between beaches NW of willow ~ 35' NE of lower</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>5</u> (A)
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u> </u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:	
1. <u>Salix hookeriana</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>	Total % Cover of:	Multiply by:
2. <u>Rubus armeniacus</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	OBL species <u> </u> x 1 = <u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u> </u> x 2 = <u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u> </u> x 3 = <u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u> </u> x 4 = <u> </u>	
<u>45</u> = Total Cover <u>22.5</u>				UPL species <u> </u> x 5 = <u> </u>	
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals:	(A) <u> </u> (B) <u> </u>
1. <u>Scirpus microcarpus</u>	<u>25</u>	<u>✓</u>	<u>OBL</u>	Prevalence Index = B/A = <u> </u>	
2. <u>Equisetum telmateia</u>	<u>15</u>	<u> </u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:	
3. <u>Rorippa repens</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	<u>X</u> 1 - Rapid Test for Hydrophytic Vegetation	
4. <u>Agrostis stolonifera</u>	<u>15</u>	<u> </u>	<u>FAC</u>	<u> </u> 2 - Dominance Test is >50%	
5. <u>Festuca perennis</u>	<u>4</u>	<u> </u>	<u>FAC</u>	<u> </u> 3 - Prevalence Index is ≤3.0 ¹	
6. <u>Hypochaeris radicata</u>	<u>5</u>	<u> </u>	<u>FACU</u>	<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
7. <u>Bellis perenne</u>	<u>1</u>	<u> </u>	<u>NL</u>	<u> </u> 5 - Wetland Non-Vascular Plants ¹	
8. <u>Holcus lanatus</u>	<u>22</u>	<u>✓</u>	<u>FAC</u>	Problematic Hydrophytic Vegetation ¹ (Explain)	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>112</u> = Total Cover <u>56</u>					
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u> </u> = Total Cover					
% Bare Ground in Herb Stratum <u> </u>					
Remarks: <u> </u>					

SOIL

Sampling Point: **TP 34**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/1	100	10YR 4/4	20	C	M	Gr	Asphalt Gravel
5-9	2.5Y 4/4	80	2.5YR 4/4	20	C	M	LS	Mixed fill
9-15	10YR 2/2	100	10YR 4/4	20	C	M	SL	Topsoil fill
15-24	10YR 4/6	80	10YR 4/1	20	D	M	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Abrupt, clear boundaries indicating fill

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☒ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
 Water Table Present? Yes _____ No ☒ Depth (inches): N/A
 Saturation Present? Yes _____ No ☒ Depth (inches): N/A
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/16/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 35
 Investigator(s): Joseph Sales, Sam Polk Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Base of Slope Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A, MLRA - 4B Lat: 40.790890° Long: -124.156208° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>16' w. of green shed w. of Pig barn under willow</u> <u>3ft s. of corner backstop, 29 ft s of bleacher (SW corner)</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
1. <u>Salix hookeriana</u>	<u>33</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Sequoia sempervirens</u>	<u>10</u>	<u>✓</u>	<u>NL</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>43</u> = Total Cover <u>21.5</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus armeniacus</u>	<u>35</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>35</u> = Total Cover <u>2.6</u>				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Scirpus microcarpus</u>	<u>53</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Ranunculus repens</u>	<u>45</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Equisetum telmateia</u>	<u>8</u>	<u> </u>	<u>FACW</u>	
4. <u>Holcus lanatus</u>	<u>4</u>	<u> </u>	<u>FAC</u>	
5. <u>Agrostis stolonifera</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>113</u> = Total Cover <u>56.5</u>				
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover <u> </u>				
% Bare Ground in Herb Stratum <u> </u>				
Remarks: <u> </u>				

SOIL

Sampling Point: **TP35**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR2/1	100	—	—	—	—	Vgr L	
8-27	10YR2/1	100	—	—	—	—	L	
27-28+	10GY5/1	90	10YR3/6	10	C	PL	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☒ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☒ Shallow Aquitard (D3)
☒ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☐ No ☒ Depth (inches): 13 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): 8 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools (ECS) State: CA Sampling Point: TP 36
 Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): Concave Slope (%): 20
 Subregion (LRR): A, MLRA - 4B Lat: 40.790269° Long: -124.156397° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candymountain Complex, 2 to 15% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation X, Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	

Remarks: ~ 55' S. of fence along Del Norte ~ 75' E. of western fence.
in northern part of small drainage; W. of track

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>90</u>	<u>✓</u>	<u>NL</u>	
2. <u>Prunus laurocerasus</u>	<u>10</u>	<u> </u>	<u>NL</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>100</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>61</u> x 3 = <u>183</u> FACU species <u>68</u> x 4 = <u>272</u> UPL species <u>101</u> x 5 = <u>505</u> Column Totals: <u>230</u> (A) <u>960</u> (B) Prevalence Index = B/A = <u>4.17</u>
1. <u>Rubus spectabilis</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Ilex aquifolium</u>	<u>3</u>	<u> </u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>43</u> = Total Cover <u>21.3</u>				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ <u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Athyrium filix-femina</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Equisetum arvense</u>	<u>7</u>	<u> </u>	<u>FAC</u>	
3. <u>Proserpinaca stratiocotyle</u>	<u>1</u>	<u> </u>	<u>NL</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>22</u> = Total Cover <u>4.4</u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>65</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>65</u> = Total Cover				
% Bare Ground in Herb Stratum <u>79%*</u>				

Remarks: * Little md ivy
* Invasive Hedera helix gives false upland veg dominance

SOIL

Sampling Point: TP36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/1	100	—	—	—	—	L	
8-18	2.5Y 2.5/1	100	—	—	—	—	SL	
18-21	10Y 5/1	93	5YR 4/4	57	C	PL	SL	sloughing/loose
21-24	5YR 4/4	50	2.5Y 4/3	40	C	m	LS	sloughing/loose
			5Y 4/1	10	D	m		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: saturated channel in dry season would meet A12 but likely disturbed or buried @ high flow
-Positive A-A-D reaction @ 3in.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|---|
| <input checked="" type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 0.25 in

Water Table Present? Yes ☒ No ☐ Depth (inches): Surface

Saturation Present? Yes ☒ No ☐ Depth (inches): Surface

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

pipe drainage drainage TP36

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9-17-20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP37
 Investigator(s): Joseph Saker, Sam Pally Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 40
 Subregion (LRR): A, MLRA-4B Lat: 40.790085 Long: -124.156432 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil Candy Mtn. Complex 2-15% Slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>Just above second drainage S. of Del Norte St.</u> <u>inside uphill edge of</u> <u>v. of track</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	
2. <u>Pinus radiata</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>8</u> (B)
3. <u>Thuja plicata</u>	<u>10</u>		<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)
4. <u> </u>	<u>70</u>		<u>35</u>	
= Total Cover <u>35</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)				Prevalence Index worksheet:
1. <u>Vaccinium parvifolium</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	Total % Cover of: <u>10</u> x 1 = <u>10</u>
2. <u>Ilex aquifolium</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	OBL species <u>10</u> x 1 = <u>10</u>
3. <u>Rubus ursinus</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	FACW species <u>2</u> x 2 = <u>4</u>
4. <u>Abies grandis</u>	<u>2</u>		<u>FACU</u>	FAC species <u>34</u> x 3 = <u>102</u>
5. <u> </u>	<u>47</u>		<u>25</u>	FACU species <u>62</u> x 4 = <u>248</u>
= Total Cover <u>25</u>				UPL species <u>64</u> x 5 = <u>320</u>
Herb Stratum (Plot size: <u>5 ft</u>)				Column Totals: <u>172</u> (A) <u>684</u> (B)
1. <u>Carex obnupta</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>	Prevalence Index = B/A = <u>3.9</u>
2. <u>Athyrium filix-femina</u>	<u>3</u>		<u>FAC</u>	
3. <u>Struthioctis spicata</u>	<u>18</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Prosartes Smithii</u>	<u>4</u>		<u>NL</u>	
5. <u>Equisetum telmateia</u>	<u>1</u>		<u>FACW</u>	
6. <u>Juncus effusus</u>	<u>1</u>		<u>FACW</u>	
7. <u>Crocasmia x crocosmiflora</u>	<u>3</u>		<u>FAC</u>	
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)				
1. <u>Hedera helix</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>15</u>			
= Total Cover <u>30</u>				
% Bare Ground in Herb Stratum <u>60%</u>				
Remarks:				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>

SOIL

Sampling Point: TP 37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 2/2	100	—	—	—	—	SM ₄	
12-18	10Y 5/1	70	2.5Y 5/3	25	C	M	LS	
	—	—	5YR 4/4	5	C	PL	—	
18-24+10	YR 5/4	60	2.5Y 5/2	40	D	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input checked="" type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☒ No ☐ Depth (inches): 5 in

Saturation Present? Yes ☒ No ☐ Depth (inches): Surface

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 38
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 30
 Subregion (LRR): A, MLRA - 4B Lat: 40.790131° Long: -124.156457 Datum: WGS 84
 Soil Map Unit Name: 257-Lepail-Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: <u>Just above 2nd drainage from Del Norte St W. of Truck</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>16</u> (A/B)
1. <u>Pinus radiata</u>	<u>50</u>	<u>✓</u>	<u>NL</u>	
2. <u>Thuja plicata</u>	<u>12</u>		<u>FAC</u>	
3. <u>Sequoia sempervirens</u>	<u>35</u>	<u>✓</u>	<u>NL</u>	
4. _____	<u>97</u>		<u>48.5</u>	
= Total Cover <u>97</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Vaccinium parvifolium</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Ilex aquifolium</u>	<u>12</u>		<u>FACU</u>	
3. <u>Piceaitchensis</u>	<u>5</u>		<u>FAC</u>	
4. _____	<u>67</u>		<u>33.5</u>	
= Total Cover <u>67</u>				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: ____ 1 - Rapid Test for Hydrophytic Vegetation ____ 2 - Dominance Test is >50% ____ 3 - Prevalence Index is ≤3.0 ¹ ____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ 5 - Wetland Non-Vascular Plants ¹ ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Crocasmia x crocasmiflora</u>	<u>4</u>		<u>FAC</u>	
2. <u>Rhynchospora alba</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Proserpinaca stratiocarpa</u>	<u>5</u>		<u>NL</u>	
4. <u>Carex obnupta</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. <u>Hedera helix</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
2. _____	<u>10</u>			
= Total Cover <u>10</u>				
% Bare Ground in Herb Stratum <u>51*</u>				
Remarks: <u>Litter</u>				

SOIL

Sampling Point: TP 38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	10YR 3/3	100					SL	Loose, roots abundant
6-12	10YR 3/5	60	10YR 3/2	20	C	M	LS	
			10YR 5/2	10	D	M		
			7.5YR 2.5/3	10	C	M		
12-24+	10YR 3/4	90	7.5YR 3/4	5	C	M	SL	Many medium roots
			2.5Y 6/2	5	D	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- | | | |
|------------------------|-----------------------|----------------------------|
| Surface Water Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Saturation Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
- (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: _____ State: CA Sampling Point: TP 39A-S
 Investigator(s): _____ Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Hydric Soil Present?	Yes _____ No _____	
Wetland Hydrology Present?	Yes _____ No _____	

Remarks:

See Data sheets for Fen Behind W. Grandstand

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
_____ = Total Cover	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
Herb Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover	_____	_____	_____	
% Bare Ground in Herb Stratum _____				

Remarks:

See 39A → 395

SOIL

Sampling Point: _____

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: ECS - Eureka City School State: CA Sampling Point: TP39A
 Investigator(s): S. Rowe, C. Wilcox, J. Saler, J. Pelly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): A, MLRA - 4B Lat: 40.789207° Long: -124.156204 Datum: NAD83
 Soil Map Unit Name: 257 - Lepoil - Candy Mtn Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes No X
 Hydric Soil Present? Yes No X
 Wetland Hydrology Present? Yes No X

Is the Sampled Area within a Wetland? Yes No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30ft)
 1. Alnus rubra Absolute % Cover: 82 Dominant Species? ✓ Indicator Status: FAC
 2.
 3.
 4.

82 = Total Cover

Sapling/Shrub Stratum (Plot size:)
 1. Rubus armeniacus Absolute % Cover: 5 Dominant Species? ✓ Indicator Status: FAC
 2. Rubus ursinus Absolute % Cover: 2 Dominant Species? ✓ Indicator Status: FACV
 3.
 4.
 5.

7 = Total Cover 3.8

Herb Stratum (Plot size:)
 1. Crocodyria x crocodyrinifolia Absolute % Cover: 18 Dominant Species? ✓ Indicator Status: FAC
 2. Holcus lanatus Absolute % Cover: 1 Dominant Species? Indicator Status: FAC
 3. Equisetum arvense Absolute % Cover: 1 Dominant Species? Indicator Status: FAC
 4. Polypodium moniliforme Absolute % Cover: 12 Dominant Species? ✓ Indicator Status: FACV
 5. Equisetum telmateia Absolute % Cover: 5 Dominant Species? Indicator Status: FACV
 6. Pteridium aquilinum Absolute % Cover: 2 Dominant Species? Indicator Status: FACV
 7. Agrostis stolonifera Absolute % Cover: 7 Dominant Species? Indicator Status: FAC
 8.
 9.
 10.
 11.

39 = Total Cover 19.5

Woody Vine Stratum (Plot size:)
 1. Helix hedera Absolute % Cover: 75 Dominant Species? ✓ Indicator Status: FACV
 2.

75 = Total Cover

% Bare Ground in Herb Stratum 61%

Remarks:

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species x 1 =

FACW species x 2 =

FAC species x 3 =

FACV species x 4 =

UPL species x 5 =

Column Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 5 - Wetland Non-Vascular Plants¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes No X

SOIL

Sampling Point: TP 39A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100					SL	
4-21	10YR 4/3	100					LS	
21-24+	2.5Y 4/2	75	10YR 3/6	10	C	M	LS SL	Small clay loam lenses
			10YR 5/8	5	C	M		
			10YR 2/2	10	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Became moist a 23 inches NOT SATURATED

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A

Water Table Present? Yes _____ No ☒ Depth (inches): N/A

Saturation Present? Yes _____ No ☒ Depth (inches): N/A

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39B
 Investigator(s): SR, JS, CW, SP Section, Township, Range: NW 1/4 Sec 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): None Slope (%): 2
 Subregion (LRR): A, MLRA-4B Lat: 40.789121° Long: -124.156310° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rubra</u>	<u>55</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Picea sitchensis</u>	<u>10</u>		<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
3. <u>Salix lasiolepis</u>	<u>5</u>		<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71%</u> (A/B)
4. <u> </u>	<u>70</u>			
= Total Cover <u>35/14</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Fuchsia magellanica</u>	<u>60</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	OBL species <u> </u> x 1 = <u> </u>
3. <u>Rubus ursinus</u>	<u>4</u>		<u>FACU</u>	FACW species <u> </u> x 2 = <u> </u>
4. <u> </u>				FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>				FACU species <u> </u> x 4 = <u> </u>
= Total Cover <u>42/18.8</u>				UPL species <u> </u> x 5 = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals: <u> </u> (A) <u> </u> (B)
1. <u>Equisetum telmateia</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>	Prevalence Index = B/A = <u> </u>
2. <u>Athyrium filix-femina</u>	<u>8</u>	<u>✓</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Crocodyria x Crocosmiiflora</u>	<u>7</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Stachys ajacoides</u>	<u>1</u>		<u>FAC</u>	
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
= Total Cover <u>15.5/8.2</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Nedara helix</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>25</u>			
= Total Cover <u>25</u>				
% Bare Ground in Herb Stratum <u>69%*</u>				
Remarks: <u>* Litter</u>				

Sampling Point: TP 39 B

HYDROLOGY

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Surface Water Present? Yes _____ No X Depth (inches): N/A
 Water Table Present? Yes _____ No X Depth (inches): 22 in
 Saturation Present? Yes X No _____ Depth (inches): 10 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

water table depth assessed 24hrs later

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP39C
 Investigator(s): S. Rowe, S. Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): terrace/hill slope Local relief (concave, convex, none): none Slope (%): 37
 Subregion (LRR): M, MLRA-4B Lat: 40.789086° Long: -124.156403° Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. complex 2-15% slope NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: <u>W. of Grandstand in fen, SW of 39 AAB, several feet uphill & much fen</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>8</u>	<u>✓</u>	<u>N2</u>	
2. <u>Picea sitchensis</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
4. _____				Prevalence Index worksheet:
5. _____				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Gaultheria shallon</u> <u>5</u> <u>✓</u> <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____				
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Scirpus microcarpus</u> <u>40</u> <u>✓</u> <u>OBL</u> 2. <u>Athyrium filix-femina</u> <u>5</u> <u>✓</u> <u>FAC</u> 3. <u>Equisetum telmateia</u> <u>10</u> <u>✓</u> <u>FACW</u> 4. <u>Asarum canadense</u> <u>3</u> <u>✓</u> <u>FACU</u> 5. <u>Stachys rigida</u> <u>1</u> <u>✓</u> <u>OBL</u> 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Woody Vine Stratum (Plot size: <u>5ft</u>) 1. <u>Hedera helix</u> <u>10</u> <u>✓</u> <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
% Bare Ground in Herb Stratum _____ Remarks: _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>

SOIL

Sampling Point: TP 39C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 2/2	100					SL	
12-21	2.5Y 3/2	80	7.5YR 2.5/3	15	C	M	L	
			5Y 5/2	5	D	M		
21-24+	5GY 4/1		7.5YR 4/4	10	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A

Water Table Present? Yes _____ No ☒ Depth (inches): N/A

Saturation Present? Yes _____ No ☒ Depth (inches): N/A
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: Tp 39D
 Investigator(s): SR, SP Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): A-MLRA-4B Lat: 40.789072° Long: -124.156374° Datum: NAD83
 Soil Map Unit Name: 257-Lepail-Candy Mtn. Complex, 2-15% slope NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: <u>Near 39C in fen</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>3</u>		<u>NL</u>	
2. <u>Salix lasiolepis</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Picea sitchensis</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) = Total Cover <u>28</u> = <u>14/6</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Rubus uranovus</u>	<u>1</u>		<u>FACU</u>	
2. <u>Rubus arcticus</u>	<u>1</u>		<u>FAC</u>	
3. _____				
Herb Stratum (Plot size: <u>5ft</u>) = Total Cover <u>2</u>				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Athyrium filix-femina</u>	<u>4</u>		<u>FAC</u>	
2. <u>Scirpus microcarpus</u>	<u>23</u>	<u>✓</u>	<u>OBL</u>	
3. <u>Stachys ajacoides</u>	<u>2</u>		<u>OBL</u>	
4. <u>Lysichiton americanus</u>	<u>2</u>		<u>OBL</u>	
5. <u>Asplenium caudatum</u>	<u>1</u>		<u>FACU</u>	
6. <u>Equisetum telmateia</u>	<u>1</u>		<u>FACW</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
Woody Vine Stratum (Plot size: <u>5ft</u>) = Total Cover <u>33</u> = <u>16.5/6</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Hedera helix</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>	
2. _____				
3. _____				
% Bare Ground in Herb Stratum <u>67%</u> = Total Cover <u>5</u>				
Remarks: <u>Rubus arcticus not counted as dominant, less than 5% cover in shrub stratum</u>				

SOIL

Sampling Point: TP 39D

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10 YR 2/2	100					Muck	
11-18+	2.5Y 2.5/1	100					mucky sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input checked="" type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input checked="" type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☒ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): Nearby

Water Table Present? Yes ☒ No ☐ Depth (inches): 2"

Saturation Present? Yes ☒ No ☐ Depth (inches): Surface

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39 E
 Investigator(s): SA, SP Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 5
 Subregion (LRR): A, MLRA-4B Lat: 40.789016° Long: -124.156401° Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No ✓
 Are Vegetation X, Soil X, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>South of 3950D in lowland of fern on E. side of 1/2 mi. see note in Veg section & Soil section</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>8</u>	<u>✓</u>	<u>NL</u>	
2. <u>Pseudotsuga menziesii</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet:
= Total Cover <u>33</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)				Total % Cover of:
1. <u>Ilex aquifolium</u>	<u>3</u>	<u> </u>	<u>FACU</u>	Multiply by:
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u>0</u> x 1 = <u>0</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>8</u> x 2 = <u>16</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>10</u> x 3 = <u>30</u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>103</u> x 4 = <u>412</u>
= Total Cover <u>3</u>				UPL species <u>8</u> x 5 = <u>40</u>
Herb Stratum (Plot size: <u>5 ft</u>)				Column Totals: <u>129</u> (A) <u>498</u> (B)
1. <u>Asplenium filix-femina</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	Prevalence Index = B/A = <u>3.8</u>
2. <u>Equisetum telmateia</u>	<u>5</u>	<u>✓</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:
3. <u>Juncus effusus</u>	<u>3</u>	<u> </u>	<u>FACW</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 2 - Dominance Test is >50%
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 3 - Prevalence Index is ≤3.0 ¹
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 5 - Wetland Non-Vascular Plants ¹
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain)
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
Woody Vine Stratum (Plot size: <u>5 ft</u>)				
1. <u>Hedera helix</u>	<u>75</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover <u>75</u>				
% Bare Ground in Herb Stratum <u>82%</u>				

Remarks: - Ilex aquifolium not considered dominant, less than 5% overstratum.
- Invasive Hedera helix creating false dominance by upland vegetation

SOIL

Sampling Point: TP395

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	7.5YR 2.5/1	100					O	Organic material/root mat
5-11	10YR 2/1	100					muck	
11-13	10YR 3/1	60	10YR 2/1	25	C	M	SL	
			10YR 4/1	15	D	M		
13-24+	5YR 5/1	70	10YR 2/1	5	C	M		
			7.5YR 4/4	15	C	PL		
			5YR 3/4	10	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☒ Depleted Below Dark Surface (A11)* ☐ Depleted Matrix (F3)
☒ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☒ 2 cm Muck (A10) *
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks) *

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: *Hedera helix creating 5" mat of forest duff-like O horizon which impedes All-... All is likely met*

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☐ No ☒ Depth (inches): 15 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): 5 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39 F
 Investigator(s): S. Rowe, S. Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 25
 Subregion (LRR): A, MLRA-4B Lat: 40.789017 Long: -124.156358 Datum: NAD83
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>7</u>		<u>NL</u>	
2. <u>Pseudotsuga menziesii</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
3. _____				
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Ilex aquifolium</u> <u>2</u> <u>FACU</u> 2. _____ 3. _____ 4. _____ 5. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Athyrium filix-femina</u> <u>2</u> <u>y</u> <u>FAC</u> 2. <u>Equisetum telmateia</u> <u>1</u> <u>y</u> <u>FACW</u> 3. <u>Maianthemum racemosum</u> <u>1</u> <u>y</u> <u>FAC</u> 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Woody Vine Stratum (Plot size: <u>5ft</u>) 1. <u>Hedera helix</u> <u>70</u> <u>✓</u> <u>FACU</u> 2. _____ 3. _____				
% Bare Ground in Herb Stratum <u>96%</u> <u>70</u> = Total Cover				
Remarks: <u>Ilex aquifolium not considered dominant on account of low cover by shrub stratum</u>				

SOIL

Sampling Point: TP 39F

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10 YR 2/2	100					SL	
16-84+	10 Y 5/1	90	2.5Y 3/1	10	C	M	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A

Water Table Present? Yes _____ No ☒ Depth (inches): 19 in

Saturation Present? Yes _____ No ☒ Depth (inches): 15 in

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP39 G
 Investigator(s): SE, SP Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): None Slope (%): 35
 Subregion (LRR): AMLRA - 4B Lat: 40.788657 Long: -124.156649 Datum: WGS 84
 Soil Map Unit Name: 257 NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X

Are Vegetation X, Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	
Remarks: <u>In the draw leading to the fence near access gate from main campus contains debris, torn - chopped fence posts, conds) see veg Remarks below</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>45</u>	<u>✓</u>	<u>NL</u>	
2. <u>Alnus rubra</u>	<u>8</u>	<u> </u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				
1. <u>Fraxulus purshiana</u>	<u>7</u>	<u>✓</u>	<u>FAC</u>	Total % Cover of:
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u>5</u> x 1 = <u>5</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>2</u> x 2 = <u>4</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>102</u> x 3 = <u>306</u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>11</u> x 4 = <u>44</u>
Herb Stratum (Plot size: <u>5ft</u>)				UPL species <u>45</u> x 5 = <u>225</u>
1. <u>Polystichum munitum</u>	<u>3</u>	<u> </u>	<u>FACU</u>	Column Totals: <u>165</u> (A) <u>584</u> (B)
2. <u>Crocodylia x crocodyliiflora</u>	<u>80</u>	<u>✓</u>	<u>FAC</u>	Prevalence Index = B/A = <u>3.54</u>
3. <u>Equisetum telmateia</u>	<u>2</u>	<u> </u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:
4. <u>Equisetum variegatum</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
5. <u>Arthrum filix-femina</u>	<u>6</u>	<u> </u>	<u>FAC</u>	<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
6. <u>Scirpus microcarpus</u>	<u>5</u>	<u> </u>	<u>OBL</u>	<u> </u> 2 - Dominance Test is >50%
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 3 - Prevalence Index is ≤3.0 ¹
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 5 - Wetland Non-Vascular Plants ¹
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain)
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>8</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
% Bare Ground in Herb Stratum <u>3%</u>				
Remarks: <u>* Invasive species may obscure wetland conditions at this location (H.helix)</u> <u>* Sequoia dripline extent not representative of soils + hydrology</u>				

SOIL

Sampling Point: TP 39G

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	100					Mucky S	
6-12	10YR 3/1	95	10YR 3/4	5	C	PL	SL	
12-24+	2.5Y 5/1	95	10YR 3/6	5	C	M	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input checked="" type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

concrete
w/ rebar chunks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes ☒ No _____ Depth (inches): Surface

Saturation Present? Yes ☒ No _____ Depth (inches): Surface
(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39H
 Investigator(s): SR, SP Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 70
 Subregion (LRR): A, MLRA -4B Lat: 40.788659° Long: -124.156624° Datum: NAD83
 Soil Map Unit Name: 257-Lepail-Candy Mtn. Complex, 2-15% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks: <u>up ~ 1.5 ft from wetland (TP 39G)</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Sequoia sempervirens</u>	<u>45</u>	<u>✓</u>	<u>NL</u>
2. <u>Alnus rubra</u>	<u>6</u>		<u>FAC</u>
3. <u> </u>			
4. <u> </u>			
<u>51</u> = Total Cover		<u>23.5</u> <u>10.2</u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Frangula purshiana</u>	<u>4</u>		<u>FAC</u>
2. <u> </u>			
3. <u> </u>			
4. <u> </u>			
5. <u> </u>			
<u>4</u> = Total Cover			
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Scirpus microcarpus</u>	<u>1</u>		<u>OBL</u>
2. <u>Crocasmia x crocasmiflora</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>
3. <u>Polystichum munitum</u>	<u>5</u>		<u>FACU</u>
4. <u>Equisetum telmateia</u>	<u>1</u>		<u>FACW</u>
5. <u> </u>			
6. <u> </u>			
7. <u> </u>			
8. <u> </u>			
9. <u> </u>			
10. <u> </u>			
11. <u> </u>			
<u>47</u> = Total Cover		<u>23.5</u> <u>4.4</u>	
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>
2. <u> </u>			
<u>30</u> = Total Cover			
% Bare Ground in Herb Stratum <u>53%</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:

OBL species x 1 =

FACW species x 2 =

FAC species x 3 =

FACU species x 4 =

UPL species x 5 =

Column Totals: (A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 5 - Wetland Non-Vascular Plants¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: Frangula purshiana not considered dominant as there is less than 5% cover in shrub stratum

SOIL

Sampling Point: TP 39 H

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 2/2	100					SL	
10-16	10YR 3/1	90	10YR 3/3	10	C	PL	SL	
16-24	5Y 5/2	60	5Y 3/1	30	C	M	SL	
			7.5YR 3/4	10	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>
Saturation Present? (includes capillary fringe)	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka / Humboldt Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39 I
 Investigator(s): S. Rowe, S. Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 12
 Subregion (LRR): A, MLRA - 4B Lat: 40.788855 Long: -124.157057 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>	
Remarks: <u>Near top of w. slope in big draw</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57%</u> (A/B)
1. <u>Alnus rubra</u>	<u>18</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Salix hookeriana</u>	<u>17</u>	<u>✓</u>	<u>FACW</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>35</u> = Total Cover <u>125</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Sambucus racemosa</u>	<u>51</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>19</u>	<u>✓</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>70</u> = Total Cover <u>35</u>				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Equisetum telmateia</u>	<u>4</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Polystichum munitum</u>	<u>3</u>	<u>✓</u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>7</u> = Total Cover <u>35</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>62</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>62</u> = Total Cover				
% Bare Ground in Herb Stratum <u>93%</u>				
Remarks: <u> </u>				

SOIL

Sampling Point: Tr 39 I

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except
MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☐ No ☒ Depth (inches): N/A

Saturation Present? Yes ☐ No ☒ Depth (inches): 194

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39 J
 Investigator(s): S. Rowe, S. Poll Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 12
 Subregion (LRR): A, MLRA - 4B Lat: 40.788853° Long: -124.157016° Datum: WGS 84
 Soil Map Unit Name: 257-Lepid-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>7' East of TP 39 J, down hill</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57 %</u> (A/B)
1. <u>Salix hatteriana</u>	<u>17</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Alnus rubra</u>	<u>18</u>	<u>✓</u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>) <div style="float: right;"> <u>35</u> = Total Cover <u>12.5</u> <u>7</u> </div>				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>8</u>	<u> </u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
3. <u>Sambucus racemosa</u>	<u>51</u>	<u>✓</u>	<u>FACU</u>	
Herb Stratum (Plot size: <u>5 ft</u>) <div style="float: right;"> <u>61</u> = Total Cover <u>30.5</u> <u>12.2</u> </div>				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u> </u> <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Athyrium filix-femina</u>	<u>2</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Polystichum munitum</u>	<u>3</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Equisetum telmateia</u>	<u>4</u>	<u>✓</u>	<u>FACW</u>	
Woody Vine Stratum (Plot size: <u>5 ft</u>) <div style="float: right;"> <u>9</u> = Total Cover <u>4.5</u> <u>1.8</u> </div>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>62</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
% Bare Ground in Herb Stratum <u>91%</u> <div style="float: right;"> <u>62</u> = Total Cover </div>				
Remarks: <u> </u>				

SOIL

Sampling Point: TP39J

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	93	10YR 4/4	7	C	PL	M _u L	
6-17	10YR 2/1	88	2.5Y 5/3	7	C	M	M _u L	
			7.5YR 4/4	5	C	PL		
17-24	10Y 5/1	75	5YR 4/6	20	C	M	L	
			10YR 6/6	5	C	PL		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☒ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
 Water Table Present? Yes _____ No ☒ Depth (inches): 22"
 Saturation Present? Yes ☒ No _____ Depth (inches): 10 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: 39k
 Investigator(s): Cindy Wilcox, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 20
 Subregion (LRR): A, MLRA-4B Lat: 40.789164° Long: -124.156547 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	
2. <u>Pseudotsuga menziesii</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u>Salix lasioandra</u>	<u>5</u>		<u>FACW</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
4. <u>Ilex aquifolium</u>	<u>10</u>		<u>FACU</u>	
	<u>85</u>		<u>42.5</u>	
= Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				Prevalence Index worksheet:
2. _____				
3. _____				
4. _____				
5. _____				
= Total Cover				
Herb Stratum (Plot size: <u>5ft</u>)				
1. <u>Maianthemum dilatatum</u>	<u>2</u>		<u>FAC</u>	Prevalence Index = B/A = _____
2. <u>Equisetum telmateia</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Scirpus microcarpus</u>	<u>40</u>	<u>✓</u>	<u>OBL</u>	
4. <u>Stachys ajacoides</u>	<u>4</u>		<u>OBL</u>	
5. <u>Athyrium filix-femina</u>	<u>3</u>		<u>FAC</u>	
6. <u>Proserpinaca stratiocarpa</u>	<u>1</u>		<u>NL</u>	
= Total Cover <u>65</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)				
1. <u>Hedera helix</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2. _____	<u>40</u>			
= Total Cover				
% Bare Ground in Herb Stratum <u>35%</u>				
Remarks: <u>* Litter</u>				

SOIL

Sampling Point: 39k

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 2/2	100					SL	Abundant roots
5-16	2.5Y 4/2	94	7.5YR 5/8	6	C	PL	LS	
16-24+	5G 5/1	70	7.5YR 5/8	30	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>	
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>16 in</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: _____

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: A16ce Stadium, City/County: Eureka Sampling Date: 9/23/20
Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP39L
Investigator(s): Joseph Sater, Cindy Wilcox Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 20
Subregion (LRR): A, MLRA - 4B Lat: 40.789197° Long: -124.156531° Datum: WGS 84
Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____		Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: 5ft from TP 39k		

VEGETATION – Use scientific names of plants.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Pseudotsuga Menziesii</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Sequoia sempervirens</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>NL</u>
3. <u>Salix lasioandra</u>	<u>10</u>		<u>FACW</u>
4. <u>Ilex aquifolium</u>	<u>10</u>		<u>FACU</u>
	<u>80</u>	= Total Cover <u>$\frac{35}{14}$</u>	

Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
	_____	= Total Cover _____	

Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Scirpus microcarpus</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. <u>Lysichiton americanus</u>	<u>5</u>		<u>OBL</u>
3. <u>Stachys albugoides</u>	<u>12</u>		<u>OBL</u>
4. <u>Maianthemum dilatatum</u>	<u>1</u>		<u>FAC</u>
5. <u>Equisetum telmateia</u>	<u>5</u>		<u>FACW</u>
6. <u>Prasartes Smithii</u>	<u>1</u>		<u>NL</u>
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
	<u>104</u>	= Total Cover <u>$\frac{52}{20.8}$</u>	

Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. _____	<u>10</u>		
	_____	= Total Cover _____	

% Bare Ground in Herb Stratum 0

Remarks: _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>97</u>	x 1 = <u>97</u>
FACW species <u>15</u>	x 2 = <u>30</u>
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species <u>50</u>	x 4 = <u>200</u>
UPL species <u>21</u>	x 5 = <u>105</u>
Column Totals: <u>184</u>	(A) <u>335</u> (B)

Prevalence Index = B/A = 1.8

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is $\leq 3.0^1$

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants¹

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: TP 39L

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	100					Mu	Positive AAD
8-24+	10GY 5/1	60	7.5YR 5/8	40	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☒ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☒ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☒ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks) *

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks: * Positive AAD rxn

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
☒ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☒ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
 Water Table Present? Yes _____ No ☒ Depth (inches): 13 in
 Saturation Present? Yes ☒ No _____ Depth (inches): Surface

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39M
 Investigator(s): Cindy Wilcox, Joseph Saker Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 10
 Subregion (LRR): A, MLRA - 4B Lat: 40.789244 Long: -124.156676 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% Slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Thuja plicata</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2. <u>Sequoia sempervirens</u>	<u>60</u>	<u>✓</u>	<u>NL</u>	Total Number of Dominant Species Across All Strata:	<u>5</u> (B)
3. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>60 %</u> (A/B)
4. <u> </u>					
				<u>75</u> = Total Cover <u>37.5 / 15</u>	
Sapling/Shrub Stratum (Plot size: <u> </u>)				Prevalence Index worksheet:	
1. <u> </u>				Total % Cover of:	Multiply by:
2. <u> </u>				OBL species <u> </u>	x 1 = <u> </u>
3. <u> </u>				FACW species <u> </u>	x 2 = <u> </u>
4. <u> </u>				FAC species <u> </u>	x 3 = <u> </u>
5. <u> </u>				FACU species <u> </u>	x 4 = <u> </u>
				UPL species <u> </u>	x 5 = <u> </u>
				Column Totals:	(A) <u> </u> (B) <u> </u>
				Prevalence Index = B/A = <u> </u>	
Herb Stratum (Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators:	
1. <u>Equisetum telmateia</u>	<u>30</u>	<u>✓</u>	<u>FACW</u>	1 - Rapid Test for Hydrophytic Vegetation	
2. <u>Scirpus microcarpus</u>	<u>15</u>	<u>✓</u>	<u>OBL</u>	<u>X</u> 2 - Dominance Test is >50%	
3. <u> </u>				3 - Prevalence Index is ≤3.0 ¹	
4. <u> </u>				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. <u> </u>				5 - Wetland Non-Vascular Plants ¹	
6. <u> </u>				Problematic Hydrophytic Vegetation ¹ (Explain)	
7. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. <u> </u>					
9. <u> </u>					
10. <u> </u>					
11. <u> </u>					
				<u>45</u> = Total Cover <u>22.5 / 9</u>	
Woody Vine Stratum (Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Present?	
1. <u>Hedera helix</u>	<u>95</u>	<u>✓</u>	<u>FACU</u>	Yes <u>X</u>	No <u> </u>
2. <u> </u>	<u>95</u>				
				<u>95</u> = Total Cover	
% Bare Ground in Herb Stratum <u>55 % *</u>					
Remarks: <u>* Hedera and litter</u>					

SOIL

Sampling Point: **TP 39 M**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 2/2	100	—	—	—	—	L	
9-13	10YR 3/2	98	—	—	—	—	Gr. S. CL	Fill w/ gravel
	10YR 5/8	2	—	—	—	—	—	
13-23	10YR 5/8	95	—	—	—	—	Gr. SL	Fill, abrupt horizon → broken glass
	10YR 4/2	5	—	—	—	—	—	Mixed fill chunks

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Fill → Debris including plastic, glass, and iron.
 - Rocky/cobbly fill

9-13" horizon no reaction to a-a-d

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☒ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☒ No ☐ Depth (inches): 10 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): 6 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: 39 N
 Investigator(s): Josef Saler, Cindy Wilcox Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Bottom of Hill/Slope Local relief (concave, convex, none): None Slope (%): 0-2
 Subregion (LRR): A, MLRA-4B Lat: 40.789220° Long: -124.156713 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Thuja plicata</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Sequoia sempervirens</u>	<u>35</u>	<u>✓</u>	<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. <u>Picea sitchensis</u>	<u>5</u>		<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
4. <u> </u>	<u>50</u>		<u>25</u>	
= Total Cover <u>10</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Vaccinium parvifolium</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Luchsia magellanica</u>	<u>2</u>		<u>FACU</u>	OBL species <u>70</u> x 1 = <u>70</u>
3. <u>Ilex aquifolium</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>	FACW species <u>12</u> x 2 = <u>24</u>
4. <u> </u>				FAC species <u>23</u> x 3 = <u>69</u>
5. <u> </u>				FACU species <u>37</u> x 4 = <u>148</u>
= Total Cover <u>17</u>				UPL species <u>35</u> x 5 = <u>175</u>
= Total Cover <u>8.5</u>				Column Totals: <u>177</u> (A) <u>486</u> (B)
= Total Cover <u>3.4</u>				Prevalence Index = B/A = <u>2.7</u>
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Scirpus microcarpus</u>	<u>65</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Equisetum telmateia</u>	<u>12</u>		<u>FACW</u>	2 - Dominance Test is >50%
3. <u>Rhynchospora repens</u>	<u>8</u>		<u>FAC</u>	<u>X</u> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Stachys ajacoides</u>	<u>5</u>		<u>OBL</u>	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u> </u>				5 - Wetland Non-Vascular Plants ¹
6. <u> </u>				Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>20</u>			
= Total Cover <u>40</u>				
= Total Cover <u>45</u>				
= Total Cover <u>18</u>				
= Total Cover <u>10%*</u>				
% Bare Ground in Herb Stratum <u>10%*</u>				
Remarks: <u>* Litter</u>				

Sampling Point: 39 N

[illegible]

Indicators for Problematic Hydric Soils³:

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Hydric Soil Present? Yes ☒ No ☐

- ☐ Water-Stained Leaves (B9) (**MLRA 1, 2, 4A, and 4B**)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (**LRR A**)
- ☐ Frost-Heave Hummocks (D7)

Wetland Hydrology Present? Yes X No

Western Mountains, Valleys, and Coast – Version 2.0

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 390
 Investigator(s): Joseph Saler, Cindy Wilcox Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 80
 Subregion (LRR): A, MLRA-4B Lat: 40.789355° Long: -124.156829° Datum: WGS 84
 Soil Map Unit Name: 257 - Lepoil - Candy Mtn. Complex, 2-15 % slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation X Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks: <u>see veg notes</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	
2. <u>Prunus cerasifera</u>	<u>5</u>		<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. <u>Ilex aquifolium</u>	<u>15</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. <u>Picea sitchensis</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	
	<u>90</u>	= Total Cover	<u>93/18</u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				Prevalence Index worksheet:
1.				Total % Cover of: Multiply by:
2.				OBL species <u>0</u> x 1 = <u>0</u>
3.				FACW species <u>4</u> x 2 = <u>8</u>
4.				FAC species <u>51</u> x 3 = <u>153</u>
5.				FACU species <u>63</u> x 4 = <u>252</u>
		= Total Cover		UPL species <u>35</u> x 5 = <u>175</u>
				Column Totals: <u>153</u> (A) <u>588</u> (B)
				Prevalence Index = B/A = <u>3.8</u>
Herb Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators:
1. <u>Pteridium aquilinum</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>	1 - Rapid Test for Hydrophytic Vegetation
2. <u>Athyrium filix-femina</u>	<u>6</u>	<u>✓</u>	<u>FAC</u>	2 - Dominance Test is >50%
3. <u>Equisetum telmateia</u>	<u>4</u>		<u>FACW</u>	3 - Prevalence Index is ≤3.0 ¹
4. <u>Polystichum munitum</u>	<u>3</u>		<u>FACU</u>	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Groenlandia xerocerasifera</u>	<u>5</u>	<u>✓</u>	<u>FAC</u>	5 - Wetland Non-Vascular Plants ¹
6.				<u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain)
7.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8.				
9.				
10.				
11.	<u>23</u>	= Total Cover	<u>11.5/4.6</u>	
Woody Vine Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. <u>Hedera helix</u>	<u>40</u>	<u>✓</u>	<u>FACU</u>	
2.	<u>40</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>80*</u>				
Remarks: <u>* Bare soil</u> <u>- Invasive Hedera helix creating false dominance by upland vegetation</u>				

SOIL

Sampling Point: TP 390

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-18	2.5Y 2.5/1	100	/	/	/	/	MuS	
18-24+	10YR 3/1	100	/	/	/	/	MuS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☒ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- ☒ Surface Water (A1)
☒ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)
- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No _____ Depth (inches): 0.5 inWater Table Present? Yes ☒ No _____ Depth (inches): 11 inSaturation Present? Yes ☒ No _____ Depth (inches): SurfaceWetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

9/20/20

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/20/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP39P
 Investigator(s): Candace Wilcox, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 30
 Subregion (LRR): A, MLRA - 4B Lat: 40.789330° Long: -124.156853 Datum: WGS 84
 Soil Map Unit Name: 257 - Lepoil - Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

Remarks: 8'6" above slope of TP390

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Picea sitchensis</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Prunus laurocerasus</u>	<u>10</u>	<u> </u>	<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u>Sequoia sempervirens</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
4. <u> </u>	<u>75</u>	<u> </u>	<u>37.5</u>	Prevalence Index worksheet:
= Total Cover <u>75</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				Total % Cover of: <u> </u> Multiply by: <u> </u>
1. <u>Rubus ursinus</u>	<u>2</u>	<u> </u>	<u>FACU</u>	OBL species <u> </u> x 1 = <u> </u>
2. <u>Rubus armeniacus</u>	<u>1</u>	<u> </u>	<u>FAC</u>	FACW species <u> </u> x 2 = <u> </u>
3. <u>Sambucus racemosa</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	FAC species <u> </u> x 3 = <u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u> </u> x 4 = <u> </u>
5. <u> </u>	<u>13</u>	<u> </u>	<u>6.5</u>	UPL species <u> </u> x 5 = <u> </u>
= Total Cover <u>13</u>				Column Totals: <u> </u> (A) <u> </u> (B)
Herb Stratum (Plot size: <u>5ft</u>)				Prevalence Index = B/A = <u> </u>
1. <u>Pteridium aquilinum</u>	<u>3</u>	<u> </u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Equisetum telmateia</u>	<u>12</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Crocasmia x crocasmiflora</u>	<u>3</u>	<u> </u>	<u>FAC</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u>18</u>	<u> </u>	<u>9</u>	
= Total Cover <u>18</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>30</u>	<u> </u>	<u> </u>	
= Total Cover <u>30</u>				
% Bare Ground in Herb Stratum <u> </u>				
Remarks: <u> </u>				

SOIL

Sampling Point: TP39P

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-14	10YR 3/2	100	7.5YR 3/4	15	C	M	SL	fill → broken glass, debris to 2 in.
14-24+	10YR 3/2	85					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

- | | | |
|--|--|----------------------------|
| Surface Water Present? | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): <u>N/A</u> |
| Saturation Present?
(includes capillary fringe) | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): <u>14"</u> |

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP39Q
 Investigator(s): Cindy Wilcox Joseph Saler Section, Township, Range: NW 1/4 Sec 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): None Slope (%): 45
 Subregion (LRR): A, MLRA-4B Lat: 40.789471° Long: -124.156862 Datum: NAD83
 Soil Map Unit Name: 257-Lepoint-Candy Mtn. Complex NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: <u>In narrow drainage & concentrated runoff (sub surface)</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rubra</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Sequoia sempervirens</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:
= Total Cover <u>65</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)				Total % Cover of: _____ Multiply by: _____
1. <u>Fuchsia magellanica</u>	<u>38</u>	<u>✓</u>	<u>FACU</u>	OBL species _____ x 1 = _____
2. <u>Rubus wissii</u>	<u>5</u>	_____	<u>FACU</u>	FACW species _____ x 2 = _____
3. _____	_____	_____	_____	FAC species _____ x 3 = _____
4. _____	_____	_____	_____	FACU species _____ x 4 = _____
5. _____	_____	_____	_____	UPL species _____ x 5 = _____
= Total Cover <u>43</u>				Column Totals: _____ (A) _____ (B)
Herb Stratum (Plot size: <u>5 ft</u>)				Prevalence Index = B/A = _____
1. <u>Athyrium filix-femina</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Eleocharis palustris</u>	<u>30</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Crocodyria x crocodyriflora</u>	<u>1</u>	_____	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
= Total Cover <u>56</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
= Total Cover _____				
% Bare Ground in Herb Stratum <u>45</u>				
Remarks: <u>* Muck</u>				

SOIL

Sampling Point: TP39Q

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input checked="" type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |
- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☒ No ☐ Depth (inches): 0.5 in

Saturation Present? Yes ☒ No ☐ Depth (inches): 0.5"

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: 39 R
 Investigator(s): Joseph Sater, Cindy Wilcox Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Base of slope Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A, MLRA-4B Lat: 40.789263 Long: -124.156440 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No
 Hydric Soil Present? Yes X No
 Wetland Hydrology Present? Yes X No

Is the Sampled Area within a Wetland? Yes X No

Remarks:

10 ft between TP39 R and TP39 S

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Raoultia menziesii</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>
2. <u>Salix lasioandra</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>
3. <u>Ilex aquifolium</u>	<u>5</u>		<u>FACU</u>
4. <u> </u>	<u>40</u>		<u>20</u>
= Total Cover <u>20</u>			
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Euchisia macellana</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>
2. <u>Rubus ursinus</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
3. <u>Rubus armeniacus</u>	<u>7</u>		<u>FAC</u>
4. <u> </u>			
5. <u> </u>	<u>52</u>		<u>26</u>
= Total Cover <u>26</u>			
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Lysichiton americanus</u>	<u>25</u>	<u>✓</u>	<u>OBL</u>
2. <u>Scirpus microcarpus</u>	<u>15</u>	<u>✓</u>	<u>OBL</u>
3. <u>Crocodylia x crocodylora</u>	<u>10</u>		<u>FAC</u>
4. <u>Equisetum telmateia</u>	<u>7</u>		<u>FACW</u>
5. <u>Stachys ajacoides</u>	<u>6</u>		<u>OBL</u>
6. <u> </u>			
7. <u> </u>			
8. <u> </u>			
9. <u> </u>			
10. <u> </u>			
11. <u> </u>	<u>63</u>		<u>31.5</u>
= Total Cover <u>31.5</u>			
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>			
2. <u> </u>			
= Total Cover <u> </u>			
% Bare Ground in Herb Stratum <u>40*</u>			
Remarks: <u>* Much + debris</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>46</u>	x 1 = <u>46</u>
FACW species <u>17</u>	x 2 = <u>34</u>
FAC species <u>17</u>	x 3 = <u>51</u>
FACU species <u>75</u>	x 4 = <u>300</u>
UPL species <u>155</u>	x 5 = <u>775</u>
Column Totals: <u>155</u> (A)	<u>431</u> (B)
Prevalence Index = B/A = <u>2.78</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

SOIL

Sampling Point: IP39R

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:		Wetland Indicators (2 or more required)	
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): N/A		
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): 12.25		
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 3 in		
(includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: - Water table revisited 24 hrs later			

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka/Humboldt Sampling Date: 9/23/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 39.5
 Investigator(s): SR, SP Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 38
 Subregion (LRR): A, MLRA-4B Lat: 40.789286° Long: -124.156434° Datum: WGS84
 Soil Map Unit Name: Z57-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks: <u>@ transition of wetland ~3' uphill on N. side of fen</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Pseudotsuga menziesii</u>	<u>85</u>	<u>Y</u>	<u>FACU</u>	
2. <u> </u>				Total Number of Dominant Species Across All Strata: <u>8</u> (B)
3. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>38%</u> (A/B)
4. <u> </u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)				Prevalence Index worksheet:
1. <u>Fuchsia megalylla</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	Total % Cover of: <u> </u> Multiply by: <u> </u>
2. <u>Gaultheria shallon</u>	<u>4</u>	<u>Y</u>	<u>FACU</u>	OBL species <u> </u> x 1 = <u> </u>
3. <u>Rubus armeniacus</u>	<u>2</u>	<u>N</u>	<u>FAC</u>	FACW species <u> </u> x 2 = <u> </u>
4. <u>Ilex aquifolium</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	FAC species <u> </u> x 3 = <u> </u>
5. <u>Rubus ursinus</u>	<u>2</u>	<u>N</u>	<u>FACU</u>	FACU species <u> </u> x 4 = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>)				UPL species <u> </u> x 5 = <u> </u>
1. <u>Crocasmia x crocasmiflora</u>	<u>7</u>	<u>Y</u>	<u>FAC</u>	Column Totals: <u> </u> (A) <u> </u> (B)
2. <u>Scirpus micropus</u>	<u>6</u>	<u>Y</u>	<u>OBL</u>	Prevalence Index = B/A = <u> </u>
3. <u>Stripteris spicata</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:
4. <u>Athyrium filix-femina</u>	<u>5</u>	<u>Y</u>	<u>FACU</u>	<u> </u> 1 - Rapid Test for Hydrophytic Vegetation
5. <u>Proserpinaca stratiocarpa</u>	<u>1</u>	<u>N</u>	<u>NL</u>	<u> </u> 2 - Dominance Test is >50%
6. <u>Stachys arvensis</u>	<u>1</u>	<u>N</u>	<u>OBL</u>	<u> </u> 3 - Prevalence Index is ≤3.0 ¹
7. <u> </u>				<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8. <u> </u>				<u> </u> 5 - Wetland Non-Vascular Plants ¹
9. <u> </u>				<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
10. <u> </u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
11. <u> </u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
2. <u> </u>				
% Bare Ground in Herb Stratum <u>76%</u>				
Remarks: <u> </u>				

SOIL

Sampling Point: TP 39S

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/2	100					SL	
3-12	10YR 3/2	80	10YR 3/4	5	C	M	SL	
			10YR 5/3	5	C	M		
			5Y 4/2	10	C	M		
12-17	10YR 2/2	50	5YR 3/3	15	C	M	SL	
			5Y 4/2	35	C	M		
17-24	5GY 4/1	80	10YR 3/6	10	C	PL	SL	
			10YR 4/2	10	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): <u>N/A</u> Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): <u>N/A</u> Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): <u>N/A</u> (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albion Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 40
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 16
 Subregion (LRR): A, MLRA-4B Lat: 40.788516° Long: -124.155951° Datum: WGS 84
 Soil Map Unit Name: 212-Urbana-Half-Half-Red Sand Complex, 0-5% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>TP 2ft west of sidewalk retaining wall, 15 ft south of south bleacher wall.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer rubrum</u> (planted)	<u>50</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Sequoiadendron sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. <u>Alnus rubra</u>	<u>10</u>		<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. <u> </u>	<u>90</u>		<u>45</u>	
<u>90</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Prevalence Index worksheet:
1. <u> </u>				
2. <u> </u>				OBL species <u>0</u> x 1 = <u>0</u>
3. <u> </u>				FACW species <u>0</u> x 2 = <u>0</u>
4. <u> </u>				FAC species <u>105</u> x 3 = <u>315</u>
5. <u> </u>				FACU species <u>40</u> x 4 = <u>160</u>
				UPL species <u>30</u> x 5 = <u>150</u>
				Column Totals: <u>195</u> (A) <u>645</u> (B)
<u>195</u> = Total Cover				Prevalence Index = B/A = <u>3.3</u>
Herb Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators:
1. <u>Ranunculus repens</u>	<u>1</u>		<u>FAC</u>	
2. <u>Anthoxanthum odoratum</u>	<u>25</u>	<u>✓</u>	<u>FACU</u>	<u> </u> 2 - Dominance Test is >50%
3. <u>Malva lanata</u>	<u>5</u>		<u>FAC</u>	<u> </u> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Scirpus microcarpus</u>	<u>20</u>		<u>OBL</u>	<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Hypochaeris radicata</u>	<u>13</u>		<u>FACU</u>	<u> </u> 5 - Wetland Non-Vascular Plants ¹
6. <u>Plantago lanceolata</u>	<u>1</u>		<u>FACU</u>	<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Agrostis stolonifera</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>Equisetum arvense</u>	<u>4</u>		<u>FAC</u>	
9. <u>Prunella vulgaris</u>	<u>1</u>		<u>FACU</u>	
10. <u>Festuca rubra</u>	<u>5</u>		<u>FAC</u>	
11. <u> </u>	<u>105</u>		<u>52.5</u>	
<u>105</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u> </u>
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>				
Remarks: <u>0 - Pit excavated adj. to bleachers, some species likely landscaping remnants</u>				

SOIL

Sampling Point: **TP40**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	100					L	
6-10	5Y 3/1	92	5YR 3/3	8	C	PL	SL	
10-24	10Y 4/1	95	10YR 2/1	5	C	PL	LS	charcoal present

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/AWater Table Present? Yes _____ No ☒ Depth (inches): 17 inSaturation Present? Yes ☒ No _____ Depth (inches): 6 in
(includes capillary fringe)Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: A16 ee Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP41
 Investigator(s): Joseph Sales, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 15
 Subregion (LRR): A, MLRA - 4B Lat: 40.788523° Long: -124.155991° Datum: WGS 84
 Soil Map Unit Name: 212-Urbanland-Halfbluff-Redsands Complex 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks: <u>Just uphill of TP40</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
1. <u>Alnus rubra</u>	<u>2</u>		<u>FAC</u>	
2. <u>Acer rubrum</u>	<u>70</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Sequoia sempervirens</u>	<u>50</u>	<u>✓</u>	<u>NL</u>	
4. <u> </u>	<u>122</u>	= Total Cover	<u>61/24.4</u>	

Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus armeniacus</u>	<u>1</u>		<u>FAC</u>	
2. <u> </u>	<u> </u>		<u> </u>	
3. <u> </u>	<u> </u>		<u> </u>	
4. <u> </u>	<u> </u>		<u> </u>	
5. <u> </u>	<u>1</u>	= Total Cover	<u> </u>	

Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Hypochaeris radicata</u>	<u>18</u>		<u>FACU</u>	
2. <u>Trifolium repens</u>	<u>1</u>		<u>FAC</u>	
3. <u>Plantago lanceolata</u>	<u>7</u>		<u>FACU</u>	
4. <u>Taraxacum officinale</u>	<u>5</u>		<u>FACU</u>	
5. <u>Anthraxanthus odoratum</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
6. <u>Scirpus microcarpus</u>	<u>25</u>	<u>✓</u>	<u>OBL</u>	
7. <u>Agrostis stolonifera</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
8. <u>Bellis perenne</u>	<u>2</u>		<u>NL</u>	
9. <u>Ranunculus repens</u>	<u>3</u>		<u>FAC</u>	
10. <u>Cerastium glomeratum</u>	<u>1</u>		<u>FACU</u>	
11. <u> </u>	<u>112</u>	= Total Cover	<u>36/22.4</u>	

Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>1</u>		<u> </u>	
2. <u> </u>	<u>1</u>	= Total Cover	<u> </u>	

% Bare Ground in Herb Stratum 0

Remarks: Rubus armeniacus and Hedera helix not counted as dominants because of the low cover (25%) in each stratum.

SOIL

Sampling Point: TP41

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/1	100					L	
6-12	10YR 3/1	50	10YR 4/4	25	C	M	SL	
			10YR 4/2	25	D	M		
12-24	10YR 3/2	95	5Y 5/2	5	D	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐Remarks: Transition location

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
- Water Table Present? Yes ☐ No ☒ Depth (inches): N/A
- Saturation Present? Yes ☐ No ☒ Depth (inches): N/A
- (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP42
 Investigator(s): Sam Pelly, Joseph Saker Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill Slope Local relief (concave, convex, none): None Slope (%): 13
 Subregion (LRR): A, MLRA-4B Lat: 40.788423° Long: -124.155990° Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: <u>set of 3 south across walkway from 40441</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u>Alnus rubra</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Rhododendron cultivar *</u>	<u>45</u>		<u>NL</u>	
3. <u>Sequoia sempervirens</u>	<u>10</u>	<u>✓</u>	<u>NL</u>	
4. _____				
<u>85</u> = Total Cover <u>28</u>				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____				
3. _____				
4. _____				
5. _____				
<u>_____</u> = Total Cover				
Herb Stratum (Plot size: <u>5ft</u>)				
1. <u>Anthoxanthum odoratum</u>	<u>60</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Hypochaeris radicata</u>	<u>15</u>		<u>FACU</u>	
3. <u>Equisetum arvense</u>	<u>1</u>		<u>FAC</u>	
4. <u>Scirpus microcarpus</u>	<u>10</u>		<u>OBL</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>86</u> = Total Cover <u>43</u> <u>17.2</u>				
Woody Vine Stratum (Plot size: _____)				
1. _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2. _____				
<u>14%</u> = Total Cover				

Remarks: Litter * Rhododendron not counted as a dominant because it was planted and does not reflect conditions

SOIL

Sampling Point: TP 42

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	100	—	—	—	—	SL	
6-13	10YR 3/2	100	—	—	—	—	SL	
13-16	10YR 3/3	100	—	—	—	—	S	
16-24+	5Y 3/2	100	—	—	—	—	S	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- | | | |
|--|-----------------------|----------------------------|
| Surface Water Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |
| Saturation Present?
(includes capillary fringe) | Yes _____ No <u>X</u> | Depth (inches): <u>N/A</u> |

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/7/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 43
 Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 12
 Subregion (LRR): A, MLRA - 4B Lat: 40.788430° Long: -124.155965 Datum: WGS 84
 Soil Map Unit Name: 257-Lepail-Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>see note in 42</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>Alnus rubra</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Rhododendron cultorum</u> *	<u>50</u>		<u>NL</u>	
3. <u> </u>				
4. <u> </u>				
= Total Cover <u>80</u>				
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus armeniacus</u>	<u>2</u>		<u>FAC</u>	
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
= Total Cover <u>2</u>				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Scirpus microcarpus</u>	<u>50</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Anthoxanthum odoratum</u>	<u>8</u>		<u>FACU</u>	
3. <u>Hypochaeris radicata</u>	<u>2</u>		<u>FACU</u>	
4. <u>Equisetum arvense</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Ranunculus repens</u>	<u>4</u>		<u>FAC</u>	
6. <u>Crocus x crocosmiflorus</u>	<u>2</u>		<u>FAC</u>	
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
= Total Cover <u>86</u>				
Woody Vine Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>2</u>		<u>FACU</u>	
2. <u> </u>				
3. <u> </u>				
= Total Cover <u>2</u>				
% Bare Ground in Herb Stratum <u>14%*</u>				
Remarks: <u>* Litter</u> <u>* Rhododendron not included in cover</u> <u>Rubus armeniacus + Hedera helix not counted as dominants b/c there is <5% cover in the stratum</u>				

SOIL

Sampling Point: TP 43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	100	—	—	—	—	SL	
6-11	2.5Y 3/1	85	10YR 3/4	15	C	PL	SL	
11-24	5Y 3/1	85	5YR 4/4	10	C	PL	SL	
—	—	—	5YR 3/3	5	C	PL	—	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☒ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
 Water Table Present? Yes _____ No ☒ Depth (inches): N/A
 Saturation Present? Yes ☒ No _____ Depth (inches): 11 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 44
 Investigator(s): Sam Polly, Joseph Sater Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, H8M
 Landform (hillslope, terrace, etc.): Hill Slope Local relief (concave, convex, none): None Slope (%): 10
 Subregion (LRR): A, MLRA - 4B Lat: 40.788433° Long: -124.155930° Datum: WGS 84
 Soil Map Unit Name: 212-Urban Land-Halfbluff-Redsands Complex, 0-5% NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: <u>see note in 42</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>Alnus rubra</u>	<u>90</u>	<u>✓</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Rhododendron cultivar</u> <u>2</u> = Total Cover <u>NL</u>				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Scirpus microcarpus</u> <u>85</u> <u>✓</u> <u>OBL</u> 2. <u>Taraxacum officinale</u> <u>1</u> <u>FACU</u> 3. <u>Ranunculus repens</u> <u>2</u> <u>FAC</u> 4. <u>Equisetum arvense</u> <u>10</u> <u>FAC</u> 5. <u>Cnicus x crassiflorus</u> <u>2</u> <u>FAC</u> 6. <u>Holcus lanatus</u> <u>1</u> <u>FAC</u>				
7. _____ 8. _____ 9. _____ 10. _____ 11. _____				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ % Bare Ground in Herb Stratum <u>0</u> = Total Cover <u>50.5</u> <u>20.2</u>				
Remarks: <u>Rhododendron not counted as dominant on account of low cover and it being planted for landscaping.</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No _____

SOIL

Sampling Point: 44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 2/2	100	/	/	/	/	SMu	
16-24*	10YR 3/1	100	/	/	/	/	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☒ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☒ No ☐ Depth (inches): 10 m
 Saturation Present? Yes ☒ No ☐ Depth (inches): 6 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/17/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 45
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 18
 Subregion (LRR): A, MLRA - 4B Lat: 40.788247° Long: -124.155974 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>On top of slope break above shower house @ S. of track</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>50</u>	<u>✓</u>	<u>NL</u>	
2. <u>Ilex acutifolium</u>	<u>10</u>		<u>FACU</u>	
3. <u>Pyrus calleryana</u>	<u>5</u>		<u>NL</u>	
4. <u> </u>	<u>65</u>		<u> </u>	
<u>65</u> = Total Cover <u>32.5%</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>4</u>		<u>FACU</u>	
2. <u> </u>	<u> </u>		<u> </u>	
3. <u> </u>	<u> </u>		<u> </u>	
4. <u> </u>	<u> </u>		<u> </u>	
5. <u> </u>	<u> </u>		<u> </u>	
<u>4</u> = Total Cover				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Hypochaeris radicata</u>	<u>15</u>		<u>FACU</u>	
2. <u>Holcus lanatus</u>	<u>69</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Scirpus microcarpus</u>	<u>15</u>		<u>OBL</u>	
4. <u>Taraxacum officinale</u>	<u>1</u>		<u>FACU</u>	
5. <u> </u>	<u> </u>		<u> </u>	
6. <u> </u>	<u> </u>		<u> </u>	
7. <u> </u>	<u> </u>		<u> </u>	
8. <u> </u>	<u> </u>		<u> </u>	
9. <u> </u>	<u> </u>		<u> </u>	
10. <u> </u>	<u> </u>		<u> </u>	
11. <u> </u>	<u> </u>		<u> </u>	
<u>100</u> = Total Cover <u>50%</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>18</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>		<u> </u>	
<u>18</u> = Total Cover <u>9%</u>				
% Bare Ground in Herb Stratum <u>5%*</u>				
Remarks: <u>* Deer trail</u> <u>* Rubus ursinus not considered dominant, less than 5% cover</u>				

SOIL

Sampling Point: TP 45

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					SL	Dense roots
5-13	5Y 4/2	100					S	
13-21	5Y 4/3	100					S	
21-24+	10YR 3/6	100					S	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes _____ No X Depth (inches): N/A
- Water Table Present? Yes _____ No X Depth (inches): N/A
- Saturation Present? Yes _____ No X Depth (inches): N/A

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/21/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP46
 Investigator(s): Sam Pally, Joseph Siler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 120
 Subregion (LRR): A, MLRA-4B Lat: 40.788227 Long: -124.155927 Datum: WGS 84
 Soil Map Unit Name: 257 - Lepoil - Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks: <u>~9' downhill from TP45, up slope from shower house</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57%</u> (A/B)
1. <u>Ilex aquifolium</u>	<u>5</u>		<u>FACU</u>	
2. <u>Sequoia sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	
3. <u>Pyrus calleryana</u>	<u>3</u>		<u>NL</u>	
4. <u> </u>				
Total Cover: <u>38</u> = <u>19</u> / <u>7.6</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus arsnus</u>	<u>3</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus armenicus</u>	<u>2</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Rubus spectabilis</u>	<u>3</u>	<u>✓</u>	<u>FAC</u>	
4. <u> </u>				
5. <u> </u>				
Total Cover: <u>8</u> = <u>4</u> / <u>2</u>				
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Equisetum telmateia</u>	<u>46</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Scirpus microcarpus</u>	<u>51</u>	<u>✓</u>	<u>OBL</u>	
3. <u>Athyrium filix-femina</u>	<u>14</u>		<u>FAC</u>	
4. <u>Juncus effusus</u>	<u>2</u>		<u>FACW</u>	
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
Total Cover: <u>113</u> = <u>56.5</u> / <u>2.28</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hedera helix</u>	<u>22</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>				
Total Cover: <u>22</u>				
% Bare Ground in Herb Stratum <u> </u>				
Remarks:				

SOIL

Sampling Point: TP 46

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-11	7.5YR 2.5/2	100	—	—	—	SL	High root content
11-13	2.5Y 3/3	100	—	—	—	SL	
13-24	10YR 4/4	100	—	—	—	LS	
24-30+	2.5Y 4/3	—	10YR 3/1	—	—	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): 3 in

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <u>X</u> Depth (inches): <u>N/A</u></p> <p>Water Table Present? Yes _____ No <u>X</u> Depth (inches): <u>N/A</u></p> <p>Saturation Present? Yes _____ No <u>X</u> Depth (inches): <u>13 in</u></p> <p>(includes capillary fringe)</p> <p>Wetland Hydrology Present? Yes _____ No <u>X</u></p>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/21/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 47
 Investigator(s): Joseph Siler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 12%
 Subregion (LRR): A, MLRA-4B Lat: 40.788227° Long: -124.155912 Datum: WGS 84
 Soil Map Unit Name: 257-Lepail-Candy Mtn. complex, 2-15% slope NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil X or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>18 in east of TP 46</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57%</u> (A/B)
1. <u>Ilex aquifolium</u>	<u>3</u>		<u>FACU</u>	
2. <u>Sequoia sempervirens</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	
3. <u>Pyrus calleryana</u>	<u>3</u>		<u>NL</u>	
4. <u> </u>	<u> </u>		<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) <u>31</u> = Total Cover <u>5.5</u> <u>2.2</u>				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Rubus ursinus</u>	<u>3</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus armeniacus</u>	<u>4</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Rubus spectabilis</u>	<u>4</u>	<u>✓</u>	<u>FAC</u>	
4. <u> </u>	<u> </u>		<u> </u>	
5. <u> </u>	<u> </u>		<u> </u>	
Herb Stratum (Plot size: <u>5ft</u>) <u>11</u> = Total Cover <u>5.5</u> <u>2.2</u>				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Equisetum telmateia</u>	<u>46</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Scirpus microcarpus</u>	<u>51</u>	<u>✓</u>	<u>OBL</u>	
3. <u>Athyrium filix-femina</u>	<u>12</u>		<u>FAC</u>	
4. <u>Samolus effusus</u>	<u>4</u>		<u>FACW</u>	
5. <u> </u>	<u> </u>		<u> </u>	
6. <u> </u>	<u> </u>		<u> </u>	
7. <u> </u>	<u> </u>		<u> </u>	
8. <u> </u>	<u> </u>		<u> </u>	
9. <u> </u>	<u> </u>		<u> </u>	
10. <u> </u>	<u> </u>		<u> </u>	
11. <u> </u>	<u> </u>		<u> </u>	
Woody Vine Stratum (Plot size: <u>5ft</u>) <u>113</u> = Total Cover <u>5.5</u> <u>22.8</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Hebea helix</u>	<u>22</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>		<u> </u>	
% Bare Ground in Herb Stratum <u> </u> <u>22</u> = Total Cover				
Remarks: <u> </u>				

SOIL

Sampling Point: TP 47

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR3/2	100	/	/	/	/	SL	
4-12	10YR3/3	100	/	/	/	/	SL	
12-24+	10YR3/3	60	2.5Y4/1	40	D	M	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☒ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Positive A-A-O reaction @ 5in

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- | | | |
|------------------------|--|-----------------------------|
| Surface Water Present? | Yes _____ No <input checked="" type="checkbox"/> | Depth (inches): <u>N/A</u> |
| Water Table Present? | Yes <input checked="" type="checkbox"/> No _____ | Depth (inches): <u>12in</u> |
| Saturation Present? | Yes <input checked="" type="checkbox"/> No _____ | Depth (inches): <u>8in</u> |
- (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/21/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP48
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): None Slope (%): 100%
 Subregion (LRR): A, MLRA -4B Lat: 40.788212° Long: -124.155889° Datum: WGS84
 Soil Map Unit Name: 257-Lepail-Candy Mtn. Complex 2-15% Slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>10.5 ft east of TP 47</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Rubus armeniacus</u> <u>15</u> <u>✓</u> <u>FAC</u> 2. <u>Rubus ursinus</u> <u>3</u> <u> </u> <u>FACU</u> 3. <u> </u> 4. <u> </u> 5. <u> </u>				
= Total Cover <u>18</u>				
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Scirpus microcarpus</u> <u>50</u> <u>✓</u> <u>OBL</u> 2. <u>Equisetum telmateia</u> <u>40</u> <u>✓</u> <u>FACW</u> 3. <u>Athyrium filix-femina</u> <u>15</u> <u> </u> <u>FAC</u> 4. <u>Holcus lanatus</u> <u>1</u> <u> </u> <u>FAC</u> 5. <u>Stachys arvensis</u> <u>3</u> <u> </u> <u>OBL</u> 6. <u>Ranunculus repens</u> <u>1</u> <u> </u> <u>FAC</u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u>				
= Total Cover <u>110</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>) 1. <u>Hedera helix</u> <u>2</u> <u> </u> <u>FACU</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u>				
= Total Cover <u>2</u>				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: <u>Hedera helix not considered dominant <5% cover in stratum</u>				

SOIL

Sampling Point: TP48

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/1	100	—	—	—	—	L	
3-13	10YR 2/2	100	—	—	—	—	L	
13-15	5GY 2.5/1	100	—	—	—	—	SL	
15-16	2.5Y 4/3	65	N5/	15	D	M	SCL	
			5YR 4/6	10	C	PL	—	
			10YR 5/3	10	C	M	—	
16-24	10YR 3/3	75	10YR 3/6	25	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Positive AAD reaction

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☒ Shallow Aquitard (D3)
☒ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☒ No ☐ Depth (inches): Surface
 Saturation Present? Yes ☒ No ☐ Depth (inches): 5 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/21/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 49
 Investigator(s): Sam Polly, Joe Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 25
 Subregion (LRR): A, MLRA - 4B Lat: 40.788117° Long: -124.155783° Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Alnus rubra</u>	<u>75</u>	<u>✓</u>	<u>FAC</u>		Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. <u>Sequoia sempervirens</u>	<u>10</u>		<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)	
4. _____				Prevalence Index worksheet:	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)					
1. <u>Rubus ursinus</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>		Total % Cover of: _____ Multiply by: _____
2. _____					OBL species _____ x 1 = _____
3. _____					FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____	
5. _____				FACU species _____ x 4 = _____	
Herb Stratum (Plot size: <u>5ft</u>)				UPL species _____ x 5 = _____	
1. <u>Athyrium filix-femina</u>	<u>20</u>		<u>FAC</u>	Column Totals: _____ (A) _____ (B)	
2. <u>Equisetum telmateia</u>	<u>70</u>	<u>✓</u>	<u>FACW</u>	Prevalence Index = B/A = _____	
3. <u>Crocasmia x crocasmiflora</u>	<u>10</u>		<u>FAC</u>	Hydrophytic Vegetation Indicators:	
4. <u>Scirpus microcarpus</u>	<u>3</u>		<u>OBL</u>		1 - Rapid Test for Hydrophytic Vegetation
5. <u>Holcus lanatus</u>	<u>1</u>		<u>FAC</u>		2 - Dominance Test is >50%
6. <u>Agrostis stolonifera</u>	<u>5</u>		<u>FAC</u>		3 - Prevalence Index is ≤3.0 ¹
7. _____					4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8. _____				5 - Wetland Non-Vascular Plants ¹	
9. _____				Problematic Hydrophytic Vegetation ¹ (Explain)	
10. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
11. _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
Woody Vine Stratum (Plot size: <u>5ft</u>)					
1. <u>Hedera helix</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>		
2. _____					
% Bare Ground in Herb Stratum <u>0</u>					
Remarks:					

SOIL

Sampling Point:

TP49

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/2	100					L	
2-12	2.5Y 3/3	85	10YR 3/1	5	D	M	LS	
			10YR 3/6	10	C	PL		
12-24+	10Y 4/1	85	10YR 3/6	15	C	PL	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
 Water Table Present? Yes _____ No ☒ Depth (inches): N/A
 Saturation Present? Yes _____ No ☒ Depth (inches): N/A
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/21/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP50
 Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 13
 Subregion (LRR): A, MLRA-4B Lat: 40.788136° Long: -124.155774° Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slope NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Alnus rubra</u>	<u>42</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>42</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Rubus ursinus</u>	<u>6</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u>13</u> x 1 = <u>13</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>64</u> x 2 = <u>128</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>90</u> x 3 = <u>270</u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>21</u> x 4 = <u>84</u>
<u>6</u> = Total Cover				UPL species <u> </u> x 5 = <u> </u>
				Column Totals: <u>168</u> (A) <u>435</u> (B)
				Prevalence Index = B/A = <u>2.59</u>
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Juncus effusus</u>	<u>4</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Equisetum telmateia</u>	<u>60</u>	<u>✓</u>	<u>FACW</u>	2 - Dominance Test is >50%
3. <u>Atkynium filix-tenna</u>	<u>20</u>	<u> </u>	<u>FAC</u>	<u>X</u> 3 - Prevalence Index is ≤3.0 ¹
4. <u>Stachys ajacoides</u>	<u>12</u>	<u> </u>	<u>OBL</u>	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u>Scirpus microparpus</u>	<u>1</u>	<u> </u>	<u>OBL</u>	5 - Wetland Non-Vascular Plants ¹
6. <u>Holcus lanatus</u>	<u>3</u>	<u> </u>	<u>FAC</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
7. <u>Crocasmia xrocasmiflora</u>	<u>4</u>	<u> </u>	<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8. <u>Ranunculus repens</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>105</u> = Total Cover <u>52.5</u> %				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. <u>Hedera helix</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>15</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

SOIL

Sampling Point: **TP 50**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/2	100					Mul	
3-24+	5GY 3/1	85	5YR 3/4	15	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☒ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Weak Positive AAD @ 4 in and 8 in

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☒ High Water Table (A2) ☐ Salt Crust (B11)
☒ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☒ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☒ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☒ No ☐ Depth (inches): Surface
 Saturation Present? Yes ☒ No ☐ Depth (inches): Surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/2/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP51
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 25
 Subregion (LRR): A, MLRA-4B Lat: 40.788273 Long: -124.155064 Datum: WGS 84
 Soil Map Unit Name: 257 - Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Thuja plicata</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. <u>Pyrus calleryana</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>NL</u>	Total Number of Dominant Species Across All Strata: <u>7</u> (B)
3. <u>Abies grandis</u>	<u>10</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>57%</u> (A/B)
4. <u>Picea sitchensis</u>	<u>10</u>		<u>FAC</u>	
	<u>65</u>	= Total Cover <u>125</u>		
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)				Prevalence Index worksheet:
1. <u>Rubus ursinus</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Gaultheria shallon</u>	<u>12</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	OBL species _____ x 1 = _____
3. <u>Lonicera involucrata</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
	<u>47</u>	= Total Cover <u>215</u>		UPL species _____ x 5 = _____
Herb Stratum (Plot size: <u>5 ft</u>)				Column Totals: _____ (A) _____ (B)
1. <u>Struthiopteris spicant</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Prevalence Index = B/A = _____
2. <u>Hypochaeris radicata</u>	<u>2</u>		<u>FACU</u>	Hydrophytic Vegetation Indicators:
3. <u>Lactylis glomerata</u>	<u>7</u>		<u>FACU</u>	<input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation
4. <u>Stachys apugetus</u>	<u>18</u>		<u>OBL</u>	<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
5. <u>Scirpus microrhizus</u>	<u>15</u>		<u>OBL</u>	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
6. <u>Equisetum arvense</u>	<u>4</u>		<u>FAC</u>	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
7. <u>Sagittaria arifolia</u>	<u>28</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
8. <u>Mnemonium dilatatum</u>	<u>3</u>		<u>FAC</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
9. <u>Helcus lanatus</u>	<u>1</u>		<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. <u>Althium filix-femina</u>	<u>3</u>		<u>FAC</u>	
11. _____				
	<u>101</u>	= Total Cover <u>505</u>		
Woody Vine Stratum (Plot size: <u>0</u>)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____				
2. _____				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

SOIL

Sampling Point: TP 51

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	100					L	
6-10	10YR 3/1	80	2.5Y 3/3	15	C	M	L	
			2.5YR 2.5/1	5	C	PL		
10-15	10YR 3/1	80	2.5Y 4/1	15	D	M	L	
			7.5YR 3/4	5	C	PL		
15-24	2.5Y 3/1	85	10YR 3/3	15	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required: check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
- Water Table Present? Yes _____ No ☒ Depth (inches): 20 in
- Saturation Present? Yes ☒ No _____ Depth (inches): 6 in
- (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/21/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 52
 Investigator(s): Joseph Salas, Sam Pally Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 12
 Subregion (LRR): A MLRA-4B Lat: 40.788379° Long: -124.155100° Datum: WGS84
 Soil Map Unit Name: 212-Urbanland-Halfbluff-Redsands Complex 0-5% NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Pseudotsuga menziesii</u>	<u>35</u>	<u>✓</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>) <u>35</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Rubus ursinus</u>	<u>2</u>	_____	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
Herb Stratum (Plot size: <u>5 ft</u>) <u>2</u> = Total Cover				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Agrostis stolonifera</u>	<u>55</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Sclerurus microcarpus</u>	<u>10</u>	_____	<u>OBL</u>	
3. <u>Hypochaeris radicata</u>	<u>12</u>	_____	<u>FACU</u>	
4. <u>Anthoxanthum odoratum</u>	<u>5</u>	_____	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
5. <u>Plantago lanceolata</u>	<u>4</u>	_____	<u>FACU</u>	
6. <u>Juncus effusus</u>	<u>3</u>	_____	<u>FACW</u>	
7. <u>Dactylis glomerata</u>	<u>8</u>	_____	<u>FACU</u>	
8. <u>Cirsium vulgare</u>	<u>1</u>	_____	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
9. <u>Ranunculus repens</u>	<u>1</u>	_____	<u>FAC</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
Woody Vine Stratum (Plot size: _____) <u>104</u> = Total Cover <u>52</u> <u>20%</u>				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
% Bare Ground in Herb Stratum <u>0</u> = Total Cover				
Remarks: <u>Vegetation moved.</u> <u>* Rubus ursinus not coded < 5% in stratum</u>				

SOIL

Sampling Point: TP52

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4	10YR 2/2	100					L	
4-10	2.5Y 3/3	85	5YR 3/3	15	C	PL	LS	
10-20	2.5Y 3/2	80	5YR 3/4	20	C	PL	VGr SL	
20-24	2.5Y 3/2	90	5YR 3/4	10	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☐ No ☒ Depth (inches): N/A
 Saturation Present? Yes ☐ No ☒ Depth (inches): N/A
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 53
 Investigator(s): J. Saler, J. Poll Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 30
 Subregion (LRR): A, MLRA - 4B Lat: 40.788386° Long: -124.155062 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)														
1. <u>Prunella virginiana</u>	<u>75</u>	<u>✓</u>	<u>FACW</u>															
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>															
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>) 1. <u>Rubus ursinus</u> <u>7</u> <u>✓</u> <u>FACW</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u>				Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>26</u></td> <td>x 1 = <u>26</u></td> </tr> <tr> <td>FACW species <u>44</u></td> <td>x 2 = <u>88</u></td> </tr> <tr> <td>FAC species <u>13</u></td> <td>x 3 = <u>39</u></td> </tr> <tr> <td>FACU species <u>96</u></td> <td>x 4 = <u>384</u></td> </tr> <tr> <td>UPL species <u> </u></td> <td>x 5 = <u> </u></td> </tr> <tr> <td>Column Totals: <u>179</u> (A)</td> <td><u>537</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>3.00</u>	Total % Cover of:	Multiply by:	OBL species <u>26</u>	x 1 = <u>26</u>	FACW species <u>44</u>	x 2 = <u>88</u>	FAC species <u>13</u>	x 3 = <u>39</u>	FACU species <u>96</u>	x 4 = <u>384</u>	UPL species <u> </u>	x 5 = <u> </u>	Column Totals: <u>179</u> (A)	<u>537</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>26</u>	x 1 = <u>26</u>																	
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FAC species <u>13</u>	x 3 = <u>39</u>																	
FACU species <u>96</u>	x 4 = <u>384</u>																	
UPL species <u> </u>	x 5 = <u> </u>																	
Column Totals: <u>179</u> (A)	<u>537</u> (B)																	
Herb Stratum (Plot size: <u>5 ft</u>) 1. <u>Juncus effusus</u> <u>40</u> <u>✓</u> <u>FACW</u> 2. <u>Scirpus microcarpus</u> <u>26</u> <u>✓</u> <u>OBL</u> 3. <u>Holcus lanatus</u> <u>1</u> <u> </u> <u>FAC</u> 4. <u>Equisetum telmateia</u> <u>4</u> <u> </u> <u>FACW</u> 5. <u>Anthriscus odoratum</u> <u>1</u> <u> </u> <u>FACU</u> 6. <u>Struthiopteris spicant</u> <u>8</u> <u> </u> <u>FAC</u> 7. <u>Dactylis glomerata</u> <u>13</u> <u> </u> <u>FACU</u> 8. <u>Athyrium filix-femina</u> <u>1</u> <u> </u> <u>FAC</u> 9. <u>Ranunculus repens</u> <u>3</u> <u> </u> <u>FAC</u> 10. <u> </u> 11. <u> </u>																		
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u>																		
% Bare Ground in Herb Stratum <u>10%</u> = Total Cover																		
Remarks:																		

SOIL

Sampling Point: TP 53

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 2/2	100	—	—	—	—	SMu	Buried Muck Concentration is illustrated organic matter
9-25	10YR 2/1	100	—	—	—	—	Mu	
25-30+	5Y 4/1	60	10YR 2/1	40	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☒ Thick Dark Surface (A12)
☒ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☒ Surface Water (A1)
☒ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A
 Water Table Present? Yes ☒ No ☐ Depth (inches): 11 in
 Saturation Present? Yes ☒ No ☐ Depth (inches): Surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 54
 Investigator(s): Sam Polky, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 120
 Subregion (LRR): A, MLRA-4B Lat: 40.788516 Long: -124.154993 Datum: WGS 84
 Soil Map Unit Name: 257 - Lepoil - Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
1. <u>Sequoia sempervirens</u>	<u>15</u>	<u>✓</u>	<u>NL</u>	
2. <u>Alnus rubra</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Thuja plicata</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	
4. <u> </u>				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>) 1. <u>Rubus ursinus</u> <u>1</u> <u> </u> <u>FACU</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u>				
Herb Stratum (Plot size: <u>5 ft</u>) 1. <u>Scirpus microcarpus</u> <u>50</u> <u>✓</u> <u>OBL</u> 2. <u>Hypochaeris radicata</u> <u>12</u> <u> </u> <u>FACU</u> 3. <u>Anthoxanthum odoratum</u> <u>10</u> <u> </u> <u>FACU</u> 4. <u>Equisetum arvense</u> <u>25</u> <u>✓</u> <u>FAC</u> 5. <u>Urtica dioica</u> <u>4</u> <u> </u> <u>FAC</u> 6. <u>Juncus effusus</u> <u>5</u> <u> </u> <u>FACW</u> 7. <u>Crocodylia x Crocodyliiflora</u> <u>5</u> <u> </u> <u>FAC</u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u>				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> 9. <u> </u> 10. <u> </u> 11. <u> </u>				
% Bare Ground in Herb Stratum <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <u> </u> X 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Remarks: <u>Rubus ursinus not considered dominant as there is less than 5% cover in stratum.</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

SOIL

Sampling Point: TP54

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100	5YR 3/4	20	C	PL	SL	
4-20	10YR 4/1	75	10YR 4/4	5	C	PL	SCL	
20-24	10Y 4/1	75	2.5Y 3/3	15	C	PL	SL	
			10YR 3/6	5	C	PL		
			2.5Y 2.5/1	5	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☒ Depleted Below Dark Surface (A11) ☒ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ High Water Table (A2) ☐ Salt Crust (B11)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☒ Oxidized Rhizospheres along Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Surface Soil Cracks (B6) ☐ Other (Explain in Remarks)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A
 Water Table Present? Yes _____ No ☒ Depth (inches): N/A
 Saturation Present? Yes _____ No ☒ Depth (inches): 21 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 55
 Investigator(s): Joseph Saler, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill Slope Local relief (concave, convex, none): None Slope (%): 90
 Subregion (LRR): A, MLRA-4B Lat: 40.788549 Long: -124.155000 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Thuja plicata</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>
2. <u>Amelanchier</u>	<u>3</u>	<u>✓</u>	<u>FAC</u>
3. <u>Ceanothus thyrsiflorus</u>	<u>6</u>	<u>✓</u>	<u>NL</u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover <u>19</u>			
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus ursinus</u>	<u>3</u>	<u>✓</u>	<u>FACU</u>
2. <u>Cotoneaster lacteus</u>	<u>5</u>	<u>✓</u>	<u>NL</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover <u>8</u>			
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Scirpus microcarpus</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>
2. <u>Equisetum arvense</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>
3. <u>Crocodylia x crocosmiflora</u>	<u>2</u>	<u> </u>	<u>FAC</u>
4. <u>Agrostis stolonifera</u>	<u>5</u>	<u> </u>	<u>FAC</u>
5. <u>Plantago lanceolata</u>	<u>7</u>	<u> </u>	<u>FACU</u>
6. <u>Holcus lanatus</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>
7. <u>Anthoxanthum odoratum</u>	<u>7</u>	<u> </u>	<u>FACU</u>
8. <u>Hypochaeris radicata</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>
9. <u>Festuca arundinacea</u>	<u>2</u>	<u> </u>	<u>FAC</u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover <u>78</u>			
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Hedera helix</u>	<u>1</u>	<u> </u>	<u>FACU</u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
= Total Cover <u>1</u>			
% Bare Ground in Herb Stratum <u>22</u>			

Remarks: Hedera helix not counted as dominant <5% in woody vine stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u> </u>	x 1 = <u> </u>
FACW species <u> </u>	x 2 = <u> </u>
FAC species <u> </u>	x 3 = <u> </u>
FACU species <u> </u>	x 4 = <u> </u>
UPL species <u> </u>	x 5 = <u> </u>
Column Totals: <u> </u> (A)	<u> </u> (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 5 - Wetland Non-Vascular Plants¹

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes No X

SOIL

Sampling Point: TP55

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 3/2	100	✓	✓	✓	✓	SL	fill-mixed rock + charcoal
9-20	10YR 3/2	80	✓	✓	✓	✓	CoSL	Burnt soil
✓	7.5YR 3/2	15	✓	✓	✓	✓	✓	✓
✓	10YR 2/1	5	✓	✓	✓	✓	✓	charcoal
20-24+	10YR 5/1	85	10YR 3/4	10	C	PL	SL	
✓	✓	✓	10YR 5/4	5	C	M	✓	
✓	✓	✓	✓	✓	✓	✓	✓	
✓	✓	✓	✓	✓	✓	✓	✓	
✓	✓	✓	✓	✓	✓	✓	✓	
✓	✓	✓	✓	✓	✓	✓	✓	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): <u>N/A</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 56
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hill Slope Local relief (concave, convex, none): None Slope (%): 70
 Subregion (LRR): A, MLRA-4B Lat: 40.788657 Long: -124.155006 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Thuja plicata</u>	<u>70</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
1. <u>Gaultheria shallon</u>	<u>1</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Rubus ursinus</u>	<u>7</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Coreaster luteus</u>	<u>1</u>	<u> </u>	<u>NL</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Herb Stratum (Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Anthoxanthum odoratum</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	
2. <u>Hypochaeris radicata</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>	
3. <u>Dactylis glomerata</u>	<u>4</u>	<u>✓</u>	<u>FACU</u>	
4. <u>Agrostis stolonifera</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Scirpus microcarpus</u>	<u>9</u>	<u> </u>	<u>OBL</u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
6. <u>Equisetum arvense</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
7. <u>Vicia sativa</u>	<u>1</u>	<u> </u>	<u>UPL</u>	
8. <u>Holcus lanatus</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
9. <u>Stachys ajacoides var. rigida</u>	<u>1</u>	<u> </u>	<u>OBL</u>	
10. <u>Juncus effusus</u>	<u>1</u>	<u> </u>	<u>FACW</u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
11. <u>Pteridium aquilinum</u>	<u>5</u>	<u> </u>	<u>FACU</u>	
Woody Vine Stratum (Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>6</u>	<u> </u>	<u>FACU</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
% Bare Ground in Herb Stratum <u>5%</u>	<u>6</u>	<u> </u>	<u> </u>	
Remarks:				

SOIL

Sampling Point: TP56

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	100	/	/	/	/	SL	Roots abundant
8-24+	2.5Y 3/2	100	/	/	/	/	GrSL	fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): N/A

Water Table Present? Yes _____ No X Depth (inches): N/A

Saturation Present? Yes _____ No X Depth (inches): N/A
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP57
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 70
 Subregion (LRR): A, MLRA-4B Lat: 40.788694° Long: -124.155001 Datum: NAD83
 Soil Map Unit Name: 257 - Lepoint - Candy Mtn. complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Thuja plicata</u>	<u>50</u>	<u>✓</u>	<u>FAC</u>
2. _____			
3. _____			
4. _____			
<u>50</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus ursinus</u>	<u>2</u>		<u>FACU</u>
2. _____			
3. _____			
4. _____			
5. _____			
<u>2</u> = Total Cover			
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juncus effusus</u>	<u>28</u>	<u>✓</u>	<u>FACW</u>
2. <u>Stachys albuginea</u>	<u>3</u>		<u>OBL</u>
3. <u>Plantago lanceolata</u>	<u>4</u>		<u>FACU</u>
4. <u>Holcus lanatus</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>
5. <u>Scirpus microcarpus</u>	<u>5</u>		<u>OBL</u>
6. <u>Equisetum arvense</u>	<u>10</u>		<u>FAC</u>
7. <u>Arthoxanthum odoratum</u>	<u>4</u>		<u>FACU</u>
8. <u>Athyrium filix-femina</u>	<u>3</u>		<u>FAC</u>
9. <u>Ranunculus repens</u>	<u>3</u>		<u>FAC</u>
10. <u>Dactylis glomerata</u>	<u>2</u>		<u>FACU</u>
11. _____			
<u>102</u> = Total Cover <u>51</u> <u>20.4</u>			
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
_____ = Total Cover			
% Bare Ground in Herb Stratum <u>0</u>			
Remarks: <u>Rubus ursinus not counted as dominant, <5% cover in shrub stratum.</u>			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____
Prevalence Index = B/A = _____	

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes X No _____

SOIL

Sampling Point: 57

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/2	100					MyS	
6-10	2.5Y 3/2	100					SL	
10-24	5Y 4/1	95	7.5YR 3/4	5	C	PL	SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input checked="" type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☒ No ☐ Depth (inches): 11.5 in

Saturation Present? Yes ☒ No ☐ Depth (inches): 1 in

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP58
 Investigator(s): Joseph Sater, Sam Polly Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 75
 Subregion (LRR): A, MLRA-4B Lat: 40.788919° Long: -124.154888 Datum: WGS 84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
= Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Rubus ursinus</u> <u>5</u> <u>✓</u> <u>FACU</u> 2. <u> </u> <u> </u> <u> </u> <u> </u> 3. <u> </u> <u> </u> <u> </u> <u> </u> 4. <u> </u> <u> </u> <u> </u> <u> </u> 5. <u> </u> <u> </u> <u> </u> <u> </u>				
= Total Cover				
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Anthoxanthum odoratum</u> <u>50</u> <u>✓</u> <u>FACU</u> 2. <u>Plantago lanceolata</u> <u>4</u> <u> </u> <u>FACU</u> 3. <u>Dactylis glomerata</u> <u>3</u> <u> </u> <u>FACU</u> 4. <u>Phytolacca aquilinum</u> <u>25</u> <u>✓</u> <u>FACU</u> 5. <u>Festuca ovina</u> <u>25</u> <u>✓</u> <u>FAC</u> 6. <u>Hypochaeris radicata</u> <u>3</u> <u> </u> <u>FACU</u> 7. <u> </u> <u> </u> <u> </u> <u> </u> 8. <u> </u> <u> </u> <u> </u> <u> </u> 9. <u> </u> <u> </u> <u> </u> <u> </u> 10. <u> </u> <u> </u> <u> </u> <u> </u> 11. <u> </u> <u> </u> <u> </u> <u> </u>				
= Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> <u> </u> <u> </u> <u> </u> 2. <u> </u> <u> </u> <u> </u> <u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum <u>0</u> = Total Cover <u>55/22</u>				
Remarks:				

Sampling Point: 58

HYDROLOGY

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)
---	--	--

Field Observations:			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>		
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>		
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 59
 Investigator(s): Joseph Saler, Sam Pally Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 80
 Subregion (LRR): A, MLRA-4B Lat: 40.788925° Long: -124.154947° Datum: WGS 84
 Soil Map Unit Name: 257-Lepail-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
1. <u>Alnus rubra</u>	<u>8</u>	<u>✓</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5ft</u>) 1. <u>Rubus ursinus</u> <u>17</u> <u>✓</u> <u>FACU</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u>				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>) 1. <u>Scirpus microcarpus</u> <u>20</u> <u> </u> <u>OBL</u> 2. <u>Pteridium aquilinum</u> <u>35</u> <u>✓</u> <u>FACU</u> 3. <u>Holcus lanatus</u> <u>5</u> <u> </u> <u>FAC</u> 4. <u>Equisetum arvense</u> <u>20</u> <u> </u> <u>FAC</u> 5. <u>Arthrocnemum ovatum</u> <u>3</u> <u> </u> <u>FACU</u> 6. <u>Dactylis glomerata</u> <u>15</u> <u> </u> <u>FACU</u> 7. <u>Crocodymia x crocosmiflora</u> <u>4</u> <u> </u> <u>FAC</u> 8. <u>Stachys argyroides</u> <u>2</u> <u> </u> <u>OBL</u> 9. <u>Agrostis stolonifera</u> <u>2</u> <u> </u> <u>FAC</u> 10. <u> </u> 11. <u> </u>				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> % Bare Ground in Herb Stratum <u>0</u> <u> </u> = Total Cover <u>53</u> <u>2.2</u>				
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>				
Remarks:				

SOIL

Sampling Point: TP59

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/1	100					SL	
5-20	2.5Y 4/4	77	10YR 4/4	20	C	PL	SL	
			5YR 3/4	3	C	M		
20-24	10YR 4/2	85	10YR 4/6	15	C	M	ExGr SL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No AAD reaction

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <u>X</u> Depth (inches): <u>N/A</u></p> <p>Water Table Present? Yes _____ No <u>X</u> Depth (inches): <u>N/A</u></p> <p>Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>5 in</u></p> <p>(includes capillary fringe)</p> <p>Wetland Hydrology Present? Yes <u>X</u> No _____</p>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 60
 Investigator(s): Sam Polly, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 15
 Subregion (LRR): A, MLRA-4B Lat: 40.789203 Long: -124.154893 Datum: WGS 84
 Soil Map Unit Name: 257-1epoil-Candy Mtn. Complex, 2-15% slopes NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	
2. <u>Salix lasiolepis</u>	<u>5</u>	<u> </u>	<u>FACW</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. <u>Picea sitchensis</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
4. <u>Pseudotsuga menziesii</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
	<u>41</u>	= Total Cover <u>28.2</u>		
Sapling/Shrub Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Ceanothus leucodermis</u>	<u>2</u>	<u>✓</u>	<u>NL</u>	
2. <u>Coronaster laevis</u>	<u>1</u>	<u> </u>	<u>NL</u>	OBL species <u>50</u> x 1 = <u>50</u>
3. <u>Rubus ursinus</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>	FACW species <u>38</u> x 2 = <u>76</u>
4. <u>Rubus armeniacus</u>	<u>1</u>	<u> </u>	<u>FAC</u>	FAC species <u>21</u> x 3 = <u>63</u>
5. <u> </u>	<u>9</u>	<u> </u>	<u> </u>	FACU species <u>13</u> x 4 = <u>52</u>
	<u>9</u>	= Total Cover <u>17.8</u>		UPL species <u>28</u> x 5 = <u>140</u>
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals: <u>150</u> (A) <u>381</u> (B)
1. <u>Scirpus microcarpus</u>	<u>40</u>	<u>✓</u>	<u>OBL</u>	Prevalence Index = B/A = <u>2.54</u>
2. <u>Dactylis glomerata</u>	<u>7</u>	<u> </u>	<u>FACU</u>	
3. <u>Stachys latifolia</u>	<u>10</u>	<u> </u>	<u>OBL</u>	
4. <u>Juncus effusus</u>	<u>25</u>	<u>✓</u>	<u>FACW</u>	
5. <u>Equisetum telmateia</u>	<u>8</u>	<u> </u>	<u>FACW</u>	
6. <u>Holcus lanatus</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
7. <u>Crocasmia xrocasmiflora</u>	<u>8</u>	<u> </u>	<u>FAC</u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11. <u> </u>	<u>100</u>	= Total Cover <u>50</u>		
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2 - Dominance Test is >50%
	<u> </u>	<u> </u>	<u> </u>	<u>X</u> 3 - Prevalence Index is ≤3.0 ¹
	<u> </u>	<u> </u>	<u> </u>	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	<u> </u>	<u> </u>	<u> </u>	5 - Wetland Non-Vascular Plants ¹
	<u> </u>	<u> </u>	<u> </u>	Problematic Hydrophytic Vegetation ¹ (Explain)
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum <u>0</u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
Remarks:				

Sampling Point: TP 60

HYDROLOGY

Wetland Hydrology Indicators:Western Mountains, Valleys, and Coast – Version 2.0

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/22/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 61
 Investigator(s): Sam Polly, Joseph Solar Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 40
 Subregion (LRR): A, MLRA 4B Lat: 40.789175° Long: -124.154840 Datum: WGS84
 Soil Map Unit Name: 257-Lepoil-Candy Mtn. Complex, 2-15% slope NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Sequoia sempervirens</u>	<u>30</u>	<u>✓</u>	<u>NL</u>	
2. <u>Picea sitchensis</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u>Pseudotsuga menziesii</u>	<u>5</u>		<u>FACU</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40%</u> (A/B)
4. <u> </u>	<u>50</u>			
= Total Cover <u>25%</u>				
Sapling/Shrub Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Gaultheria shallon</u>	<u>5</u>		<u>FACU</u>	
2. <u>Cotoneaster lacteus</u>	<u>25</u>	<u>✓</u>	<u>NL</u>	OBL species <u> </u> x 1 = <u> </u>
3. <u>Ilex aquifolium</u>	<u>8</u>		<u>FACU</u>	FACW species <u> </u> x 2 = <u> </u>
4. <u>Geistmannia persulcata</u>	<u>5</u>		<u>NL</u>	FAC species <u> </u> x 3 = <u> </u>
5. <u> </u>	<u>43</u>			FACU species <u> </u> x 4 = <u> </u>
= Total Cover <u>25%</u>				UPL species <u> </u> x 5 = <u> </u>
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Column Totals: <u> </u> (A) <u> </u> (B)
1. <u>Crocodylia x crocodylora</u>	<u>50</u>	<u>✓</u>	<u>FAC</u>	Prevalence Index = B/A = <u> </u>
2. <u>Sagittaria microcarpa</u>	<u>8</u>		<u>OBL</u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Pteridium aquilinum</u>	<u>10</u>		<u>FACU</u>	
4. <u>Equisetum telmateia</u>	<u>5</u>		<u>FACW</u>	
5. <u>Arthrocnemum odoratum</u>	<u>2</u>		<u>FACU</u>	
6. <u>Holcus lanatus</u>	<u>2</u>		<u>FAC</u>	
7. <u>Dactylis glomerata</u>	<u>10</u>		<u>FACU</u>	
8. <u>Prosopis smithii</u>	<u>2</u>		<u>NL</u>	
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
= Total Cover <u>44%</u>				
Woody Vine Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Hedera helix</u>	<u>8</u>	<u>✓</u>	<u>FACU</u>	
2. <u> </u>	<u>8</u>			
= Total Cover <u>15%</u>				
% Bare Ground in Herb Stratum <u>15%</u>				
Remarks:				

SOIL

Sampling Point: TP 61

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/2	100					SL	Dense roots
12-20	2.5Y 4/1	90	10YR 3/4	10	C	PL	SL	
20-24	5B 6/1	90	7.5YR 4/6	10	C	PL	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☒ Drainage Patterns (B10)
- ☒ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): NA

Water Table Present? Yes _____ No X Depth (inches): 23 in

Saturation Present? Yes _____ No X Depth (inches): 12.5

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP62
 Investigator(s): Joseph Suler, Cindy Wilcox Section, Township, Range: NW 1/4 Sec 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): lawn area Local relief (concave, convex, none): none Slope (%): 10
 Subregion (LRR): A, MLRA-4B Lat: 40.789409° Long: -124.154938° Datum: WGS84
 Soil Map Unit Name: Z12-Urban Land-Halfbluff-Redsands Complex, 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: <u>Vegetation regularly mowed, lawn conditions.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species: _____ x 1 = _____ FACW species: _____ x 2 = _____ FAC species: _____ x 3 = _____ FACU species: _____ x 4 = _____ UPL species: _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5 ft</u>)				
1. <u>Scirpus microcarpus</u>	<u>40</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Ranunculus repens</u>	<u>22</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Juncus phaeocephalus</u>	<u>1</u>		<u>FACW</u>	
4. <u>Agrostis hyemalis</u>	<u>32</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Holcus lanatus</u>	<u>4</u>		<u>FAC</u>	
6. <u>Juncus bitoris</u>	<u>1</u>		<u>FACW</u>	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
<u>100</u> = Total Cover <u>50%</u>				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: <u>Mowed lawn</u>				

SOIL

Sampling Point: TP62

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/2	100					SCL	fill w/charcoal
2-24+	10YR 2/2	75	7.5YR 4/6	15	C	M	SL	w/occasional gravel
	10GY 5/1	10						- Inclusions of sandy fill

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input checked="" type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): N/A

Water Table Present? Yes ☐ No ☒ Depth (inches): 17 in

Saturation Present? Yes ☒ No ☐ Depth (inches): 2 in

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP63
 Investigator(s): Joseph Saler, Cindy Wilcox Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): lawn area Local relief (concave, convex, none): None Slope (%): 10
 Subregion (LRR): A, MLRA-4B Lat: 40.789448° Long: -124.154949° Datum: WGS84
 Soil Map Unit Name: 212-UrbanLand-Halfbluff-Redsands Complex, 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
= Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
= Total Cover				
Herb Stratum (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Scirpus microcarpus</u>	<u>12</u>	<u> </u>	<u>OBL</u>	
2. <u>Ranunculus repens</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Agrostis stolonifera</u>	<u>49</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Tridacium repens</u>	<u>15</u>	<u> </u>	<u>FAC</u>	
5. <u>Lolus corniculatus</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
6. <u>Equisetum arvense</u>	<u>1</u>	<u> </u>	<u>FAC</u>	
7. <u>Hibiscus tanacetifolius</u>	<u>2</u>	<u> </u>	<u>FAC</u>	
8. <u>Bellis perenne</u>	<u>1</u>	<u> </u>	<u>NL</u>	
9. <u> </u>				
10. <u> </u>				
11. <u> </u>				
<u>100</u> = Total Cover <u>50/20</u>				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
= Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: <u>Mowed lawn</u>				

SOIL

Sampling Point: **TP63**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	100					SL	
4-16	10YR 3/2	80					LS	fill, mixed
	10YR 6/8	5						
	7.5YR 5/6	2						
	10YR 2/2	1						
	10YR 6/6	12						with charcoal
16-24*	10YR 4/1	75	7.5YR 5/8	25	C	M	LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): N/A

Water Table Present? Yes _____ No ☒ Depth (inches): N/A

Saturation Present? Yes _____ No ☒ Depth (inches): N/A

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP 64
 Investigator(s): Cindy Wilcox, Joseph Saler Section, Township, Range: NW 1/4 Sec. 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): Athletic field Local relief (concave, convex, none): None Slope (%): 0-1
 Subregion (LRR): A MLRA-4B Lat: 40.789933° Long: -124.154748 Datum: WGS 84
 Soil Map Unit Name: 212- Urban Land - Halfbluff - Redsands Complex, 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks: <u>Mowed lawn ~ 10 ft N of softball dugout</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Ranunculus repens</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Scirpus microcarpus</u>	<u>2</u>		<u>OBL</u>	
3. <u>Belis perenne</u>	<u>2</u>		<u>NL</u>	
4. <u>Agrostis stolonifera</u>	<u>35</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Prunella vulgaris</u>	<u>10</u>		<u>FACU</u>	
6. <u>Holcus lanatus</u>	<u>7</u>		<u>FAC</u>	
7. <u>Plantago major</u>	<u>4</u>		<u>FAC</u>	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover <u>50</u>				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: <u>Vegetation regularly mowed</u>				

Sampling Point: TP 64

HYDROLOGY

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input checked="" type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost-Heave Hummocks (D7)
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Surface Water Present? Yes _____ No X Depth (inches): N/A
 Water Table Present? Yes _____ No X Depth (inches): 20 in
 Saturation Present? Yes X No _____ Depth (inches): 7 in
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Albee Stadium City/County: Eureka Sampling Date: 9/24/20
 Applicant/Owner: Eureka City Schools State: CA Sampling Point: TP65
 Investigator(s): Joseph sober, Cindy Wilcox Section, Township, Range: NW 1/4 Sec 25, T4N, R1W, HBM
 Landform (hillslope, terrace, etc.): lawn area Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): A, MLRA - 4B Lat: 40.789992° Long: -124.154710° Datum: WGS84
 Soil Map Unit Name: 212- Urban Land - Halfbluff-Redsands Complex 0-5% NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u>Pinus radiata</u>	<u>60</u>	<u>✓</u>	<u>NL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Hypochaeris radicata</u>	<u>10</u>	<u> </u>	<u>FACU</u>	
2. <u>Ranunculus repens</u>	<u>8</u>	<u> </u>	<u>FAC</u>	
3. <u>Horus lanatus</u>	<u>12</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Tritolium repens</u>	<u>10</u>	<u> </u>	<u>FAC</u>	
5. <u>Prunella vulgaris</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	
6. <u>Medicago polymorpha</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
7. <u>Sisyrinchium microcephalus</u>	<u>3</u>	<u> </u>	<u>OBL</u>	
8. <u>Lactuca officinale</u>	<u>1</u>	<u> </u>	<u>FACU</u>	
9. <u>Bellis perenne</u>	<u>2</u>	<u> </u>	<u>NL</u>	
10. <u>Festuca arundinacea</u>	<u>5</u>	<u> </u>	<u>FAC</u>	
11. <u>Agrostis stolonifera</u>	<u>33</u>	<u>✓</u>	<u>FAC</u>	
<u>100</u> = Total Cover <u>50</u>				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>				
Remarks: <u>Mowed lawn</u>				

SOIL

Sampling Point: TP65

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					SL	Fill, mixed Black
6-24	10YR 4/2	72	7.5YR 5/8	1	C	M	LS	
	5B 6 5/2	2						
	Charcoal	5						
	10YR 6/8	20						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>
Saturation Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): <u>N/A</u>

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project: Albee StadiumDate: 8/19/20Location: Eureka, CAInvestigator(s): Joseph Siler**Project Description:**

Upgrade existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

stream drains wetland along the eastern side of the baseball field. Man-made feature constructed when ball field was constructed.

- No flowing water present at time of site visit (8/19/20)

Off-site Information

Remotely sensed image(s) acquired? ☐ Yes ☒ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☒ No [If yes, attach information to datasheet(s) and describe below.] Description:

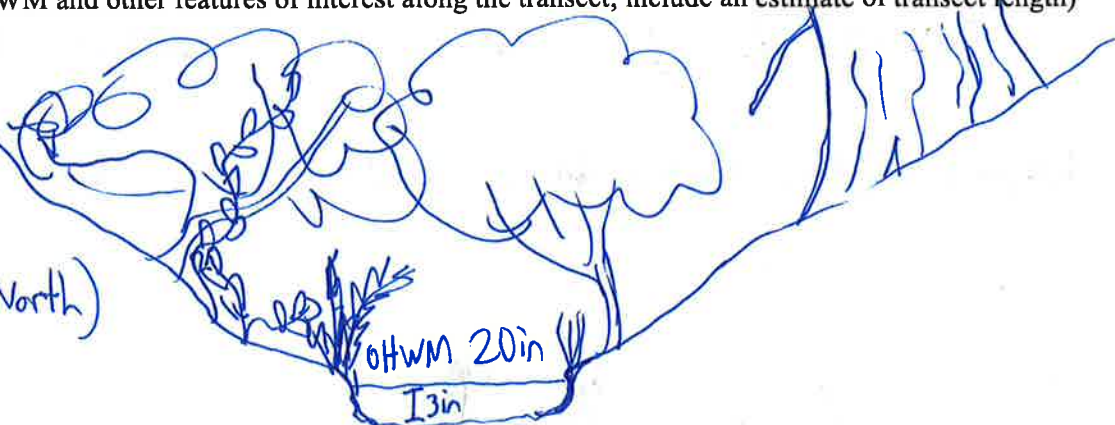
List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)

← Ball field.

Looking
downstream (North)



Break in Slope at OHWM: ☐ Sharp ($> 60^\circ$) | ☒ Moderate ($30-60^\circ$) | ☐ Gentle ($< 30^\circ$) | ☐ None

Notes/Description:

Small incised channel with moderately sloping banks down to OHWM with is near vertical below.

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	50	50	0	0	0	Y
Below OHWM	40	60				N

Notes/Description:

Entire area is built on fill, is not native soil situation, however soil horizons have developed above the OHWM

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	50	50	100	0 (litter)
Below OHWM	50	40	0	100

Notes/Description:

Trees and shrubs over hang small stream. No herbaceous vegetation was observed below the OHWM.

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- Drift/wrack
- Knick point
- Erosion /scar
- Litter removal
- Silt deposit
- water staining

Project: Albee StadiumDate: 8/24/2020Location: Eureka, CAInvestigator(s): Jesse Laker, Sam Polly

Project Description:

Upgrade existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

Perennial stream with substantial summer flow.
Stream daylight approx. 18 ft south of OHWM, within steep channel
likely created by collapse of culvert (pieces still present) and subsequent
erosion.

Off-site Information

Remotely sensed image(s) acquired? ☐ Yes ☒ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☒ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☐ Sharp ($> 60^\circ$) | ☒ Moderate ($30-60^\circ$) | ☒ Gentle ($< 30^\circ$) | ☐ None

Notes/Description:

Moderate to sharp break in slope on left bank, gentle on right bank

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	5	95	0	0	0	N
Below OHWM	5	85	10	0	0	N

Notes/Description:

Highly disturbed, collapsed culvert

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	30	100	10	0
Below OHWM	30	0	0	100

Notes/Description:

Tree canopy extends over stream, shrub cover extremely dense along eroded bank.

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- Drift/wrack
- Erosion/scar
- Bank undercutting
- Water staining
- Litter removal
- Silt deposit
- Shelving

Project: Albee StadiumDate: 9/14/20Location: Eureka, CAInvestigator(s): Joseph Saler

Project Description:

Upgrade existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

- Stream drains western side of baseball field
- feature likely created when baseball field was filled and constructed.
- sandy bluff soil easily eroded, water flowing in September

Off-site Information

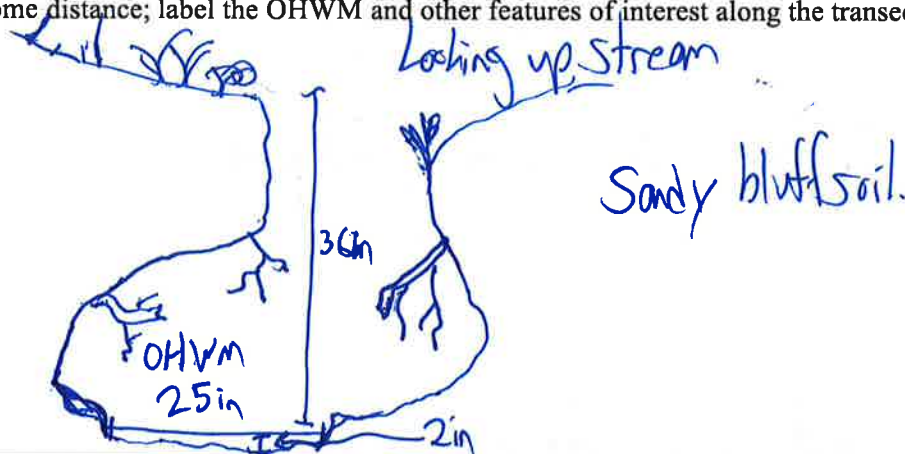
Remotely sensed image(s) acquired? ☐ Yes ☒ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☒ Yes ☒ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☒ Sharp ($> 60^\circ$) | ☐ Moderate ($30-60^\circ$) | ☐ Gentle ($< 30^\circ$) | ☐ None

Notes/Description:

OHWM within deeply incised channel. OHWM has sharp break in slope within deeply incised channel.

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	29	70	1	0	0	Y
Below OHWM	4	73	23	0	0	N

Notes/Description:

Abundant organic material above OHWM.

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	75	50	3	97
Below OHWM	50	0	0	100

Notes/Description:

No Vegetation below OHWM, except overhanging tree cover

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- knick point
- Drift/wrack
- Root exposure
- Bank undercutting
- Litter removal
- silt deposit

Project: Albee StadiumDate: 9/14/20Location: Eureka, CAInvestigator(s): Joseph L. Siler

Project Description:

Upgrade existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

- Stream drains western side of baseball field
- Excavated channel with naturalized conditions.

Off-site Information

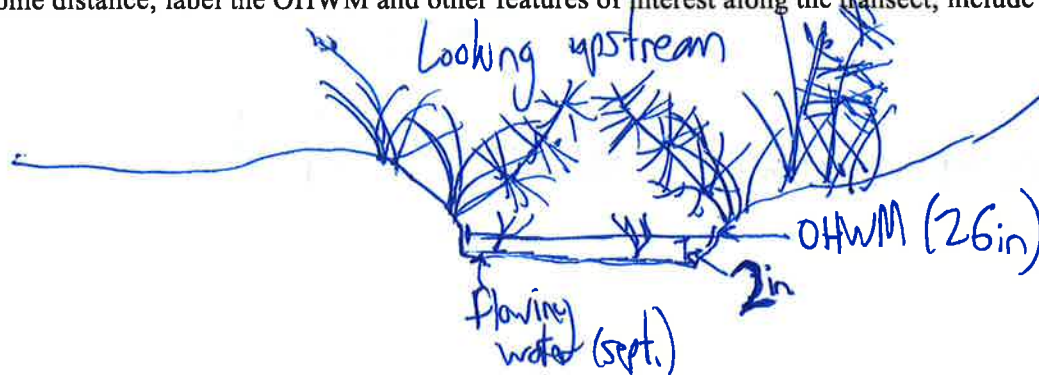
Remotely sensed image(s) acquired? ☐ Yes ☐ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☐ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☐ Sharp ($> 60^\circ$) | ☐ Moderate ($30-60^\circ$) | ☒ Gentle ($< 30^\circ$) | ☐ None

Notes/Description:

Artificial conditions, excavated linear drainage feature with naturalized conditions

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	40	60	0	0	0	Y
Below OHWM	10	87	3	0	0	N

Notes/Description:

Excavated channel, sediment deposited.

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	75%	2	100	0
Below OHWM	75%	0	50%	50%

Notes/Description:

Herbaceous vegetation extends over the OHWM, however little herbaceous veg rooted below the OHWM. Tree canopy extends over stream

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- flowing water
- Erosion/scour
- water staining
- litter removal
- silt deposit
- Drift/wrack

Project: Abree StadiumDate: 9/15/20Location: Eureka, CAInvestigator(s): Joseph Saler, Sam Pilly

Project Description:

Upgrade existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

- Stream drains hillside wetland and spring.
- Natural conditions present.
- Water flowing at time of site visit (9/15/20)

Off-site Information

Remotely sensed image(s) acquired? ☐ Yes ☐ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☐ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☐ Sharp ($> 60^\circ$) | ☐ Moderate ($30-60^\circ$) | ☒ Gentle ($< 30^\circ$) | ☐ None

Notes/Description: Incised channel with flat bottom. Steep gradient

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	40	55	5	0	0	Y
Below OHWM	20	70	10	0	0	N

Notes/Description:

Lots of organic debris above OHWM
Organic debris present below OHWM on surface

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	10 *	100 *	50	50%
Below OHWM	10 *	100 *	0	100

Notes/Description:

* Overhanging small stream

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- Drift/wrack
- Erosion Scar
- Bank undercutting
- Root exposure
- Litter removal
- Silt deposit

Project: Albee StadiumDate: September 23, 2020Location: Eureka CAInvestigator(s): Joseph Sailer, Cindy Wilcox**Project Description:**

Upgrade Existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

- Drains to culvert that flows under athletic facilities.
- Stream spits approximately 20ft upstream from OHWM delineation.

Off-site Information

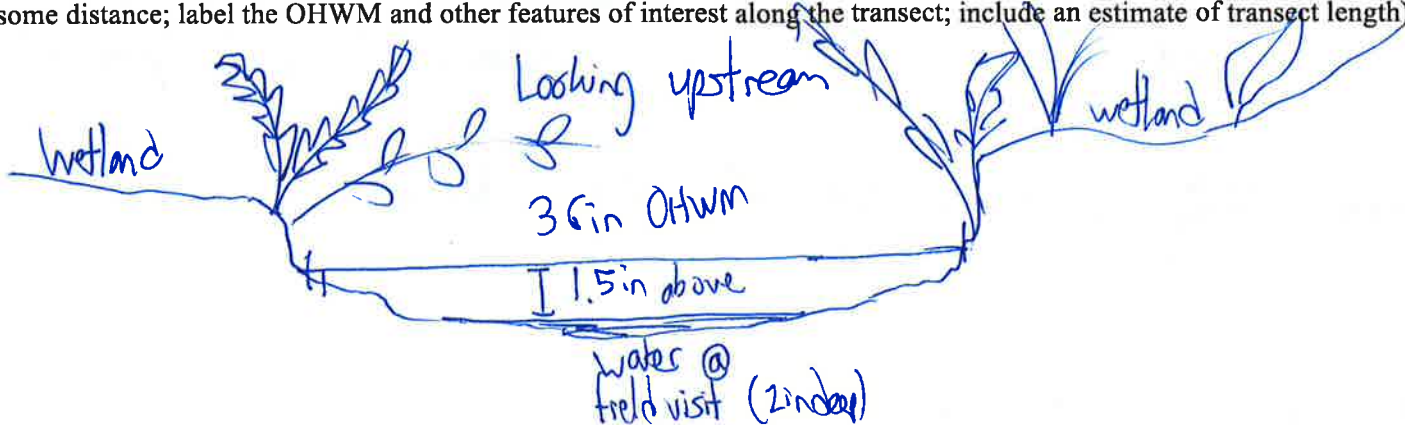
Remotely sensed image(s) acquired? ☐ Yes ☐ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☐ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☐ Sharp ($> 60^\circ$) | ☒ Moderate ($30-60^\circ$) | ☐ Gentle ($< 30^\circ$) | ☐ None

Notes/Description:

Sediment deposits below OHWM, slope eroded at OHWM.

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	90 Muck	10	0	0	0	Y
Below OHWM	2	98	0	0	0	N

Notes/Description:

* Above OHWM High organic content and Muck reflecting surrounding wetland conditions
 * Below OHWM Sand with ~~little~~ No organics

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	25	75	85	15 %
Below OHWM	25	73	20	100 %

Notes/Description:

Trees overhang small stream
 Shrubs overhang small stream, no shrubs rooted below OHWM

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- Drift/wrack
- Erosion/scar
- Bank undercutting (immediately upstream of OHWM delineation)
- Litter removal
- Shelving

Project: Albee stadiumDate: 9/21/20Location: Eureka, CAInvestigator(s): SP/JS**Project Description:**

Upgrade existing athletic facilities with existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

Cross section performed immediately above culvert
~50' above shower house in good shape &
relatively undisturbed in dense vegetation

Off-site Information

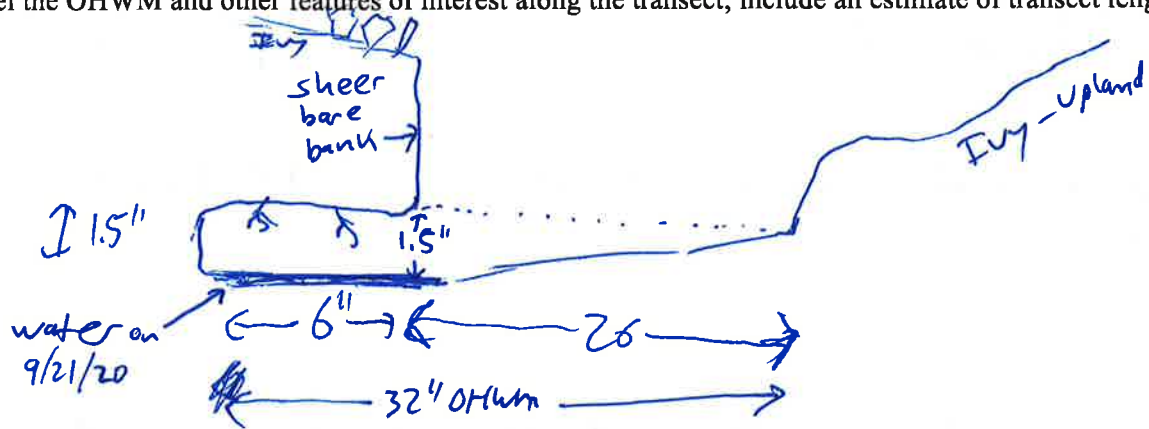
Remotely sensed image(s) acquired? ☐ Yes ☒ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☒ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☒ Sharp ($> 60^\circ$) | ☐ Moderate ($30-60^\circ$) | ☐ Gentle ($< 30^\circ$) | ☐ None

Notes/Description: Undercut bank is lowest portion of stream channel w/ flow

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	35	60	5	0	0	Y
Below OHWM	8	82	10	0	0	N

Notes/Description: Very sandy channel (below OHWM)
Higher OM above OHWM

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	70	0	100	0
Below OHWM	70	0	0	100

Notes/Description:

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- scour & incision/erosion
- bank undercutting
- root exposure
- silt deposit
- litter removal

Project: Albee StadiumDate: 9/24/20Location: Eureka CAInvestigator(s): Joseph Saler**Project Description:**

Upgrade existing athletic facilities within existing footprint

Describe the river or stream's condition (disturbances, in-stream structures, etc.):

Upstream from Athletic facilities. Perennial stream, moderately incised flowing through dense vegetation.
An eroded check dam exists 100 ft upstream of OHWM transect.

Off-site Information

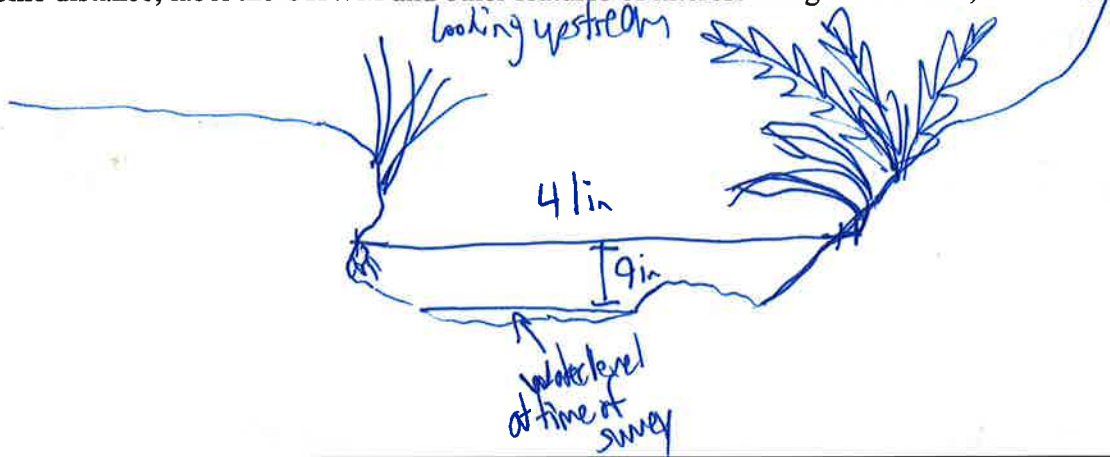
Remotely sensed image(s) acquired? ☐ Yes ☒ No [If yes, attach image(s) to datasheet(s) and indicate approx. locations of transects, OHWM, and any other features of interest on the image(s); describe below] Description:

Hydrologic/hydraulic information acquired? ☐ Yes ☒ No [If yes, attach information to datasheet(s) and describe below.] Description:

List and describe any other supporting information received/acquired:

Instructions: Complete one cover sheet and one or more datasheets for each project site. Each datasheet should capture the dominant characteristics of the OHWM along some length of a given stream. Complete enough datasheets to adequately document up- and/or downstream variability in OHWM indicators, stream conditions, etc. Transect locations can be marked on a recent aerial image or their GPS coordinates noted on the datasheet.

Transect (cross-section) drawing: (choose a location that is representative of the dominant stream characteristics over some distance; label the OHWM and other features of interest along the transect; include an estimate of transect length)



Break in Slope at OHWM: ☐ Sharp ($> 60^\circ$) | ☒ Moderate ($30-60^\circ$) | ☐ Gentle ($< 30^\circ$) | ☐ None

Notes/Description:

- Undercut bank on left, OHWM at top of undercut.
- Slight beach on right bank at OHWM

Sediment Texture: Estimate percentages to describe the general sediment texture above and below the OHWM

	Clay/Silt <0.05mm	Sand 0.05 – 2mm	Gravel 2mm – 1cm	Cobbles 1 – 10cm	Boulders >10cm	Developed Soil Horizons (Y/N)
Above OHWM	40	60	0	0	0	Y
Below OHWM	3	97	0	0	0	N

Notes/Description:

- Lots of roots / organic matter above OHWM
- Sandy soils below.

Vegetation: Estimate absolute percent cover to describe general vegetation characteristics above and below the OHWM

	Tree (%)	Shrub (%)	Herb (%)	Bare (%)
Above OHWM	30	30	50	50
Below OHWM	30	30	0	100

Notes/Description:

- Trees overhang stream
- Shrubs overhang stream

Other Evidence: List/describe any additional field evidence and/or lines of reasoning used to support your delineation

- Drift / wrack
- Erosion / scour
- Bank undercutting
- Root exposure
- Point/bar
- Water staining
- Litter removal
- Silt deposit

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

