

# LS POWER GRID CALIFORNIA, LLC

# COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT TERRESTRIAL BIOLOGICAL RESOURCES TECHNICAL REPORT

**SEPTEMBER 2025** 

PREPARED FOR:



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#### **LIST OF ATTACHMENTS**

Attachment A: Collinsville Terrestrial Biological Resources Technical Report Addendum

Attachment B: Collinsville 500/230 Kilovolt Substation Project Aquatic Resources

**Delineation Report** 

Attachment C: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report Attachment D: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report Addendum

Attachment E: Biological Resources Map

Attachment F: Habitat Assessment Photographs

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Attachment K: Potentially Jurisdictional Water Features Table

Attachment L: National Wetlands Inventory Map

## 1 - INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct a pre-project survey for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). The Proposed Project would involve the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that will loop Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that will connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project's general location is depicted in Figure 1: Project Overview Map and the Proposed Project components located within the survey area associated with this report are depicted in Figure 2: Project Components Map. The Proposed Project has been designed to address overloads on the existing Contra Costa-Newark 230 kV corridor and provide an additional supply into the northern greater San Francisco Bay Area to increase reliability to the area and advance additional renewable generation.

This Biological Resources Technical Report was prepared to identify any existing or potentially sensitive biological resources. (e.g., vegetation communities, hydrologic features, and special-status plant and animal species and their associated habitats) that may be present within or adjacent to the Proposed Project's survey area.<sup>1</sup>

## 2 - PROJECT DESCRIPTION

#### 2.0 PROJECT LOCATION

As depicted in Figure 2: Project Components Map, the Collinsville Substation will be near the unincorporated community of Collinsville, located in the southwestern portion of Solano County. The survey area is bordered on the south and southwest by the Sacramento River, where it debouches into the Suisun Bay; on the west by the Montezuma Hills and Suisun Marsh; and to the north and east by agricultural lands. The Proposed Project will create a connection to the existing Pittsburg Substation located in the City of Pittsburg in the northern portion of Contra Costa County.

#### 2.1 PROJECT COMPONENTS

The main components of the Proposed Project are depicted on Figure 2: Project Components Map and include the following:

 Constructing a new 500/230 kV substation (the proposed LSPGC Collinsville Substation).

<sup>&</sup>lt;sup>1</sup> The survey area primarily consists of all terrestrial areas of the Proposed Project area north of the Sacramento River, as well as an approximately 10-acre buffer. Terrestrial areas south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation, comprise a small portion of the survey area.

- Constructing two new approximately 1.2-mile-long, single-circuit 500 kV transmission line segments extending to interconnect (or "loop") PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation.
- Constructing a new approximately 6-mile-long, double-circuit 230 kV transmission line to connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation.
- Extending and connecting PG&E's existing 12 kV Peabody 2107 Circuit distribution line to the proposed LSPGC Collinsville Substation.
- Constructing two new telecommunications paths to the proposed LSPGC Collinsville Substation, including a new microwave tower that would be constructed and owned by PG&E at the proposed substation, as well as a new fiber optic path consisting of two fiber optic cables for redundancy that would be installed between existing fiber in the city of Pittsburg and the proposed substation.
- Constructing three new PG&E 500 kV transposition structures, removing two existing lattice steel poles (LSPs), and replacing two existing lattice steel towers with two new three-pole dead-end tubular steel poles along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line.

All biological resource studies, including an assessment of any additional regulatory framework, associated with the PG&E 500 kV transposition structures are documented in Attachment A: Collinsville Terrestrial Biological Resources Technical Report Addendum. As a result, they are not discussed further in this report. The transposition structures are depicted on Figure 1: Project Overview Map and Figure 2: Project Components Map to provide regional context.

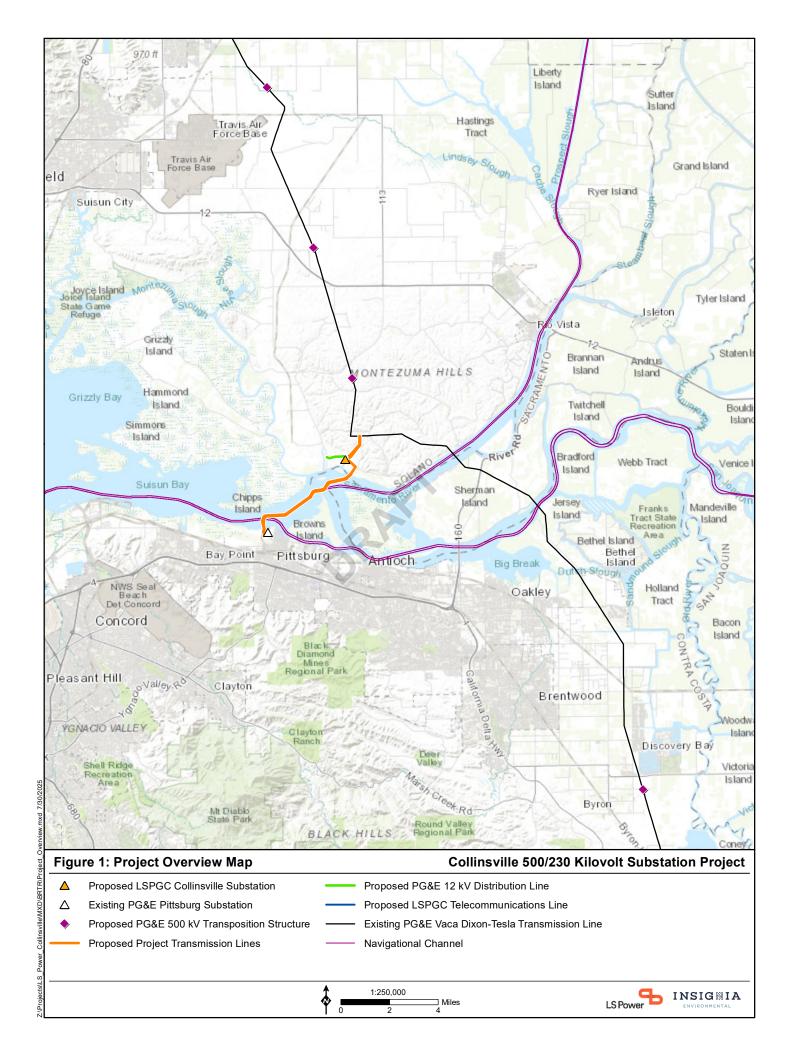
## 3 – REGULATORY FRAMEWORK

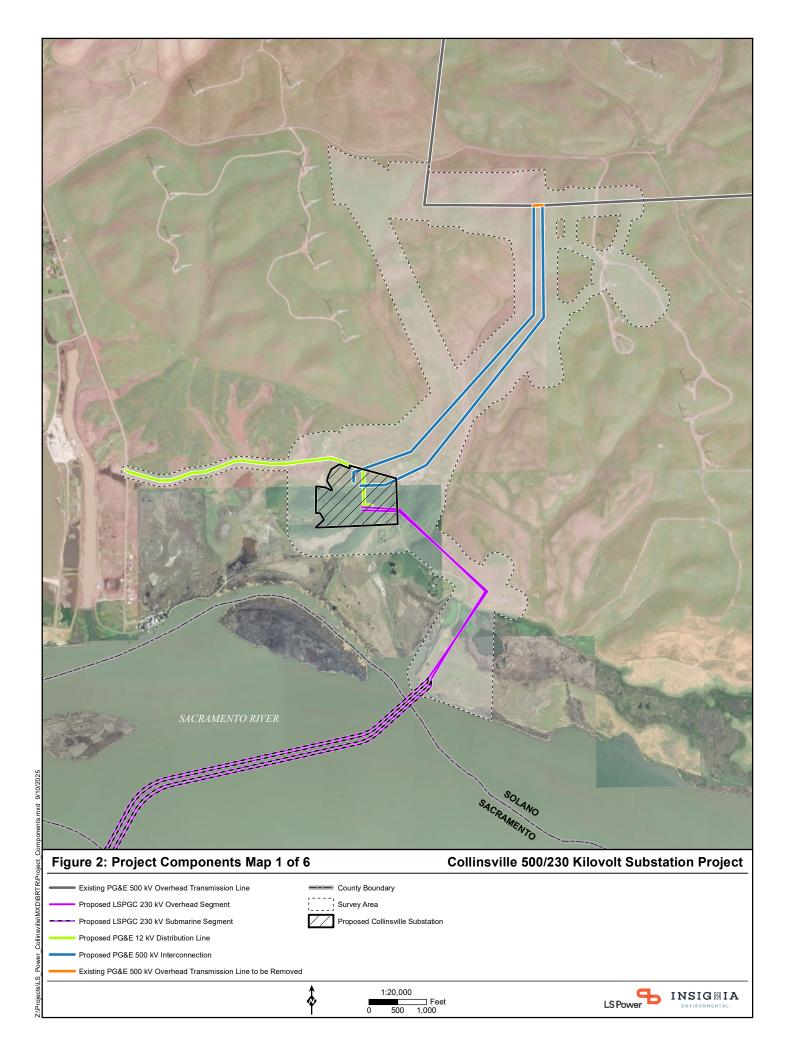
#### 3.0 FEDERAL

## 3.0.0 Federal Endangered Species Act

The federal Endangered Species Act (FESA) protects plant and wildlife species that are listed as endangered or threatened by the United States (U.S.) Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NOAA Fisheries).

Under Section 9 of the FESA, any take of endangered wildlife is prohibited; "take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (16 U.S. Code [U.S.C.] 1532[19] and 1538). This can also include the modification of a species' habitat. For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land, as well as removing,







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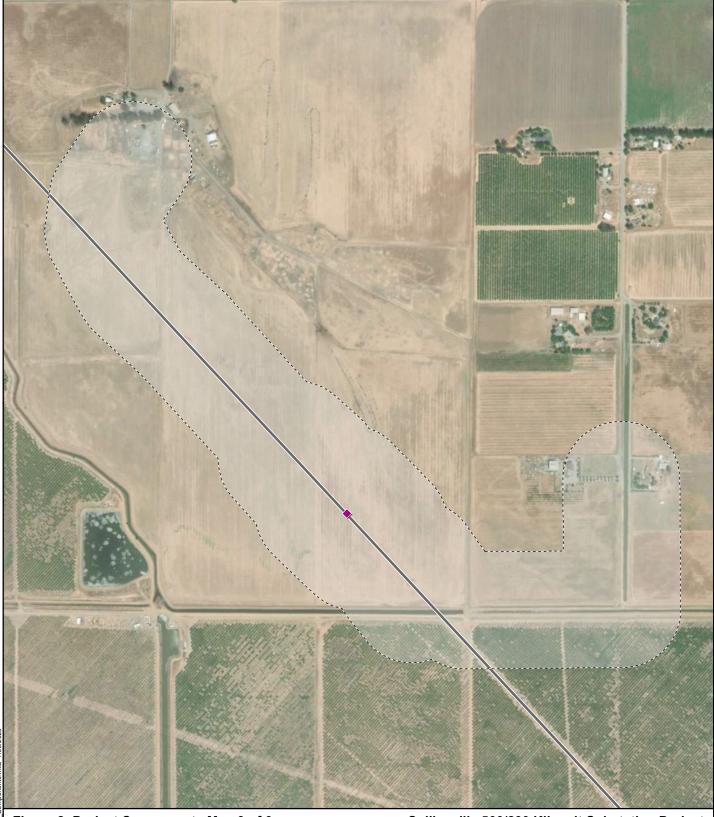


Figure 2: Project Components Map 3 of 6

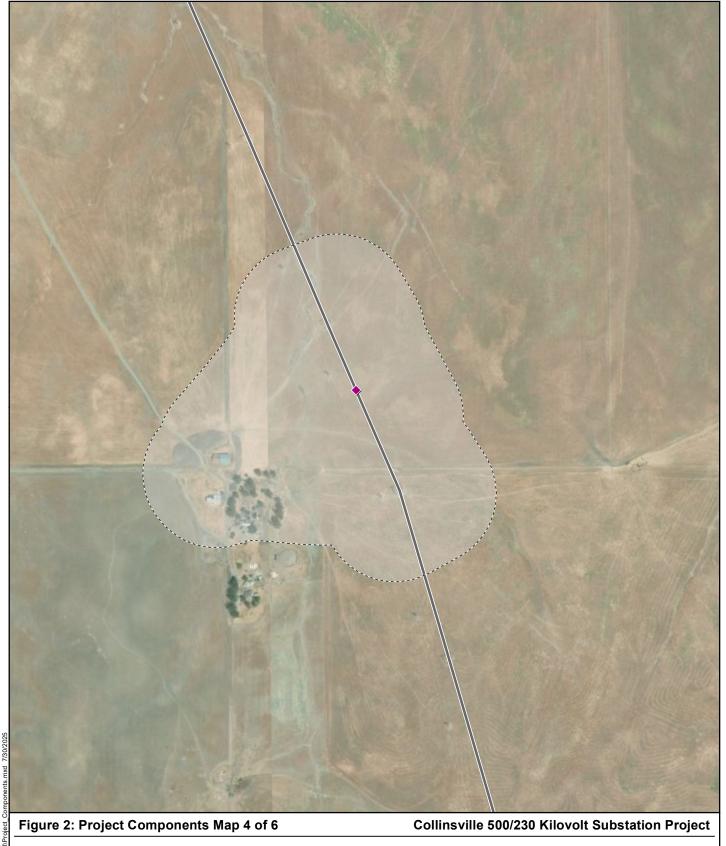
Collinsville 500/230 Kilovolt Substation Project

Proposed PG&E 500 kV Transposition Structure

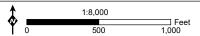
Existing PG&E 500 kV Overhead Transmission Line

Survey Area

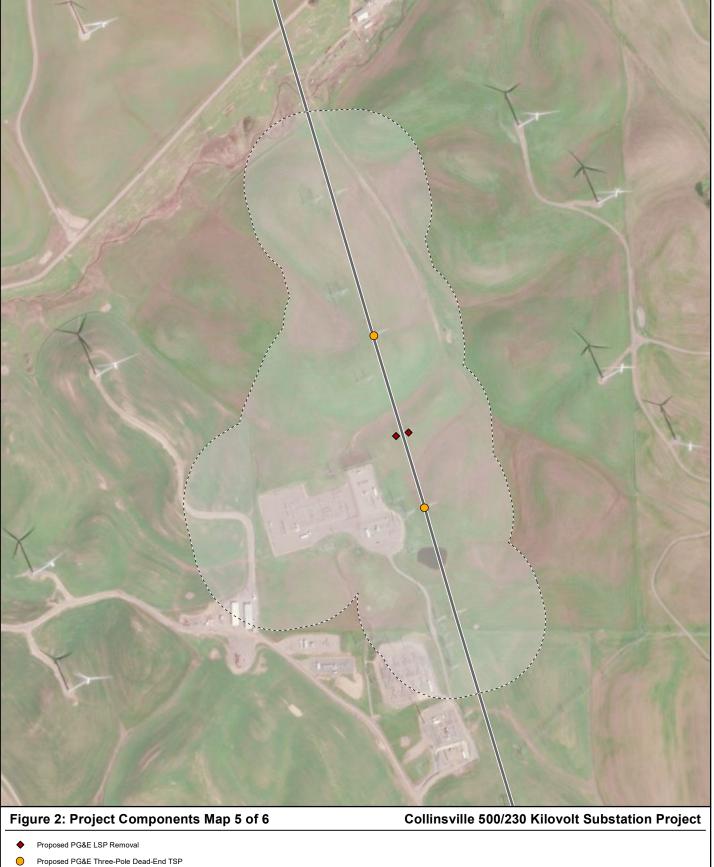




Proposed PG&E 500 kV Transposition Structure Existing PG&E 500 kV Overhead Transmission Line Survey Area







Existing PG&E 500 kV Overhead Transmission Line
 Survey Area

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Figure 2: Project Components Map 6 of 6

Collinsville 500/230 Kilovolt Substation Project

Proposed PG&E 500 kV Transposition Structure

Existing PG&E 500 kV Overhead Transmission Line

Survey Area



cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 U.S.C. 1538[c]). Under Section 7 of the FESA, federal agencies are required to consult with the USFWS and/or NOAA Fisheries if their actions, including permit approvals or federal funding, could adversely affect a listed species (including plants) or its critical habitat. Through Section 7 consultation and the issuance of a Biological Opinion, the USFWS and/or NOAA Fisheries may issue an incidental take permit, allowing take of the species that is incidental to another authorized activity, provided that the action will not jeopardize the continued existence of the species.

Section 10 of the FESA provides for the issuance of incidental take permits for private actions that have no federal involvement through the development of a Habitat Conservation Plan (HCP).

## 3.0.1 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) recognizes international treaties between the U.S. and other countries that have afforded protection to migratory birds and any of their parts, eggs, and nests, from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The MBTA prohibits acts to "pursue, hunt, take, capture, or kill, or attempt to take, capture, or kill" migratory birds and a range of buying, selling, and transporting activities (16 U.S.C. 703). "Take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to pursue or collect" a bird. Birds, nests, and eggs are all protected. The regulations governing migratory bird permits can be found in Title 50, Part 13 (General Permit Procedures) and Part 21 (Migratory Bird Permits) of the Code of Federal Regulations.

## 3.0.2 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) affords additional legal protection to bald eagles and golden eagles. This law prohibits the take, sale, purchase, barter, offer of sale, purchase, or barter, transport, export or import, at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof (16 U.S.C. 668-668d). The BGEPA also defines "take" to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb," and includes criminal and civil penalties for violating the statute. The USFWS further defines the term "disturb" as agitating or bothering an eagle to a degree that causes or is likely to cause injury, or a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior.

#### 3.0.3 Clean Water Act

#### Section 404

Section 404 of the Clean Water Act (CWA) requires project proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) before performing any activity involving a discharge of dredged or fill material into waters of the U.S. Waters of the U.S. include the following:

- navigable waters of the U.S.,
- interstate waters,

- all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce,
- tributaries to any of these waters, and
- wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

Many surface waters and wetlands in California meet the criteria for waters of the U.S.

#### Section 402

CWA Section 402 regulates construction-related storm water discharges to surface waters through the National Pollutant Discharge Elimination System program, which is administered by the U.S. Environmental Protection Agency (EPA). In California, the State Water Resources Control Board is authorized by the EPA to oversee the program through the Regional Water Quality Control Boards (RWQCBs). The Proposed Project is within the jurisdiction of the Central Valley RWQCB (Region 5).

#### Section 401

Under CWA Section 401(a)(1), the applicant for a federal license or permit to conduct an activity that may result in a discharge into waters of the U.S. must provide the federal licensing or permitting agency with a certification that any such discharge will not violate state water quality standards. The RWQCBs administer the Section 401 program to prescribe measures for projects that are necessary to avoid, minimize, and mitigate adverse effects on water quality and ecosystems.

#### 3.0.4 Plant Protection Act of 2000

Some non-native plant species are officially categorized as "noxious weeds" because they are highly invasive or interfere with an area's management objectives, or both. Both the U.S. and California governments maintain lists of plants that are considered threats to the well-being of the nation or the state. The Federal Noxious Weed Act of 1974, as amended (7 U.S.C. 2801 et seq.; 88 Stat. 2148), established a federal program to control the spread of noxious weeds. The act was superseded by the federal Plant Protection Act of 2000 (7 U.S.C. 7701 et seq.; 114 Stat. 438), which consolidated and modernized all major statutes pertaining to plant protection and quarantine (e.g., the Federal Noxious Weed Act and Plant Quarantine Act).

The Plant Protection Act revised the original definition of a "noxious weed" as listed in the Federal Noxious Weed Act to include the following:

"any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment."

Under the Plant Protection Act, the Secretary of Agriculture was authorized to designate plants as "noxious weeds" by regulation, and to prohibit or restrict all such weeds from entering the U.S. or moving through interstate commerce. The secretary was also given authority to inspect, seize, and destroy products and to quarantine areas, if necessary, to prevent the spread of such

weeds. The Secretary of Agriculture was also authorized to cooperate with other federal, state, and local agencies; farmers' associations; and private individuals in measures to control, eradicate, prevent, or retard the spread of such weeds.

### 3.1 CALIFORNIA

## 3.1.0 Fish and Game Code Sections 3511, 4700, 5050, and 5515

The state of California first began to designate species as "fully protected" prior to the creation of the California Endangered Species Act (CESA) and the FESA. Lists of fully protected species were initially developed to provide protection to animals (i.e., fish, amphibians, reptiles, birds, and mammals) that were rare or facing possible extinction. Most fully protected species have since been listed as threatened or endangered under the CESA and/or the FESA. Fully protected species may not be taken or possessed at any time, and incidental take permits cannot be issued for these species (California Fish and Game Code Section 4700).

## 3.1.1 Fish and Game Code Sections 3503, 3503.5, and 3513

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 specifies these protections for birds in the orders Falconiformes and Strigiformes (i.e., raptors). Section 3513 also makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird.

# 3.1.2 Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. The RWQCB must prepare and periodically update water quality control plans, also known as basin plans. Each basin plan establishes numerical or narrative water quality objectives to protect established beneficial uses, which include wildlife, fisheries, and their habitats. Projects that affect wetlands or waters of the state, including groundwater, must meet the discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

#### 3.1.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) (California Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State." The NPPA is administered by the California Department of Fish and Wildlife (CDFW). The California Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect them from take. The NPPA also stipulates that no person may take or possess any endangered or rare native plant, or any part or product thereof. However, this does not apply to the removal of endangered or rare native plants within a right-of-way by the owner of the land or his/her agent, nor does it apply to the obligation of a publicly or privately owned public utility to provide service to the public.

# 3.1.4 California Code of Regulations

Title 14, Section 251.1 of the California Code of Regulations (CCR) restricts the harassment of nongame birds and mammals. Harassment is defined as an intentional act that disrupts an animal's normal behavior patterns, which includes, but is not limited to breeding, feeding, or sheltering. Sections 670.2 and 670.5 list animals designated as "threatened" or "endangered" in California. California Species of Special Concern (SSC) is a category conferred by the CDFW on species that are indicators of regional habitat changes or that are considered potential future protected species. SSCs do not have any special legal status, but this category is intended as a management tool to take these species into special consideration when decisions are made concerning the future of any land parcel.

#### 3.2 LOCAL

The CPUC has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D (GO 131-D), Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters" (CPUC, 1995). Consequently, public utilities are directed to consider local regulations and consult with local agencies, but county regulations are not applicable as Solano County does not have jurisdiction over the Proposed Project. This section includes a summary of local biological resources-related policies, plans or programs for informational purposes and to assist with CEQA review. Although LS Power Grid California, LLC (LSPGC) is not subject to local discretionary permitting, ministerial permits would be secured as appropriate.

# 3.2.0 Solano County General Plan

The Solano County General Plan Conservation Element and Open Space Element (Solano County 2008) include the following policies that may be applicable to resources affected by the Proposed Project:

- Policy RS.P-1: Protect and enhance the county's natural habitats and diverse plant and animal communities, particularly occurrences of special-status species, wetlands, sensitive natural communities, and habitat connections.
- Policy RS.P-2: Manage the habitat found in natural areas and ensure its ecological health and ability to sustain diverse flora and fauna.
- Policy RS.P-3: Focus conservation and protection efforts on high-priority habitat areas depicted in Figure RS-1 [of the Solano County General Plan].
- Policy RS.P-4: Together with property owners and federal and state agencies, identify
  feasible and economically viable methods of protecting and enhancing natural habitats
  and biological resources.

- Policy RS.P-5: Protect and enhance wildlife movement corridors to ensure the health and long-term survival of local animal and plant populations. Preserve contiguous habitat areas to increase habitat value and to lower land management costs.
- Policy RS.P-6: Protect oak woodlands and heritage trees and encourage the planting of native tree species in new developments and along road rights-of-way.
- Policy RS.P-7: Preserve and enhance the diversity of habitats in marshes, delta to maintain these unique wildlife resources.
- Policy RS.P-8: Protect marsh waterways, managed wetlands, tidal marshes, seasonal marshes, and lowland and grasslands because they are critical habitats for marsh-related wildlife and are essential to the integrity of the marshes.
- Policy RS.P-9: Encourage restoration of historic marshes to wetland status, either as tidal marshes or managed wetlands. When managed wetlands are no longer used for waterfowl hunting, restore them as tidal marshes.

#### 3.2.1 Habitat Conservation Plans

# Solano County Water Agency Solano Multispecies Habitat Conservation Plan

In October 2012, the Solano County Water Agency (SCWA) published a draft of the Solano Multispecies HCP (SCWA 2012), but the HCP has not yet been adopted. The draft HCP establishes a framework for complying with federal and state endangered species regulations while accommodating future urban growth, infrastructure development, and ongoing operations and maintenance for flood control, irrigation facilities, and other public infrastructure undertaken by or under the permitting authority/control of the plan participants in Solano County over the next 30 years (SCWA 2012). A total of 37 species are proposed to be covered under the HCP.

# East Contra Costa County Habitat and Natural Community Conservation Plan

The East Contra Costa County Habitat Conservation Plan Association intends to use the East Contra Costa County Habitat and Natural Community Conservation Plan (HNCCP) to protect natural resources in eastern Contra Costa County while improving environmental permitting processes for impacts to endangered species and contributing to their recovery. The East Contra Costa County HNCCP covers the cities of Clayton, Pittsburg, Antioch, Oakley, and Brentwood, and the unincorporated areas between those cities. The Pittsburg Substation falls within the East Contra Costa County HNCCP. The East Contra Costa County HNCCP addresses comprehensive species, wetlands, and ecosystem conservation. Agencies involved with approving permits for endangered species within the county request from USFWS and California Department of Fish and Wildlife (CDFW) to have authorized 30-year take permits for species covered under the federal Endangered Species Act (ESA) and the Natural Community Conservation Planning Act (NCCPA).

## PG&E Bay Area Operations and Maintenance Habitat Conservation Plan

This HCP is intended to avoid, minimize, and mitigate temporary and permanent impacts on threatened and endangered species resulting from PG&E's operations and management and minor new construction activities in the Plan Area. It additionally provides the basis for incidental take authorization pursuant to the ESA for PG&E's current and future operations and management activities and minor new construction in the Plan Area.

# 4 - PRELIMINARY AGENCY CONSULTATION

No pre-survey contact with applicable wildlife agencies was conducted with regards to this BRTR. No agency-approvals were required for biologists conducting surveys. Agency protocols and best practices applied to the survey effort are detailed in Section 5.2 Biological Resource Survey Method.

## 5 - METHODS

#### 5.0 DEFINITIONS

The following definitions were used to define special-status resources within the survey area.

## 5.0.0 Special-Status Plants

Plants were considered special-status species if they met one or more of the following criteria:

- species listed or candidates for listing as threatened or endangered under the FESA;
- species listed or candidates for listing as threatened or endangered under the CESA;
- species meeting the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 CCR Section 15380) that may include species not found on either federal or state endangered species lists; and
- species considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California (i.e., California Rare Plant Ranks [CRPRs] 1A, 1B, 2A, 2B, and 3).

### 5.0.1 Sensitive Natural Communities and Habitats

Natural communities were considered sensitive if they met one or more of the following criteria:

- sensitive vegetation communities/habitats identified in local or regional plans, policies, or regulations, or designated as sensitive by the CDFW or USFWS (including communities assigned a State Rarity Rank of S1-S3 under the CDFW Vegetation Classification and Mapping Program);
- areas that provide habitat for locally unique biotic species/communities (e.g., oak woodlands, grasslands, and forests);

- habitat that contains or supports rare, endangered, or threatened wildlife or plant species as defined by the CDFW and USFWS;
- habitat that supports one or more CDFW Species of Special Concern;
- areas that provide habitat for rare or endangered species and that meet the definition in CEQA Guidelines Section 15380;<sup>2</sup>
- existing game and wildlife refuges and reserves;
- lakes, wetlands, estuaries, lagoons, streams, and rivers; and
- riparian corridors.

# 5.0.2 Special-Status Wildlife

Wildlife species were considered special-status species if they met one or more of the following criteria:

- species listed or candidates for listing as threatened or endangered under the FESA;
- species listed or candidates for listing as threatened or endangered under the CESA;
- species that are fully protected in California (California Fish and Game Code Sections 3511, 4700, 5050, and 5515);
- species meeting the definition of endangered, rare, or threatened under CEQA (14 CCR Section 15380) that may include species not found on either federal or state endangered species lists;
- migratory birds and any of their parts, eggs, and nests, as protected by the MBTA;
- birds of prey (California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800);
- species designated as an SSC or as fully protected by the CDFW;
- species protected under the BGEPA;
- species designated as Birds of Conservation Concern or Watch List species by the CDFW; and
- bats considered by the Western Bat Working Group to be "high" or "medium" priority species.

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<sup>&</sup>lt;sup>2</sup> California Code of Regulations Title 14; Division 6; Chapter 3; Section 15380 - Endangered, Rare or Threatened Species

## 5.0.3 Special-Status Species with Potential to Occur

Species identified from a literature search were assigned one of the following potentials to occur:

- Present: The species was observed during surveys.
- High Potential: Suitable habitat for the species is present within the survey area, and recent (i.e., within 30 years) occurrences have been reported within 1 mile of the survey area; or marginal habitat is present, and recent occurrences have been recorded within 0.25 mile of the survey area. For plants, recent occurrences have been recorded within 0.25 mile, but the species was not observed during floristic surveys or was surveyed for outside of the known bloom period for the species.
- Moderate Potential: Suitable habitat for the species is present, and the survey area is located within the species' known range, but no recent (i.e., within 30 years) occurrences have been recorded between 1 and 5 miles from the survey area; or marginal habitat is present, the survey area is located within the species' known range, and multiple recent occurrences have been recorded between 1 and 5 miles from the survey area. For plants, recent occurrences have been recorded within 1 mile, but the species was not observed during floristic surveys or was surveyed for outside of the known bloom period for the species.
- Low Potential: Poor or marginal habitat for the species exists, and at least one recent occurrence has been recorded between 1 and 5 miles from the survey area; barriers to migration/dispersal may be present; or suitable habitat for the species is present within the survey area, but either no recent occurrences have been recorded between 1 and 5 miles from the survey area or the survey area is located outside of the species' known range. For plants, recent occurrences have been recorded within 5 miles, but the species was not observed during floristic surveys or was surveyed for outside of the known bloom period for the species.
- No Potential: No habitat exists for the species; no occurrences have been recorded between 1 and 5 miles from the survey area, or the survey area is outside of the species' known geographic or elevation range; and/or the species has been confirmed to be extirpated from the area.

## **RECORDS SEARCH**

A literature and database review, including a geographic information system (GIS) review of records from the California Natural Diversity Database (CNDDB) (CDFW 2023), was conducted of the U.S. Geological Survey 7.5-minute quadrangles within and adjacent to the survey area. Records for all known special-status species within 0.25 mile, 1 mile, and 5 miles of the Proposed Project were compiled and reviewed. The CNPS Inventory of Rare and Endangered Plants of California (CNPS 2023a) was reviewed to obtain additional information regarding special-status plant species. The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (USFWS 2023a) was queried for a list of federally threatened and endangered species known to occur within or near the Proposed Project and to determine the project's proximity to USFWS designated critical habitat.

Further, the USFWS National Wetlands Inventory (USFWS 2023b) and the USGS National Hydrography Dataset (USGS 2023) were queried to determine if potentially jurisdictional waters had been previously mapped within the survey area.

#### 5.2 BIOLOGICAL RESOURCE SURVEY METHOD

The geographical boundaries of the survey area were provided by LSPGC in the form of GIS shapefiles. This survey area included land-based portions of the proposed substation sites, as well as proposed transmission line routes, staging areas, and access roads. Due to access constraints imposed by the property owner, the terrestrial areas south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation were not included in biological resource surveys.

On the dates of May 23 to 26, 30, and 31, June 9, and July 10, 11, and 12, September 21 and 22 2023, and December 19, 2023, Insignia biologists conducted surveys to characterize the existing conditions within the survey area and identify potential biological resources (e.g., habitat for special-status species, sensitive natural communities, and jurisdictional waters) that may occur. The survey area is shown in Attachment E: Biological Resources Map. Approximately 569.7 acres of terrestrial habitat and land cover were surveyed.

The biologists conducted a habitat assessment, floristic botanical surveys, and a preliminary assessment of water features potentially under the jurisdiction of the USACE, RWQCB, and CDFW within the approximately 325-acre survey area (original survey area) between May 23 and July 12, 2023. Following the initial surveys, the original survey area was expanded to include an additional approximately 244 acres (expanded survey area), as shown in Attachment E: Biological Resources Map. A habitat assessment and preliminary assessment of water features was conducted on September 21 and 22 and December 19 within this expanded survey area, which includes terrestrial areas north of the Sacramento River and terrestrial areas south of Suisun Bay in the vicinity of PG&E's existing Pittsburgh Substation. Floristic botanical surveys were completed in 2024 within the expanded survey area. All sensitive natural resources observed were photographed and recorded using a submeter-accurate Global Positioning System (GPS) unit.

Surveys were conducted during daylight hours with clear to partly cloudy skies and did not occur in inclement weather conditions or fog cover. Temperatures ranged from 65 to 91 degrees Fahrenheit with wind speeds between 5 and 20 miles per hour.

#### 5.2.0 Habitat Assessment

A habitat assessment was conducted within the survey area to determine whether the Proposed Project contained habitat suitable to support special-status species. Insignia biologists searched for areas of potential habitat by walking meandering transects that covered 100 percent of the survey area that was accessible. Areas that were inaccessible due to tall, non-transparent fencing and/or lack of landowner permission were not surveyed. The areas not surveyed are shown in Attachment E: Biological Resources Map.

As part of the habitat assessment, natural communities were mapped to the alliance level, as described in *A Manual of California Vegetation Online* (CNPS 2023b). Other non-vegetative

land covers were documented as well. The biologists identified dominant species, assigned alliances, and mapped the natural community and land cover boundaries using a submeter-accurate GPS unit. Natural communities were evaluated using NatureServe's Heritage Methodology, the same system used to assign global and state rarity ranks for plant and animal species in the California Natural Diversity Database (CNDDB). Sensitive natural communities are natural communities with ranks of S1, S2, or S3.

# 5.2.1 Special-Status Plant Surveys

Special-status plant surveys were conducted and covered 100 percent of the original survey area. The results of this survey are summarized in Section 6.3 Special-Status Plant Species. A more detailed description of these surveys is provided in Attachment C: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report. Following the botanical surveys in July 2023, the survey area was expanded by approximately 244 acres. This expansion also occurred after the bloom period for most of the special-status plants with potential to occur concluded. Surveys within the expanded survey area were completed in 2024 and are detailed in Attachment D: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report Addendum. These results supplement those summarized in Section 6.3 Special-Status Plant Species.

Transect spacing between surveyors was less than or equal to 10 meters. Surveys were fully floristic in nature. The surveys were conducted in accordance with guidelines published by the CNPS (2001), the CDFW (2009), and the USFWS (2000), which state the following:

- Surveys should be conducted at the proper time of year when locally significant plants are both evident and identifiable.
- Surveys must be floristic in nature, and the species, subspecies, or variety must be identified for every observed plant to determine the rarity status.
- Surveys must be conducted in a manner that is consistent with conservation ethics and accepted plant collection and documentation techniques.

Field surveys were conducted within the bloom period for all but four special-status plant species with the potential to occur within the survey area; these special-status species are discussed further in Section 6 – Results. If present within the original survey area, the likelihood of encountering these four species was considered reasonably high; two of these species are perennial and observable year-round and the other two are annual species that have bloom periods extending into April. Given the unusually protracted rainy season and the associated cooler temperatures of the preceding winter, it was assumed that annual plants would delay their bloom periods by approximately 1 month (Moore and Laurenroth 2017).

# 5.2.2 Preliminary Jurisdictional Determination

Potentially jurisdictional waters assessments were conducted by walking meandering transects that were spaced no more than 15 meters apart and covered 100 percent of the survey area. Insignia biologists used guidance from A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008) to determine the location and size of linear water features potentially under the jurisdiction of the USACE, RWQCB, and/or CDFW. Photographs were taken for each linear water feature to record downstream and upstream conditions. OHWM indicators and measurements of each

jurisdictional linear water feature were recorded on electronic data sheets. Top of bank (TOB) measurements were also noted for each linear water feature to assess the areas that may be CDFW-jurisdictional under Section 1600 of the California Fish and Game Code.

Potentially jurisdictional wetland features were identified through combined observations of visible hydrology, vegetation typically associated with wetlands, and elevation relative to the surrounding topography.

Formal wetland delineations of all potential wetlands identified in this report were conducted in 2024. The results of these delineations are detailed in Attachment A: Collinsville Terrestrial Biological Resources Technical Report Addendum and supersede the data associated wetlands identified in Attachment E: Biological Resources Map and Attachment K: Potentially Jurisdictional Water Features Table.

#### 6 - RESULTS

## 6.0 GEOGRAPHY, CLIMATE, AND HYDROLOGY

The Proposed Project area receives an average of 23 inches of rainfall per year, with the majority of precipitation falling between November and March. Average annual temperatures range from 48 to 73 degrees Fahrenheit (NOAA 2023). The elevation ranges from 3 to 250 feet above sea level.

#### 6.1 RECORDS SEARCH

Results of the initial desktop analysis indicated that the upland areas around the proposed Collinsville Substation and transmission line routes are mainly grassland habitat and agricultural areas. Grassland habitats, in general, may provide suitable habitat for special-status plants. The survey area along the northern shore of the Sacramento River supports native riparian habitat areas and freshwater/estuarine wetlands. Areas adjacent to PG&E's existing Pittsburg Substation in Contra Costa County may have some fringe marsh habitat near the shoreline, but the majority of the facility is developed (e.g., graveled or paved) and rip-rap is present along much of the shoreline.

From this records search, Insignia compiled a list of 28 special-status plant species and 32 special-status wildlife species that have the potential to occur within 5 miles of the survey area. Eight potentially jurisdictional waters were identified within the survey area during USGS National Wetland Inventory database review.

#### 6.2 VEGETATION COMMUNITIES

Twenty-two vegetation community alliances and land cover types were identified in the survey area, as presented in Table 1: Vegetation Community Alliances and Land Cover Types. The vegetation community and land cover locations are documented in Attachment E: Biological Resources Map. Photographs are provided in Attachment F: Habitat Assessment Photographs. The natural communities observed in the Survey Area are ranked S3, S4, S5, and semi-natural alliance (SNA) (semi-natural stands dominated by non-native species). Six of the 15 natural

**Table 1: Vegetation Community Alliances and Land Cover Types** 

Vegetation Community Alliance or Land Cover Type	Approximate Size in Area Surveyed (acres)
Baccharis pilularis Shrubland Alliance	0.1
Bare Ground	1.6
Brassica nigra – Centaurea (solstitialis, melitensis) Herbaceous SNA	29.3
Developed	28.9
Distichlis spicata Herbaceous Alliance	17.5
Disturbed	16.6
Frankenia salina Herbaceous Alliance*	3.8
Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance	1.5
Lepidium latifolium – Lactuca serriola Herbaceous SNA	7.9
Lolium perenne Herbaceous SNA	394.2
Open Water	7.4
Ornamental Vegetation	2.9
Polygonum lapathifolium – Xanthium strumarium Herbaceous Alliance	0.1
Rip-Rap	0.5
Rosa californica Shrubland Alliance*	3.2
Salix exigua Shrubland Alliance	2.6
Sarcocornia pacifica (Salicornia depressa) Herbaceous Alliance*	1.0
Schoenoplectus (acutus, californicus) Herbaceous Alliance*	17.6
Schoenoplectus acutus/Rosa californica Association*	2.1
Schoenoplectus americanus Herbaceous Alliance*	0.3
Typha (angustifolia, domingensis, latifolia) Herbaceous Alliance	<0.1
Not Surveyed**	2.0
Total***	569.7

<sup>\*</sup> CDFW-designated sensitive natural community (State Rarity Rank S1-S3).

<sup>\*\*</sup> Areas that were inaccessible due to tall, non-transparent fencing and/or lack of landowner permission were not surveyed.

<sup>\*\*\*</sup> Due to rounding, total may not sum.

communities observed are considered sensitive. The following subsections describe each vegetation community identified within the survey area.

Approximately 2 acres of the survey area were inaccessible to Insignia biologists due to tall, non-transparent fencing and lack of landowner permission, as shown in Attachment E: Biological Resources Map. Based on aerial imagery from Google Earth, the unsurveyed areas are at an elementary school and are suspected to include both developed and bare ground.

## 6.2.0 Baccharis pilularis Shrubland Alliance (S5)

The *Baccharis pilularis* Shrubland Alliance can be found in coastal bluffs, terraces, stabilized dunes, and river mouths with variable soils ranging from sandy to relatively heavy clay. Coyote brush (*Baccharis pilularis*) is the dominant plant species; it generally occupies at least 50 percent of the shrub canopy or is co-dominant with silk tassel bush (*Garrya elliptica*) or coffeeberry (*Frangula californica*). This community was observed within the survey area south of Suisun Bay near PG&E's existing Pittsburg Substation and alongside non-native forbs.

## 6.2.1 Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

This community is typically associated with disturbed areas where black mustard (*Brassica nigra*) and short-pod mustard (*Hirshfeldia incana*) achieve 80 percent relative cover in the herbaceous layer. Similar ruderal forbs, including tocolote (*Centaurea melitensis*) and yellow star thistle (*Centaurea solstitialis*), may achieve dominance or co-dominance. Within the survey area, this community was generally observed in dense colonies between stands of non-native grassland in areas where heavy cattle grazing historically occurred.

# 6.2.2 Distichlis spicata Herbaceous Alliance (S4)

The *Distichlis spicata* Herbaceous Alliance is found commonly in alkaline or saline ecosystems adjacent to estuarine marshes or other wetland habitats that may be tidally influenced. Salt grass (*Distichilis spicata*) typically contains greater than 30 percent relative cover in the herbaceous layer; however, it can be co-dominant with other halophytes, including spear-leaved orache (*Atriplex prostrata*) and alkali heath (*Frankenia salina*). The herbaceous layer is continuous and typically leaves an undeveloped or sparse shrub layer. This community was generally observed north of the Sacramento River within standing water in tidally influenced brackish areas.

## 6.2.3 Frankenia salina Herbaceous Alliance (S3)

The *Frankenia salina* Herbaceous Alliance is found commonly adjacent to coastal salt marshes or brackish marshes. Typically, alkali heath contains greater than 30 percent relative cover in the herbaceous layer and stands are often found in the high marsh where soils are intermittently or seasonally flooded. Pickleweed (*Salicornia pacifica*) is often found among this community in lower percentages of 5 to 10 percent. This community was observed in the portion of the survey area located on the northern shore of the Sacramento River at the highest point of the marsh and adjacent to water that seasonally and tidally inundates this community.

## 6.2.4 Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance (S4)

The Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance varies widely in species composition based on the geographic location, but it typically includes greater than 30 percent relative cover in the shrub layer of arctic rush (Juncus arcticus) or Baltic rush (Juncus balticus). This community generally occurs in wet meadows with poor draining soils between estuarine marshes and sloughs. This community was observed in the portion of the survey area located on the northern shore of the Sacramento River adjacent to the shoreline and in upland areas of the marsh between sloughs.

## 6.2.5 Lolium perenne Herbaceous Semi-Natural Alliance

This community contains Italian rye grass (Festuca perennis) that is dominant or co-dominant with other non-natives in the herbaceous layer, including rip-gut brome (Bromus diandrus), sea barley (Hordeum marinum), and wild oat (Avena fatua). Typically, the herbaceous layer is continuous and often forms monocultures, which contributes to a poorly developed shrub layer. Within the survey area, this community is the most widespread and is found in upland areas that lack native species and have low species diversity. Additionally, this community shows evidence of heavy grazing, landowner maintenance, and agriculture use. During the September 2023 survey, large tracts of this community were being actively converted into access roads as part of the Solano 4 Wind Project.

# 6.2.6 Polygonum lapathifolium - Xanthium strumarium Herbaceous Alliance (S4)

This community contains rough cocklebur (Xanthium strumarium) that is dominant or codominant with lanceleaf water plantain (Alisma lanceolatum), Northern water plantain (Alisma triviale), Common sunflower (Helianthus annuus) as well as a variety of knotweeds and smartweeds (Polygonum spp.) in the herbaceous layer. Within the survey area, this community is dominated primarily by rough cocklebur and other smartweeds. During the September 2023 survey, one isolated community was found situated west of Stratton Lane and east of Latin Lane within stands of Lolium perenne Herbaceous Semi-Natural Alliance.

## 6.2.7 Lepidium latifolium – Lactuca serriola Herbaceous Semi-Natural Alliance

The Lepidium latifolium – Lactuca serriola Herbaceous SNA is dominated by non-native species in the shrub layer. This vegetation community can be found near disturbed or developed areas within the survey area south of Suisun Bay adjacent to PG&E's existing Pittsburg Substation. Species observed within this cover type include stinkwort (Dittrichia graviolens) as 30 percent of the ground cover, accompanied by Russian thistle (Salsola spp.), coyote brush, and various others to create an intermittent to continuous herbaceous layer.

## 6.2.8 Rosa californica Shrubland Alliance (S3)

The Rosa californica Shrubland Alliance is commonly found in creek bottoms, stream terraces, and bordering sloughs and channels. California wild rose (Rosa californica) typically contains greater than 50 percent relative cover in the shrub canopy and may be co-dominant with Himalayan blackberry (Rubus armeniacus). The shrub layer is thick and continuous while the herbaceous layer is open. Emergent trees, including willows (Salix spp.), may be present in low quantities. This community is found within the survey area on the northern shore of the Sacramento River adjacent to intertidal sloughs. Himalayan blackberry was commonly observed, and in some cases co-dominant, among thick patches of California wild rose. Isolated red willows (*Salix laevigata*) were observed scattered throughout this community.

## 6.2.9 Salix exigua Shrubland Alliance (S4)

The *Salix exigua* Shrubland Alliance is widespread in California and contains significant variation when determining habitat and shrub composition. Often the shrub layer is intermittent to continuous dominated by sandbar willow (*Salix exigua*) and contains greater than 20 percent absolute cover in the shrub layer. In a high-quality habitat, sandbar willow may be co-dominant with other willow species and emergent riparian trees may be present at a low cover. Within the survey area, this community was observed between tidally influenced sloughs and estuarine marshes containing sandy soil. Heavy cattle grazing was observed to have a direct impact on this community, leading to a sparse shrub layer dominated by sandbar willows that are in the process of re-growing.

# 6.2.10 Sarcocornia pacifica (Salicornia depressa) Herbaceous Alliance (S3)

The Sarcocornia pacifica (Salicornia depressa) Herbaceous Alliance is found almost exclusively in coastal salt marsh and alkaline flat habitats and typically contains greater than 50 percent cover of pickleweed (Sarcocornia pacifica) in the herbaceous layer. Other salt-tolerant marsh plants such as alkali heath (Frankenia salina) and salt grass (Distichlis spicata) are frequently associated with this community. Within the survey area, this community was observed within dry salt flats adjacent to grazed and cultivated Italian ryegrass fields. Along the margins of these communities, pickleweed was codominant with annual grasses.

# 6.2.11 Schoenoplectus (acutus, californicus) Herbaceous Alliance (S3S4)

This community is found in a variety of wetland habitats, including brackish marshes, freshwater ponds, sloughs, swamps, and roadside ditches. The herbaceous layer is intermittent to continuous, forming thick stands that often result in a poorly developed shrub layer. Hardstem bulrush (*Schoenoplectus acutus*) or giant bulrush (*Schoenoplectus californicus*) typically contain greater than 50 percent relative cover in the herbaceous layer. Within the survey area, this community was observed adjacent to the north shore of the Sacramento River, within sloughs, and in tidally influenced areas that are semi-brackish. Species composition varied depending on the salinity of the water and proximity to the shoreline, as hardstem bulrush is generally less tolerant of brackish conditions.

# 6.2.12 Schoenoplectus acutus/Rosa californica Association (S3S4)

Schoenoplectus acutus/Rosa californica Association occurs on tidal sloughs that are seasonally or tidally inundated with brackish or semi-brackish water. This association contains greater than 50 percent relative cover of hardstem bulrush and giant bulrush with as low as 5 percent absolute cover of California wild rose. Within the survey area, this habitat occurred primarily on manmade earthen levees bordering sloughs adjacent to the shoreline. California wild rose was observed in high quantities growing among stands of bulrush (Schoenoplectus spp.), sometimes achieving 20 to 30 percent relative cover.

# 6.2.13 Schoenoplectus americanus Herbaceous Alliance (S3)

Similar to the Schoenoplectus (acutus, californicus) Herbaceous Alliance, this community is found in a variety of wetland habitats, including brackish marshes, freshwater ponds, sloughs, swamps, and roadside ditches. The herbaceous layer is intermittent to continuous, forming thick stands. Chairmaker's bulrush (Schoenoplectus americanus) typically make up greater than 50 percent of relative cover. Within the survey area, this community was observed within wetlands adjacent to Stratton Lane and immediately adjacent to dense stands of Schoenoplectus acutus.

## 6.2.14 Typha (angustifolia, domingensis, latifolia) Herbaceous Alliance (S5)

Typha (angustifolia, domingensis, latifolia) Herbaceous Alliance occurs in semi-permanently flooded freshwater or brackish marshes. This alliance contains 50 percent or greater of various Typha spp. along with saltgrass and smartweed comprising the remainder of the herbaceous layer. Within the survey area, this community occurred within wetland habitats immediately adjacent to Stratton Lane.

## 6.3 SPECIAL-STATUS PLANT SPECIES

Background research conducted for the Proposed Project generated a list of 28 special-status plant species that have a potential to occur in the survey area. This list was generated by comparing the species' ranges and habitat requirements with the location of the Proposed Project and habitat types within it. These species are presented in Table 2: Special-Status Plant Species with the Potential to Occur, which provides the listing status, life history, and bloom period for each species. Special-status plant surveys were fully floristic. CNDDB occurrences of specialstatus wildlife are presented in Attachment G: CNDDB Occurrences of Special-Status Plant Species.3

Reference checks were performed for recorded populations of special-status plant species. Eight reference sites were visited by the botanical survey team prior to floristic botanical surveys within the survey area. Many locations with historically documented occurrences of specialstatus plants have been converted to active agriculture, which is extensive and is the primary land use within 5 miles of the survey area. Further, reference populations for many special-status plant species were located on private property that was inaccessible to the survey team. No special-status plants were observed during field reference checks.

To supplement field reference checks, local botanists working in areas adjacent to the Proposed Project were consulted. Four special-status plant species (Fritillaria liliacea, Helianthella castanea, Centromadia parryi ssp. parryi, and Senecio aphanactis) were confirmed to be blooming in habitats adjacent to the Proposed Project before or during the May and July survey periods (H. Bartosh 2023).

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<sup>&</sup>lt;sup>3</sup> The findings pertaining to the presence of special-status plants presented in this report are supplemented by those documented in Attachment C: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report.

Table 2: Special-Status Plant Species with the Potential to Occur

Common Name	Scientific Name	Listing Status <sup>4</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Alkali milkvetch	Astragalus tener var. tener	1B.2	This species occurs in alkali playas, valley and foothill grasslands, vernal pools, and wetlands at elevations between 5 and 195 feet.	March to June	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Antioch Dunes buckwheat	Eriogonum nudum var. psychicola	1B.1	This species occurs in Interior dunes at elevations between 0 to 65 feet.	July to October	Perennial herb	This species has been documented between 1 and 5 miles from the expanded survey area and suitable habitat and conditions for this species are present within the expanded survey area; however, no observations were recorded during floristic field surveys in May and July 2023.  No Potential

Federal listing code: CNPS CRPRs:

-FE: Federally listed -1A: Presumed Extinct in California and rare/extinct elsewhere

as endangered -1B: Rare or endangered in California and elsewhere

-2B: Rare, threatened, or endangered in California, but more common elsewhere

State listing code:

-SE: State-listed as CRPR Threat Code:

endangered -0.1: Seriously threatened

-0.1: Seriously threatened in California (over 80 percent of occurrences threatened, high degree and immediacy of threat)
-0.2: Moderately threatened in California (20 to 80 percent of occurrences threatened, moderate degree and immediacy of threat)

<sup>&</sup>lt;sup>4</sup> Explanation of federal and state listing codes:

Common Name	Scientific Name	Listing Status <sup>4</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Antioch Dunes evening- primrose	Oenothera deltoides ssp. howellii	FE, SE, 1B.1	This species occurs in Interior dunes at elevations between 0 to 100 feet.	March to September	Perennial herb	Suitable habitat and conditions for this species are not present within the expanded survey area, and no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 1 mile of the expanded survey area south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation, but is otherwise found between 1 and 5 miles from the remainder of the expanded survey area.  Low Potential
Bearded popcornflower	Plagiobothrys hystriculus	1B.1	This species occurs in Valley & foothill grassland, Vernal pool, Wetland at elevations between 0 to 900 feet.	April to May	Annual herb	This species has been documented between 1 and 5 miles from the expanded survey area and suitable habitat and conditions for this species are present within the expanded survey area; however, no observations were recorded during floristic field surveys in May and July 2023.  Low Potential
Big tarplant	Blepharizonia plumosa	1B.1	This species occurs in Valley & foothill grassland at elevations between 100 to 1,655 feet.	July to October	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential

Common Name	Scientific Name	Listing Status <sup>4</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Bolander's water- hemlock	Cicuta maculata var. bolanderi	2B.1	This species occurs in Marsh & swamp, Salt marsh, Wetland at elevations between 0 to 655 feet.	July to September	Perennial herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 0.25 mile of the expanded survey area.  High Potential
Brittlescale	Atriplex depressa	1B.2	This species occurs in Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland at elevations between 5 to 1,050 feet.	April to October	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Carquinez goldenbush	Isocoma arguta	1B.1	This species occurs in Valley & foothill grassland at elevations between 5 to 65 feet.	August to December	Perennial shrub	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Chaparral ragwort	Senecio aphanactis	2B.2	This species occurs in Chaparral, Cismontane woodland, Coastal scrub at elevations between 50 to 2,625 feet.	January to April	Annual herb	This species has been documented between 1 and 5 miles from the expanded survey area however suitable habitat and conditions for this species are not present within the expanded survey area; no observations were recorded during floristic field surveys in May and July 2023.  No Potential

Common Name	Scientific Name	Listing Status <sup>4</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Contra Costa goldfields	Lasthenia conjugens	FE, 1B.1	This species occurs in Alkali playa, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland at elevations between 0 to 1,540 feet.	March to June	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Contra Costa wallflower	Erysimum capitatum var. angustatum	FE, SE, 1B.1	This species occurs in Interior dunes at elevations between 10 to 65 feet.	March to July	Perennial herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Welsh mudwort	Limosella australis	2B.1	This species occurs in Brackish marsh, Freshwater marsh, Marsh & swamp, Riparian scrub, Wetland at elevations between 0 to 10 feet.	May to August	Perennial stoloniferous herb	Suitable habitat is present within the expanded survey area. Multiple observations of this species were made during floristic field surveys.  Present
Delta tule pea	Lathyrus jepsonii var. jepsonii	1B.2	This species occurs in Freshwater marsh, Marsh & swamp, Wetland at elevations between 0 to 15 feet.	May to July	Perennial herb	Suitable habitat is present within the expanded survey area. Multiple observations of this species were made during floristic field surveys.  Present

Common Name	Scientific Name	Listing Status⁴	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Diablo Helianthella	Helianthella castanea	1B.2	This species occurs in Broadleaved upland forest, Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland at elevations between 195 to 4,265 feet.	March to June	Perennial herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Diamond- petaled California poppy	Eschscholzia rhombipetala	1B.1	This species occurs in Valley & foothill grassland at elevations between 0 to 3,200 feet.	March to April	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Dwarf downingia	Downingia pusilla	2B.2	This species occurs in Valley & foothill grassland, Vernal pool, Wetland at elevations between 5 to 1,460 feet.	March to May	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential
Fragrant fritillary	Fritillaria liliacea	1B.2	This species occurs in Cismontane woodland, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland at elevations between 10 to 1,345 feet.	February to April	Perennial bulbiferous herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 5 miles of the expanded survey area.  Low Potential

Common Name	Scientific Name	Listing Status <sup>4</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Hall's bush- mallow	Malacothamnus hallii	1B.2	This species occurs in Chaparral, Coastal scrub, Ultramafic at elevations between 35 to 2,495 feet.	May to September	Perennial deciduous shrub	This species has been documented between 1 and 5 miles from the expanded survey area; however, suitable habitat and conditions for this species are not present within the expanded survey area. In addition, this species was not observed during floristic field surveys in May and July 2023.  No Potential
Heartscale	Atriplex cordulata var. cordulata	1B.2	This species occurs in Chenopod scrub, Meadow & seep, Valley & foothill grassland at elevations between 0 to 1,835 feet.	April to October	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential
Hoover's cryptantha	Cryptantha hooveri	1A	This species occurs in Interior dunes, Valley & foothill grassland at elevations between 30 to 490 feet.	April to May	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential
Keck's checkerbloom	Sidalcea keckii	FE, 1B.1	This species occurs in Cismontane woodland, Ultramafic, Valley & foothill grassland at elevations between 245 to 2,135 feet.	April to June	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential

Common Name	Scientific Name	Listing Status⁴	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Mason's lilaeopsis	Lilaeopsis masonii	1B.1	This species occurs in Freshwater marsh, Marsh & swamp, Riparian scrub, Wetland at elevations between 0 to 35 feet.	April to November	Perennial rhizomatous herb	Suitable habitat is present within the Project area. Multiple observations of this species were made during floristic field surveys.  Present
Mt. Diablo buckwheat	Eriogonum truncatum	1B.1	This species occurs in Chaparral, Coastal scrub, Valley & foothill grassland at elevations between 10 to 1,150 feet.	April to September	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential
Papoose tarplant	Centromadia parryi ssp. parryi	1B.2	This species occurs in Chaparral, Coastal prairie, Meadow & seep, Marsh & swamp, Valley & foothill grassland at elevations between 0 to 1,380 feet.	May to November	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential
San Joaquin spearscale	Extriplex joaquinana	1B.2	This species occurs in Alkali playa, Chenopod scrub, Meadow & seep, Valley & foothill grassland at elevations between 5 to 2,740 feet.	April to October	Annual herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential

Common Name	Scientific Name	Listing Status <sup>4</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Showy golden madia	Madia radiata	1B.1	This species occurs in Cismontane woodland, Valley & foothill grassland at elevations between 80 to 3,985 feet.	March to May	Annual herb	This species has been documented between 1 and 5 miles from the expanded survey area and suitable habitat and conditions for this species are present within the expanded survey area; however, no observations were recorded during floristic field surveys in May and July 2023.  No Potential
Soft salty bird's-beak	Chloropyron molle ssp. molle	FE, 1B.2	This species occurs in Marsh & swamp, Salt marsh, Wetland at elevations between 0 to 10 feet.	June to November	Annual herb (hemiparasitic)	Suitable habitat and conditions for this species are not present within the expanded survey area, and no observations were recorded during floristic field surveys in May and July 2023. This species has been documented between 1 and 5 miles from the expanded survey area.  Low Potential
Suisun Marsh aster	Symphyotrichum lentum	1B.2	This species occurs in Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland at elevations between 0 to 10 feet.	April to November	Perennial rhizomatous herb	Suitable habitat and conditions for this species are present within the expanded survey area, but no observations were recorded during floristic field surveys in May and July 2023. This species has been documented within 0.25 mile of the expanded survey area.  High Potential

Three special-status plant species were observed during field surveys of the original survey area: Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*), Mason's lilaeopsis (*Lilaeopsis masonii*), and Welsh mudwort (*Limosella australis*). The locations of these plants and the boundaries of the original survey area are shown in Attachment E: Biological Resources Map. All observed occurrences of special-status plants were along the northern shore of the Sacramento River within potentially jurisdictional wetland habitat.

Four special-status plants with the potential to occur within the survey area have bloom periods that were not captured during this botanical survey. These include:

- Carquinez goldenbush (*Isocoma arguta*)
- Chaparral ragwort (Senecio aphanactis)
- Diamond-petaled California poppy (Eschscholzia rhombipetala)
- Fragrant fritillary (Fritillaria liliacea)

Two of these species (Carquinez goldenbush and fragrant fritillary) are perennial species and would be observable within the survey area year-round. However, the remaining two species (Diamond-petaled California poppy and chaparral ragwort) are annual herbs and, if present within the survey areas, may not have been readily identifiable during the survey periods of May and July. Chaparral ragwort was confirmed to be in bloom on March 3, 2023 in surrounding areas (H. Bartosh 2023), however as described in Table 2: Special-Status Plant Species with the Potential to Occur, no suitable habitat for this species is found within the original survey area. The results of these surveys are detailed further in Attachment C: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report.

Supplemental targeted surveys were conducted within the original survey area in 2024 during the bloom period for diamond-petaled California poppy (March to April). Additionally, floristic surveys were conducted in 2024 within the expanded survey area. The findings pertaining to those surveys are detailed in Attachment D: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report Addendum and supplement the results of this report.

# 6.3.0 Species Present within the Survey Area

#### Welsh Mudwort

Welsh mudwort (*Limosella australis*) can be observed on large patches of tidal mudflats with brackish or tidal freshwater, as well as alkali playa, cismontane woodland, valley and foothill grasslands, vernal pools, and wetlands. The plant will generally grow grass-like leaves in clumps of 5-10, with short, white flowers about an inch tall. This species was observed during the survey several times along the northern intertidal margins of the Sacramento River.

## **Delta Tule Pea**

The Delta Tule Pea (*Lathyrus jepsonii* var. *jepsonii*) can be found in wetlands and dunes, among other suitable habitats. The plant can be identified via its pink to purple inflorescence or based on characteristics of its family (Fabaceae) such as branched tendrils, lance-shaped leaflets, or legume pods. Multiple observations of this species were made during the survey, usually closely associated with *Rosa californica* in close proximity to the northern shore of the Sacramento

River. Several additional observations of this species were made on the southern shore of the Sacramento River along a metal fence within rip rap.

### Mason's Lilaeopsis

Mason's Lilaeopsis (*Lilaeopsis masonii*), endemic to California, is found in freshwater and brackish marshes and other estuary habitats. The species spreads laterally by rhizomatous growth and grows linear leaves averaging around 2-7 centimeters long. It has small, white or greenish flowers in numbers of 3-8 per umbel. Multiple observations of this species were made along the northern intertidal margins of the Sacramento River.

## 6.3.1 Species with a High Potential to Occur

#### **Bolander's water-hemlock**

Bolander's Water hemlock (*Circuta maculata* var. *bolanderi*) will often be associated with ditches, stream banks, pond margins, and marshes among other suitable habitats like valley and foothill grasslands, vernal pools, and other wetlands. Water birds often consume the round fruits of the plant. The small white flowers of this species comprise an umbel atop tall stems, which are accompanied by fern-like leaves. There is suitable habitat within the survey area in wetlands immediately adjacent to the northern shore of the Sacramento River and recent CNDDB observations for this plant have been recorded within 0.25 mile of the survey area, thus making it highly likely that this species will occur within the survey area.

### Suisun Marsh Aster

The Suisun Marsh Aster (*Symphyotrichum lentum*), an endemic species to Suisun Marsh, is a spreading herb that can grow up to 4 feet tall. Like other members of Asteraceae, this species features an inflorescence with yellow flowers in the middle, surrounded by white flowers on the outside. It can be found in brackish or freshwater marshes and alongside the backs of sloughs and watercourses. This species prefers soils with higher clay and loam contents and attracts butterflies. Suitable wetland habitat for the species was observed within the survey area in wetlands immediately adjacent to the northern shore of the Sacramento River. Observations within 0.25 of a mile of the survey area have been recently documented. This species has a high potential to occur within the survey area.

### 6.4 SPECIAL-STATUS WILDLIFE SPECIES

Based on the literature and database review, 32 special-status wildlife species were identified that have the potential to occur within the survey area. The species name, listing status, life history, known locations, and a brief assessment of the potential to occur within the survey area are provided for each species in Table 3: Special-Status Wildlife Species with the Potential to Occur. CNDDB occurrences of special-status wildlife are presented in Attachment H: CNDDB Occurrences of Special-Status Wildlife Species. The approximate nest location is shown in Attachment E: Biological Resources Map.

Table 3: Special-Status Wildlife Species with the Potential to Occur

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Amphibians				
California red-legged frog	Rana draytonii	FT, SSC	This highly aquatic species typically inhabits quiet pools of streams, marshes and ponds, preferring habitat with extensive shoreline vegetation. Its diet is highly variable and may include various invertebrates, amphibians, and small mammals. In Northern California, breeding usually takes place between March and July.	Suitable wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles from the survey area. This species was not observed during the field survey.  Low Potential
California tiger salamander – central California Distinct Population Segment (DPS)	Ambystoma californiense pop. 1	FT, ST, WL	This species occupies grassland, savanna, or open woodland habitats and spends much of the year in underground refuges, especially ground squirrel ( <i>Ammospermopholis beechyi</i> ) burrows. Vernal pools or other seasonal water sources are required for breeding and egg laying. Adults may travel hundreds of meters across upland habitat to reach breeding ponds following seasonal rains during November to February. Its diet is highly variable and may include invertebrates, amphibians, or small mammals.	Annual grassland habitat is present within the survey area; however, no suitable refuge burrows were observed during field surveys. Further, no suitable vernal pools were observed within the survey area. These findings are consistent with previous habitat assessments for this species within the survey area. These protocol-level assessments concluded that the survey area lacks suitable aquatic habitat (Jennings 2010), contains multiple barriers to movement/dispersal (Area West Environmental [AWE] 2017), has land use practices that inhibit dispersal (AECOM 2018b), and has a scarcity of suitable burrows refugia. This species has been recently documented between 1 and 5 miles from the survey area. This species was not observed during the field survey.  Low Potential

<sup>&</sup>lt;sup>5</sup> Explanation of federal and state listing codes:

Federal listing codes: State listing

-FE: Federally listed as endangered -FT: Federally listed as threatened

-BCC: USFWS Bird of Conservation Concern

State listing codes:

-SE: State-listed as endangered -ST: State-listed as threatened -FP: Fully protected species -SSC: Species of special concern

-WL: Watch list species

-WBWG-H: Western Bat Working Group high designation

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Birds				
American peregrine falcon	Falco peregrinus anatum	FP	This species can be found occupying several biomes throughout California year-round. Breeding takes place from April to June. A majority of nests are constructed on ledges on relatively tall cliffs in remote areas with minimal human disturbance and are often reused from year to year. Foraging occurs in a variety of habitat types, and its diet consists almost exclusively of other birds.	Suitable nesting habitat does not occur in or near the survey area. Foraging and migrating individuals may occur in or near the survey area; however, because this species is highly mobile, any potential Proposed Project-related encounters are not likely to impact this species. This species was not observed during the field survey.  No Potential (Nesting)  Low Potential (Foraging/Migration)
Burrowing owl	Athene cunicularia hypugaea	SSC, BCC	This species can be found in a variety of open habitat types, including grassland, savanna, desert scrub, agricultural, and urban areas. Breeding occurs from March through October, and nesting takes place within abandoned burrows dug by burrowing mammals. This species preys on large insects and small mammals.	Grassland habitat suitable for foraging is found in the survey area north of the Sacramento River; however, burrows suitable for species occupation and breeding were not observed during the field surveys. Migrating individuals have been reported to occur within the survey area during winter months (AECOM 2018a), and all CNDDB occurrences north of the Sacramento River were recorded during the non-breeding season. Nesting habitat is limited and marginal given the ongoing agricultural activity north of the Sacramento River, but ground squirrels may recolonize and provide suitable burrow habitat if the fields are left fallow or grazed (AECOM 2018a). This species was not observed during the field surveys.  Moderate Potential (Nesting)  High Potential (Foraging/Migration)

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
California black rail	Laterallus jamaicensis coturniculus	ST, FP	This species is found in tidal emergent wetlands dominated by pickleweed ( <i>Salicornia</i> spp.) or in brackish marshes supporting bulrushes in association with pickleweed. Breeding occurs from March to June, and nests are concealed in dense vegetation (often pickleweed) near the upper limits of tidal flooding.	Suitable habitat capable of supporting foraging individuals is present in the survey area adjacent to the Sacramento River. Wetland habitats within the survey area lack large stands of pickleweed and tidal flux preferred by the species for breeding sites. This species has been recently documented within 1 mile of the survey area, but was not observed during the field survey.  Moderate Potential (Nesting)  High Potential (Foraging)
California least tern	Stemula antillarum browni	FE, SE, FP	This species is found throughout California and requires undisturbed stretches of beach and coastline. Adults forage in bays and estuaries for a variety of fish species. The California least tern nests in colonies on relatively open beaches where vegetation is limited by natural scouring from tidal action. However, to avoid humans, tern colonies have been known to move to inland mud flats and dredge fill sites. The breeding season typically begins in early to mid-May, and nests are constructed directly on the ground.	Suitable foraging habitat for this species is found adjacent to the survey area within the Sacramento River and Suisun Bay. However, no suitable breeding habitat is found within the survey area. This species has been documented between 1 and 5 miles from the survey area; however, all records are more than 30 years old. This species was not observed during the field survey.  No Potential (Nesting)  Moderate Potential (Foraging/Migration)

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Northern harrier	Circus cyaneus	SSC, BCC	This species is found in a variety of open grassland, wetland, and agricultural habitats. Open wetland habitats used for breeding include marshy meadows, wet and lightly grazed pastures, and freshwater and brackish marshes. Breeding habitat also includes dry upland habitats, such as grassland, cropland, drained marshland, and shrub-steppe in cold deserts. Wintering habitat includes open areas dominated by herbaceous vegetation, such as grassland, pastures, cropland, coastal sand dunes, brackish and freshwater marshes, and estuaries.	Suitable foraging and nesting habitat are present in the survey area, and two individuals were observed foraging within the survey area in wetland habitat adjacent to the northern shore of the Sacramento River. This species has been documented between 1 and 5 miles from the survey area.  High Potential (Nesting)  Present (Foraging)
Saltmarsh common yellowthroat	Geothlypis trichas sinuosa	SSC, BCC	This species occurs in freshwater and saltwater marshes. It requires thick, continuous cover down to the water surface for foraging, and tall grasses, tule patches, and willows for nesting.	Suitable habitat for this species is present within the portion of the survey area located on the northern shore of the Sacramento River. This species has been documented within 1 mile of the survey area, but was not observed during the field survey.  High Potential (Nesting)  High Potential (Foraging)
Short-eared owl	Asio flammeus	SSC, BCC	This species occurs in agricultural fields, grazed and ungrazed grasslands, and freshwater and saltwater marshes. This species requires open country that supports concentrations of microtine rodents and herbaceous cover sufficient to conceal its nest from predators. Its nests are built on the ground. This species' diet consists of small mammals and is particularly affected by the 3- to 4-year cycle of the California vole ( <i>Microtus californicus</i> ). Its breeding season occurs from April through July.	Suitable foraging and breeding habitat is present in the survey area. This species has been documented between 1 and 5 miles from the survey area; however, all records are more than 30 years old. This species was not observed during the field survey period.  Low Potential (Nesting)  Low Potential (Foraging)

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Song sparrow ("Modesto" population)	<i>Melospiza</i> <i>melodia</i> pop. 1	SSC	This species inhabits freshwater marshes, riparian thickets, sparsely vegetated irrigation canals, and valley oak restoration sites. It seeks cover and nests in willow and nettle thickets, growths of tules and cattails, and riparian oak forests with a sufficient understory of blackberry.	Suitable breeding and foraging habitat for this species is within the portion of the survey area located on the northern shore of the Sacramento River. This species has been documented between 1 and 5 miles from the survey area; however, all records are over 30 years old. This species was not observed during the field survey.  Low Potential (Nesting)  Low Potential (Foraging)
Suisun song sparrow	Melospiza melodia maxillaris	SSC	This species occurs throughout California, primarily in saltwater and brackish marshes. The species requires dense vegetation as protection from predators and high tide, for perching, and for nesting habitat. Breeding season is from early March through July.	Suitable breeding and foraging habitat for this species can be found within the portion of the survey area located on the northern shore of the Sacramento River. This species has been documented within 1 mile of the survey area south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation and within 5 miles of the survey area along the northern shore of the Sacramento River, but was not observed during the field survey.  High Potential (Nesting)  High Potential (Foraging)
Swainson's hawk	Buteo swainsoni	ST	This species occurs in open grasslands, prairies, and farmlands that have nearby trees for nesting. It nests in bushes and in several tree species, including oaks ( <i>Quercus</i> spp.), willow, and eucalyptus, and usually nests in trees in riparian areas near open fields. This species primarily hunts small rodents, rabbits, birds, and reptiles during the breeding season. It largely lives off insects, such as grasshoppers and beetles, during the non-breeding season. It reproduces from March through April, incubates for 34 to 35 days, and fledges 6 weeks later.	An adult male hawk was observed flying overhead during field surveys. Suitable foraging and breeding habitat is present, and multiple occurrences of the species have been documented between 1 and 5 miles from the survey area.  High Potential (Nesting)  Present (Foraging/Migration)

Common Name	Scientific Name	Listing Status⁵	Habitat and Life History	Potential to Occur in the Survey Area
Tricolored blackbird	Agelaius tricolor	ST, SSC, BCC	This highly colonial species requires open water, protected nesting substrate, and foraging areas adjacent to the colony with insect prey. Breeding occurs near fresh water, often in emergent wetlands with tall, dense cattails or tules, but also in thickets of willow; blackberry; wild rose; or tall, dense forbs. Seeds and cultivated grains, such as rice and oats, compose most of its fall and winter diet. Tricolored blackbird forages on the ground in croplands, grassy fields, flooded land, and along edges of ponds. The breeding season usually occurs from mid-April to late July.	Some marginal willow thicket and wild rose habitat is present within the survey area; however, fresh waterbodies suitable for nesting are not present. Suitable foraging habitat is present in the northern portion of the survey area. This species has been documented between 1 and 5 miles from the survey area; however, all records are over 30 years old. This species was not observed during the field survey.  Low Potential (Nesting)  Moderate Potential (Foraging)
White-tailed kite	Elanus leucurus	FP	This species nests in riparian or oak woodland adjacent to undisturbed, open fields and grasslands, meadows, farmlands, and emergent wetlands, where it hunts rodents. Breeding generally occurs from February through October. White-tailed kite lays three to five eggs, which it incubates for 30 to 32 days, after which fledging occurs at 5 to 6 weeks of age.	Suitable foraging habitat for the species is present in the survey area; however, oak woodland suitable for nesting is not present. This species has been documented between 1 and 5 miles from the survey area, but was not observed during the field survey.  Low Potential (Nesting)  Moderate Potential (Foraging)
Yellow rail	Coturnicops noveboracensis	SSC	This species breeds in densely vegetated, shallow freshwater marshes and wet meadows. Breeding occurs from May through September. Wintering birds frequent mature salt marshes well above the water line.	Marginal breeding habitat and suitable wintering habitat are present within the survey area. This species has been documented between 1 and 5 miles from the survey area, but was not observed during the field survey.  Low Potential (Nesting)  Moderate Potential (Foraging/Wintering)

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Fish				
Delta smelt	Hypomesus transpacificus	FT, SE	Delta smelt are a euryhaline species (i.e., a species adapted to living in fresh and brackish water) that occupies estuarine areas with salinities below 2 parts per thousand. This species is found only from the San Pablo Bay upstream through the Sacramento-San Joaquin River Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. Delta smelt spawn in shallow, fresh, or slightly brackish water upstream from the brackish water habitat associated with the mixing zone.	Critical habitat and documented occurrences of this species can be found within the waters adjacent to the survey area. However, no suitable aquatic/estuarine habitat for this species was present within the survey area.  No Potential
Green sturgeon - southern DPS	Acipenser medirostris pop. 1	FT	This species is found in a variety of estuarine and freshwater habitats within the San Francisco Bay, San Pablo Bay, and Sacramento-San Joaquin River Delta. Spawning occurs in the Sacramento, Feather, and Yuba rivers in cool (11 to 15 degrees Celsius) sections of mainstem rivers in deep pools (i.e., 8 to 9 meters) with substrate containing small- to medium-sized sand, gravel, cobble, or boulders.	Suitable habitat and documented occurrences of this species can be found within the waters adjacent to the survey area. However, suitable aquatic/estuarine habitat for this species is not present within the survey area.  No Potential

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Longfin smelt	Spirinchus thaleichthys	ST	The known range of this species extends from the San Francisco Bay Estuary and Sacramento-San Joaquin Delta (Bay-Delta) in California northward to the Cook Inlet in Alaska. In the Bay-Delta, longfin smelt spawn primarily in freshwater in the lower reaches of the Sacramento and San Joaquin rivers. Juvenile and adult longfin smelt have been found throughout the year in salinities ranging from pure freshwater to pure seawater. Once past the juvenile stage, they are typically collected in waters with salinities ranging from 14 to 28 parts per thousand. The life cycle of most longfin smelt generally requires estuarine conditions. Longfin smelt occur in the Bay-Delta typically from January to April.	Suitable habitat and documented occurrences of this species can be found within the waters adjacent to the survey area. However, suitable aquatic/estuarine habitat for this species is not present within the survey area.  No Potential
Sacramento perch	Archoplites interruptus	SSC	This freshwater fish species is endemic to California's Central Valley. It inhabits a range of aquatic habitats, including rivers, streams, lakes, reservoirs, and ponds. This species shows a preference for habitats with vegetated banks that provide both food sources and protective cover. Breeding typically occurs during the spring and early summer in shallow areas with gravel or sandy substrate. This species feeds primarily on small invertebrates but will opportunistically feed on small fish or fish eggs.	Suitable habitat and documented occurrences of this species can be found within the waters adjacent to the survey area. However, suitable aquatic/estuarine habitat for this species is not present within the survey area.  No Potential

Common Name	Scientific Name	Listing Status⁵	Habitat and Life History	Potential to Occur in the Survey Area
Steelhead - Central Valley DPS	Oncorhynchus mykiss irideus pop. 11	FT	This DPS of steelhead represents a population that spawns in freshwater habitats located in California's Central Valley. This species is anadromous, meaning they are born in freshwater, migrate to the ocean to grow and mature, and return to their natal streams to spawn. Suitable freshwater breeding habitats include rivers, streams, and tributaries with clean, cold water and gravel substrate. After hatching, the young steelhead spend several years in fresh water before migrating to the ocean, where they feed on a variety of prey, including small fish, invertebrates, and plankton.	Suitable habitat and documented occurrences of this species can be found within the waters adjacent to the survey area. However, suitable aquatic/estuarine habitat for this species is not present within the survey area.  No Potential
Invertebrates				
Conservancy fairy shrimp	Branchinecta conservatio	FE	This species occurs within vernal pool habitats in California's Central Valley. It mostly lives in relatively large, turbid freshwater vernal pools called playa pools. This species can be found at elevations ranging from 16 to 5,577 feet in grassland, rural, and wetland habitats. This species opportunistically filter-feeds on various planktonic food sources including algae and protozoa.	No suitable vernal pool habitat was observed during the field survey. It is possible that suitable vernal pool habitat for this species may develop during the rainy season and outside of this report's survey window. This species has been documented between 1 and 5 miles from the survey area, but was not observed during the field survey.  Low Potential

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Lange's metalmark butterfly	Apodemia mormo langei	FE	This species is associated with the Antioch Dunes, a riverbank dune system along the San Joaquin River. Currently, this species can only be found in the Antioch Dunes National Wildlife Refuge, the last remnants of the Antioch Dunes. All life stages are closely associated with naked-stemmed buckwheat ( <i>Eriogonum nudum</i> var. <i>psychicola</i> ), which is the primary nectar source for adults, is used to lay eggs, and is a larval food plant. The leaves of the larval host plant provide both food and shelter throughout the larval instar phases.	Suitable habitat for this species is not present within the survey area. Further, while there are documented occurrences within 0.25 mile of the survey area, there were no observations of this species or its obligate host plant during field surveys. This species may occur incidentally within the survey area given the proximity of suitable habitat, but the lack of suitable foraging and breeding habitat within the survey area makes this unlikely.  Low Potential
Vernal pool fairy shrimp	Branchinecta Iynchi	FT	This species occurs within vernal pool habitats throughout California. Female vernal pool fairy shrimp carry fertilized eggs in a sac on the underside of their body. The eggs are either dropped to the pool bottom or remain in the brood sac until the mother dies and sinks to the bottom of the pool. This species opportunistically filter-feeds on various planktonic food sources, including algae and protozoa.	No suitable vernal pool habitat was observed during the field survey. It is possible that suitable vernal pool habitat for this species may develop during the rainy season and outside of this report's survey window. This species has been documented between 1 and 5 miles from the survey area, but was not observed during the field survey.  Low Potential

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Vernal pool tadpole shrimp	Lepidurus packardi	FE	This species occurs within vernal pool habitats with a patchy distribution within California's Central Valley. Female vernal pool tadpole shrimp produce up to six clutches of eggs containing 32 to 61 eggs per clutch during each wet season. They carry fertilized eggs in a sac on the underside of their body. The eggs are either dropped to the pool bottom or remain in the brood sac until the mother dies and sinks to the bottom of the pool. This species opportunistically filter-feeds on other fairy shrimp ( <i>Branchinecta</i> spp.), invertebrates, and waste from other vernal pool species.	No suitable vernal pool habitat was observed during the field survey. It is possible that suitable vernal pool habitat for this species may develop during the rainy season and outside of this report's survey window. This species has been documented between 1 and 5 miles from the survey area, but was not observed during the field survey.  Low Potential
Mammals				
Salt marsh harvest mouse	Reithrodontomys raviventris	FE, SE, FP	This species inhabits salt marshes in California and is adapted to live in marsh vegetation, including pickleweed and cordgrass, which provide cover, food sources, and breeding habitats. Breeding typically occurs between March and October. Its diet consists of marsh vegetation, including seeds, stems, and leaves.	Suitable salt marsh habitat for this species is present within the survey area in salt marshes north of the Sacramento River. This species has been documented within 0.25 mile of the survey area on both the north shore of the Sacramento River and south shore of the Suisun Bay, but was not observed during field surveys.  High Potential
San Joaquin kit fox	Vulpes macrotis mutica	FE, ST	This species inhabits a variety of open habitats, including grasslands, chenopod scrublands, and semi-arid regions. Breeding occurs from January to March, with a gestation period of 49 to 55 days. The female constructs a den in the ground, often utilizing existing burrows dug by other animals. Its diet primarily consists of small mammals, such as rodents, rabbits, and ground squirrels.	Grassland habitat suitable for foraging is present within the survey area; however, no suitable breeding burrows/dens were encountered during the survey. This species has been documented between 1 and 5 miles from the survey area, but these records are more than 30 years old.  Low Potential

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Western red bat	Lasiurus blossevillii	SSC, WBWG-H	This species occurs a variety of habitats, including forests, woodlands, and riparian areas. It roosts and forages among trees and vegetation and exhibits a preference for mixed coniferous and deciduous forests. Breeding occurs in the spring and early summer. This species typically seeks out tree foliage, such as leaves or branches, to create roosting sites. The diet consists mainly of insects, such as moths, beetles, and flies.	Marginally suitable roosting habitat is present in the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has been documented between 1 and 5 miles from the survey area, but was not observed during field surveys.  Moderate Potential (Roosting)  Moderate Potential (Foraging)
Reptiles				
Alameda whipsnake	Masticophis lateralis euryxanthus	FT, ST	This species inhabits grasslands, chaparral, and oak woodlands within Alameda and Contra Costa counties. It is primarily diurnal, being active during the day and seeking shelter in vegetation or underground burrows at night. Breeding typically occurs in the spring and summer months. The diet consists of small vertebrates, including lizards, rodents, and birds.	Suitable grassland habitat is present; however, the survey area is outside of the geographic range for this species. The species has been documented between 1 and 5 miles from the survey area.  No Potential
California glossy snake	Arizona elegans occidentalis	SSC	This species is typically found in desert scrub, grasslands, and rocky areas. It is primarily nocturnal, being active during the night and seeking shelter in burrows, crevices, or under rocks during the day. Breeding occurs in the spring and early summer. Females lay eggs in sandy soil or loose substrate, where they are left to incubate. Its diet consists mainly of small mammals, including rodents, lizards, and occasionally birds or eggs.	Suitable grassland habitat is present; however, the survey area is outside of the geographic range for this species. The species has been documented between 1 and 5 miles from the survey area, but all occurrences are more than 30 years old.  No Potential

Common Name	Scientific Name	Listing Status <sup>5</sup>	Habitat and Life History	Potential to Occur in the Survey Area
Giant gartersnake	Thamnophis gigas	FT, ST	This semi-aquatic species inhabits marshes, wetlands, and slow-moving bodies of water. It is often closely associated with water sources, which serve as its hunting grounds. Breeding typically occurs in the spring and early summer. After mating, females give birth to live young. The diet primarily consists of small fish, amphibians, and aquatic invertebrates.	Suitable wetland habitat is not present within the survey area. Although species has been documented between 1 and 5 miles from the survey area, these observations were made in habitats upstream of the survey area with far less salt-water intrusion. Further, extensive grazing and land modification over much of the project has greatly diminished potential upland refugia. The species was not observed during field surveys.  Low Potential
Northern California legless lizard	Anniella pulchra	SSC	This species is found in grasslands, chaparral, and open woodlands and requires loose, friable soils for burrowing. Breeding typically occurs in the spring or early summer. Females lay small clutches of eggs in underground burrows or hidden areas. The diet primarily consists of small invertebrates, such as insects, spiders, and other arthropods.	Marginal grassland habitat for this species is present within the survey area. This species has been documented between 1 and 5 miles from the survey area, but was not observed during field surveys.  Low Potential
Western pond turtle	Emys marmorata	SSC	This freshwater turtle species primarily inhabits ponds, lakes, and slow-moving streams with suitable basking sites. It spends a significant amount of time basking on logs or rocks.  Breeding typically occurs in the spring and early summer. Females dig nests in sandy or gravelly areas near water, where they lay their eggs. The hatchlings emerge several months later and make their way to the water. The diet is omnivorous and consists of various aquatic plants, insects, small fish, and amphibians.	Suitable wetland habitat is present within the survey area; however, suitable nesting habitat is not present. This species has been documented within 1 mile of the survey area, but was not observed during field surveys.  High Potential

### 6.4.0 Species Present within the Survey Area

### **Avian Species**

### Northern Harrier

The Northern Harrier (Circus cyaneus) utilizes a wide variety of open habitats with herbaceous cover, including saltwater and freshwater wetlands, grasslands, idlefields, agricultural pasturelands, deserts, and cropland. This species will forage on small rodents and birds within open fields with dense vegetation. Ideal breeding and nesting grounds include wetland or upland habitats with tall, dense grasses, forbs, or low shrubs for concealment of nests. Northern Harriers will construct nests on the ground or over water on platforms of vegetation.

The survey area has attracted nesting Northern Harriers; an active northern harrier nest was observed within the survey area with two parents tending to nestlings and delivering food. The nest is situated on the ground within dense marsh vegetation in wetlands adjacent to the northern shore of the Sacramento River. The approximate nest location is shown in Attachment E: Biological Resources Map. This species was also observed foraging within clearings surrounded by dense vegetation during the field survey.

#### Swainson's Hawk

The Swainson's hawk (Buteo swainsoni) feeds almost exclusively on insects, the majority being grasshoppers. Young will occasionally be fed rodents, rabbits, and reptiles. Suitable habitat for this species requires riparian areas, shrub-steppe areas with scattered trees, as well as large shrubs. Swainson's hawk nests are typically located in small, shrubby trees. This species can be found throughout North America from southern Canada to northern Mexico.

This species may nest within the survey area within the limited tree nesting sites available. An individual was observed during the field survey foraging in upland grassland and cropland and CNDDB (CDFW 2023a) documentation has been recorded near the survey area. Foraging Swainson's hawks may be present all throughout the survey area.

## 6.4.1 Species with a High Potential to Occur

### **Avian Species**

### **Burrowing Owl**

The burrowing owl (Athene cunicularia hypugaea) occupies wide-open, sparsely vegetated areas like prairies, deserts, grasslands, and agricultural fields. Males are generally territorial and chase or attack other individuals of the same species, except for their breeding partner. Burrowing owls often use burrows dug by other animals like ground squirrels. Although insects and small mammals are the primary source of food for this species, the burrowing owl is an opportunistic predator and eats anything it can physically handle. Unlike other owl species, the burrowing owl nests in the ground and actively hunts in the daytime.

Suitable grassland habitat for foraging is present, particularly in the survey area north of the Sacramento River. Several CNDDB occurrences for this species have been documented within 5 miles of the survey area; however, all occurrences north of the Sacramento River were recorded during the non-breeding season (CDFW 2023). Further, anecdotal reports of overwintering

burrowing owls within the survey area have been reported along Talbert Lane (AECOM 2018a). The survey area contains marginal and limited nesting habitat for owls; suitably sized small mammal burrows were largely absent given the large-scale disking within the majority of grassland habitats. However, if agricultural lands are left fallow or unmaintained, small mammals, such as California ground squirrels, may reestablish burrow networks and provide suitable overwintering or breeding habitat for burrowing owls. This species was not observed or detected during field surveys. This species has a moderate potential to occur for nesting and high potential for foraging within grassland habitats of the survey area.

### Saltmarsh Common Yellowthroat

The saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) prefers freshwater and salt marshes with nearby willow thickets. This species forages on or near the ground, looking for insects and spiders in low vegetation. Females of this species will nest in higher marsh ground to avoid flooding and conceal their young with a loose, bulky outer cup of grasses and sedges, sometimes with a roof over the nest. The saltmarsh common yellowthroat is endemic and a resident to the greater San Francisco Bay Area year-round with some individuals wintering in San Diego County.

Suitable grassland habitat for nesting and foraging is present within the survey area. This species was not observed during the field surveys but has documented CNDDB (CDFW 2023) occurrences within 1 mile of the survey area south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation and within 5 miles of suitable habitats within the portion of the survey area north of the Sacramento River. For these reasons, this species has a high potential to nest and forage within the survey area.

## Suisun Song Sparrow

The Suisun song sparrow (*Melospiza melodia maxillaris*), an endemic species to Suisun Marsh, has been associated with tidal channels, particularly in marshes with dominant species of pickleweed and gumplant (*Grindelia sp.*). The diet of this species mainly consists of vegetables and some animal matter. The nests of the Suisun song sparrow can be found in an array of different substrates and dense vegetation. These include gumplant, sedges (*Scirpus sp.*), rushes (*Juncus sp.*), perennial pepperweed (*Lepidium latifolium*), pickleweed, saltgrass (*Distichlis spicata*), and arrowgrass (*Triglochin maritima*).

The portion of the survey area located on the northern shore of the Sacramento River provides suitable marsh habitat for foraging. This species has CNDDB (CDFW 2023a) occurrences in nearby marsh habitats within 0.25 mile of the survey area in the vicinity of PG&E's existing Pittsburgh Substation within 1 to 5 miles of the survey area north of the Sacramento River. Although this species was not detected during field surveys, it has a high potential to occur for both nesting and foraging.

# **Mammal Species**

#### Salt Marsh Harvest Mouse

The Salt Marsh Harvest Mouse (*Reithrodontomys raviventris*) is generally restricted to salt or brackish marshes in the general San Francisco Bay Area. This species is highly associated with

pickleweed in saline soil. This is due to the plant's ability to provide year-round cover from predators, a source of food, and refugia from flooding. Salt Marsh Harvest mice will build nests from dry grasses and sedges on the ground and within dense vegetation.

This species has a high potential to occur within survey area due to the abundance of suitable habitat within marshlands north of the Sacramento River. This species was not observed during the field survey but has recent CNDDB occurrences near and within the survey area. Further, there have been recent confirmations of salt marsh harvest mouse presence within 1 mile of the survey area based on trapping detections from San Francisco Estuary Institute's (SFEI) salt marsh harvest mouse database.

# **Reptile Species**

### Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) can be found in Puget Sound, Washington ranging down to Northwestern Baja California. They will utilize both terrestrial and aquatic habitats, including permanent and seasonal aquatic habitats like rivers, sloughs, lakes, reservoirs, ponds, and irrigation canals. This species will nest, winter, disperse, and aestivate within 100 feet of a water source onto land. Western pond turtles will consume various aquatic plants, insects, small fish, and amphibians.

Suitable wetland habitat is present within the survey area; however, conditions suitable for nesting were not observed during surveys. Although no observations were made during field surveys, multiple observations have been recorded through CNDDB (2023a) within 1 mile of the survey area north of the Sacramento River. This species has a high potential to occur within the survey area.

# 6.4.2 Species with a Moderate Potential to Occur

## **Avian Species**

### California Black Rail

The California black rail (*Lateralis jamaicensis coturniculus*) inhabits saltwater and brackish marshes with Pickleweed (*Salicornia sp.*), sedges (*Carex sp.*), saltgrass (*Distichlis sp.*), and bulrush (*Scirpus sp.*). They favor high marsh habitat for breeding but are frequently faced with high and moderate tides in the San Francisco Bay Area. California black rails prefer lowgrowing forms of vegetation with abundant insects. Their diet consists of small invertebrates and seeds of aquatic plants.

Suitable habitat capable of supporting foraging individuals is present in the survey area north of the Sacramento River. Wetland habitats within the survey area lack large stands of pickleweed and tidal flux preferred by the species for breeding sites. This species has been recently documented within 1 mile of the survey area near PG&E's existing Pittsburgh Substation and within 5 miles of the survey area north of the Sacramento River, but was not observed during the field survey. This species has a moderate potential to occur within the survey area.

#### California Least Tern

The California least tern (*Strernula antillarum browni*) is typically found in colonies of 25 pairs that nest on relatively open beaches free of vegetation. Breeding season usually begins in May and nests are constructed on bare ground. Roosting individuals will forage within 2 miles of their nest location. Adults will forage for fish primarily in near shore ocean waters and in shallow estuaries and lagoons. This species has been known to move further inland to avoid humans and onto mudflats and dredge fill sites.

Suitable nesting habitat for the species does not occur within the survey area; however, suitable foraging habitat is present. CNDDB occurrences of this species have been documented within 5 miles of the survey area (CDFW 2023a). This species was not observed during the field survey, but there is moderate potential California least tern occur within the survey area.

#### Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) will be found in colonies near a water source and natural grasslands, woodlands, or agricultural croplands. This species has historically been associated with emergent marshes, but they may be found in non-native vegetation and active agricultural areas. Breeding colonies may consist of thousands of birds and may be found in the Central Valley of California and surrounding foothills. The tricolor blackbird diet may include local, abundant food sources, ranging from invertebrates to grains. They can be seen foraging in deep dense grasses and other vegetation.

Although there is limited nesting habitat, suitable foraging habitat can be found the grasslands and croplands along the northern portions of the survey area. No occurrences have been documented near the survey area in over 30 years and tricolored blackbirds were not observed during field surveys. This species has moderate potential to occur in foraging habitat provided by croplands and grasslands.

#### White-Tailed Kite

The white-tailed kite (*Elanus leucurus*) feeds mostly on voles and other small, diurnal mammals. For habitat to be considered suitable to the species, it must include undisturbed open grasslands, meadows, farmlands, and emergent wetlands to find prey in and dense canopies for roosting. This species is a resident of coastal and valley lowlands.

Grassland and marsh habitat suitable for foraging is present within the survey area; however, nesting habitat is limited given the lack of suitable trees. This species has been recently documented (CNDDB 2023a) near the survey area, but was not observed during field surveys. Therefore, there is moderate potential for this species to occur within the survey area for the purposes of foraging.

### Yellow Rail

The yellow rail (*Corturnicops noveboracensis*) will eat small snails, aquatic insects, and seeds found in shallow marshes and wet meadows. Wintering habitat will include freshwater and brackish marshes with dense grass. This species breeds mostly in Canada and northern US states, often having two nests with one to incubate eggs and the other to brood young. Like other rails, this species is highly secretive.

Freshwater marshland habitat required for nesting is not present within the survey area. However, salt marsh habitat, suitable for wintering and foraging birds, is present within the survey area. This species has recent CNDDB occurrences within 5 miles of the survey area (CDFW 2023a), but was not observed during the field survey. For these reasons, this species has a moderate potential to occur within the survey area north of the Sacramento River.

# **Mammal Species**

### Western Red Bat

The western red bat (*Lasiurus blossevillii*) prefers riparian woodlands but is found in a variety of other forest habitats. This bat forages in and around vegetation and in open areas near roosting sites on cicadas, beetles, wasps, flies, and moths. Roosting sites are primarily located in trees and rock crevices along forest edges adjacent to streams or open fields, but day roosts will sometimes be located in orchard trees and buildings. This species makes relatively short migrations within California to summer and winter ranges in the north and south of the state. As this species prefers riparian woodlands, threats include loss of riparian zones, primarily due to agricultural conversion and creation of water storage reservoirs.

Limited suitable tree roosting habitat is present within the survey area; however, suitable foraging habitat is present throughout the grassland and marsh habitats north of the Sacramento River. This species has CNDDB occurrences within 1 to 5 miles of the survey area, but was not observed during field surveys. There is a moderate potential for this species to occur within the survey area for the purposes of foraging.

### 6.5 GENERAL WILDLIFE SPECIES

Thirty-five wildlife species were incidentally identified during the surveys; these included one reptile, four mammals, and 30 birds. Noted wildlife species were identified by direct observation, vocalizations, or the observance of scat and tracks. The wildlife identified are not necessarily comprehensive accounts of all species that utilize the survey area, because species that are nocturnal, secretive, or seasonally absent may not have been observed.

Although substantial portions of the survey area are dominated by non-native grassland that is frequently utilized for agriculture purposes, the portion of the survey area located on the northern shore of the Sacramento River contains tidally influenced estuarine marshes and sloughs that provide important habitat for a variety of species. Sloughs and marshes in the survey area were generally undisturbed, containing thick and continuous stands of hardstem and giant bulrush that provide ample nesting habitat for riparian birds. Several avian species were incidentally observed nesting within stands of bulrush, including marsh wren (*Cistothorus palustris*), northern harrier, and red-winged blackbird (*Agelaius phoeniceus*).

Observed occurrences of wildlife species are shown in Table 4: Wildlife Species Observed within the Survey Area.

Table 4: Wildlife Species Observed within the Survey Area

Common Name	Scientific Name
American coot	Fulica americana
American bittern	Botaurus lentiginosus
American goldfinch	Spinus tristis
Barn swallow	Hirundo rustica
Black phoebe	Sayornis nigricans
Black-tailed jackrabbit	Lepus californicus
Brown-headed cowbird	Molothrus ater
Brewer's blackbird	Euphagus cyanocephalus
California gull	Larus californicus
California scrub jay	Aphelocoma californica
Cliff swallow	Petrochelidon pyrrhonota
Cottontail	Sylvilagus audubonii
European starling	Sturnus vulgaris
Gopher snake	Pituophis catenifer
Great blue heron	Ardea herodias
Great egret	Ardea alba
Horned lark	Eremophila alpestris
House finch	Haemorhous mexicanus
Killdeer	Charadrius vociferus
Mallard	Anas platyrhynchos
Marsh wren	Cistothorus palustris
Mourning dove	Zenaida macroura
Mute swan	Cygnus olor
Northern harrier	Circus hudsonius
Northern mockingbird	Mimus polyglottos
Red-winged blackbird	Agelaius phoeniceus
Ring-necked pheasant	Phasianus colchicus
River otter	Lontra canadensis
Savanah sparrow	Passerculus sandwichensis
Snowy egret	Egretta thula
Song sparrow	Melospiza melodia

Common Name	Scientific Name
Swainson's hawk	Buteo swainsoni
Tule elk	Cervus canadensis nannodes
Turkey vulture	Cathartes aura
Western meadowlark	Sturnella neglecta

#### 6.6 CRITICAL HABITAT

No critical habitat is found within the survey area. However, the estuarine, open water habitat within the submarine cable alignment and surrounding Sacramento River is designated as critical habitat for delta smelt (*Hypomesus transpacificus*).

#### 6.7 NATIVE WILDLIFE CORRIDORS AND NURSERY SITES

Wildlife migration corridors are areas that connect suitable wildlife habitats in a region that would otherwise be fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features (e.g., canyon drainages, ridgelines, or areas with vegetation cover) provide corridors for wildlife travel. Wildlife corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high-population or high-density areas; and facilitate genetic diversity. CEQA guidelines require that project proponents disclose and mitigate for significant impacts on wildlife corridors. Impacts to wildlife corridors, such as human disturbance and development, can cause harm to migrating species, cause species to exceed population thresholds in fragmented patches, or prevent healthy gene flow between populations. The California Essential Habitat Connectivity Project (CEHC) maintains a statewide Essential Habitat Connectivity Map, which broadly depicts large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas) (Spencer et al., 2010). The Survey Area region lies outside of any of these Natural Landscape Blocks and Essential Connectivity Areas (CDFW, 2021d).

The Proposed Project lies within the Pacific Flyway—an important north-south migration corridor that runs along the Pacific coast of the Americas from Alaska to Patagonia, including all of North America lying west of the Rocky Mountains. The Pacific Flyway links breeding grounds to the north with wintering areas to the south and is used by many different species of birds during migration. Many birds (especially waterfowl) use locations in California's Sacramento Valley as a stopover point or wintering area. One of those major locations is Suisun Marsh, which is less than 10 miles from the Survey Area. At the Proposed Project's latitude, the Pacific Flyway extends inland from the Pacific Ocean for approximately 700 miles. As a result, the Proposed Project's aboveground components would be placed in less than 0.3 percent of the width of the Pacific Flyway. The Proposed Project site does not occur in any nursery sites.

### 6.8 AQUATIC RESOURCES

Insignia biologists identified one linear water feature within the survey area that is potentially under the jurisdiction of the USACE, RWQCB, and CDFW. Further, seven potentially jurisdictional wetland features were observed within the survey area. Attachment E: Biological Resources Map depicts the locations of the potentially jurisdictional water features within the survey area. Attachment I: Linear Water Feature Photographs presents upstream and downstream photographs of the mapped ephemeral linear water feature. Attachment J: Wetland Feature Photographs presents representative photographs of each wetland feature. Attachment K: Potentially Jurisdictional Water Features Table lists the unique feature identification number, feature type, length, OHWM width and depth, TOB width and depth, Cowardin classification (for wetlands), and the approximate extent of USACE, RWQCB, and CDFW jurisdictions.

Wetland features W-3, W-4, W-7, and portions of W-2 lacked standing water or observable hydrology and were identified by the presence of wetland vegetation (i.e., Distichilis sp., Salicornia sp., Frankenia sp., and Juncus sp.).

A formal wetland delineation was conducted in 2024. The findings pertaining to hydrologic features presented in this report are superseded by those documented in Attachment B: Collinsville 500/230 Kilovolt Substation Project Aquatic Resources Delineation Report.

# 7 - RECOMMENDATIONS

Proposed Project-specific avoidance and minimization measures will need to be developed to reduce the potential for impacts to all special-status species with moderate or high potential to occur within the project area as well as species that are present within the survey area.

Prior to initiating Project activities, the following pre-construction surveys will be required:

- Pre-construction nesting bird surveys conducted within 48 hours prior to work occurring between February 1 and September 30 each year. Surveys will be conducted within 500 feet of all Proposed Project work areas.
- Pre-construction roosting bat survey in areas within and adjacent to the Proposed Project where construction activities have the potential to directly impact active roosts or disrupt bat breeding activities.
- Pre-construction burrowing owl surveys conducted in all areas that may provide suitable nesting habitat according to the CDFW (CDFW 2012) guidelines. The take avoidance surveys, consisting of up to four visits, will be initiated within 30 days of and completed at least 14 days before construction is initiated at a given location. In areas with burrows or refuge that could potentially support burrowing owls, a clearance visit will be conducted within 24 hours of construction.
- A supplemental and floristic botanical survey conducted in 2024 during the appropriate bloom periods for special-status plants with the potential to occur within the expanded survey area north of the Sacramento River, as well as the survey area south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation. This supplemental effort will provide full survey coverage of the survey area. Floristic surveys are recommended in April and July to capture the bloom periods of all non-perennial plant species with the potential to occur. A supplemental targeted survey will be conducted within the original survey area in 2024 during the bloom period for diamond-petaled California poppy (March to April). These surveys will also serve to confirm the population boundaries of previously observed Welsh's mudwort, Mason's lilaeopsis, and Delta tule pea.6
- A formal wetland delineation will be required once further engineering is complete and prior to work commencing within the survey area. Once complete, a preliminary

<sup>&</sup>lt;sup>6</sup>Surveys within the expanded survey area were completed in 2024 and are detailed in Attachment D: Collinsville 500/230 Kilovolt Substation Project Botanical Survey Report Addendum.

jurisdictional determination will be presented to the USACE that includes all data sheets including National Wetlands Inventory maps (as shown in Attachment L: National Wetlands Inventory Map that show all proposed facilities.<sup>7</sup>

Given the high potential for salt marsh harvest mouse within the survey area and corroborating observation records in CNDDB and SFEI, surveys for this species should not be required, as presence for this species can be assumed within suitable habitats.

For all federally listed species with moderate- or high-potential to occur, if the Proposed Project has the potential to adversely affect the species or its habitat, consultation under Section 7 of the federal ESA will be necessary.

All of the state-listed species identified during the background research have low- or no potential to occur. However, if state-listed species are observed in the Proposed Project area and the Proposed Project has the potential to adversely affect the species, an incidental take permit (ITP) issued by the CDFW may be required to mitigate for potential impacts to those species.

Although the 28 bird species identified in Table 4: Wildlife Species Observed within the Survey Area do not carry listing statuses under the federal ESA or CESA, they are protected under the MBTA, California Fish and Game Code, and CCR. With the exception of the one northern harrier nest described in Section 6.4 Species Present within the Survey Area, no other nests were observed within the survey area.

Several regulatory approvals, authorizations, or permits are required for the Proposed Project, as provided in Table 5: Anticipated Biological Resource Permits and Authorizations. These approvals may include conditions that afford additional protection to species and/or their habitat. LSPGC will comply with all mitigation measures and permit conditions that result from these regulatory reviews and approvals.

As described in Section 5.2 Biological Resource Survey Method, due to access constraints imposed by the property owner, the survey area south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation was not included in biological resource surveys. While this area was included in the records search and preliminary research for this report, formal field surveys and jurisdictional waters assessments will be required to identify any existing or potentially sensitive biological resources (e.g., vegetation communities, hydrologic features, and special-status plant and animal species and their associated habitats) that may be present within or adjacent to this portion of the survey area.

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<sup>&</sup>lt;sup>7</sup>Formal wetland delineations of all wetland features identified in this report were conducted in 2024. The results of these delineations are detailed in Attachment B: Collinsville 500/230 Kilovolt Substation Project Aquatic Resources Delineation Report.

Table 5: Anticipated Biological Resource Permits and Authorizations

Agency	Permit/Approval/Consultation	Jurisdiction/Purpose of Permit						
Federal A	Federal Agencies							
USACE	CWA Section 404 Nationwide Permit	Permanent and temporary fill of waters of the U.S.						
USFWS	FESA Section 7 Consultation	Construction activities such as vegetation clearing or removal that may affect federally listed species or their habitats, including salt marsh harvest mouse						
State Age	State Agencies							
CDFW	California Fish and Game Code Section 1600 Streambed Alteration Agreement	Activities that will disturb the bed or bank of a jurisdictional waterbody						
RWQCB	CWA Section 401 Water Quality Certification	Activities authorized by federal agencies that may affect state water quality						

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ATTACHMENT A: COLLINSVILLE TERREST	TRIAL BIOLOGICAL ADDENDUM	RESOURCES TEC	HNICAL REPORT



## LS POWER GRID CALIFORNIA, LLC

# COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT TERRESTRIAL BIOLOGICAL RESOURCES TECHNICAL REPORT ADDENDUM

**MAY 2025** 

PREPARED FOR:



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## 1 - INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct a pre-project survey for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). The Proposed Project would involve the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that will loop Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that would connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project's general location is depicted in Figure 1: Project Overview Map, and the Proposed Project components located within the survey area associated with this Terrestrial Biological Resources Technical Report Addendum (Addendum) are depicted in Figure 2: Project Components Map. A Biological Resources Technical Report (Original Report) (Insignia 2024) was prepared for the Proposed Project in July 2024 to identify any existing or potentially sensitive biological resources (e.g., vegetation communities, hydrologic features, and specialstatus plant and animal species and their associated habitats) that may be present within or adjacent to the vicinity of the Proposed Project.

Since the completion of the Original Report, the project design for the Proposed Project has undergone changes, including the addition of three new transposition structures, the removal of two existing transposition lattice steel poles (LSPs), and the replacement of two existing lattice steel towers (LSTs) with two new three-pole dead-end tubular steel poles (TSPs) at four distinct locations along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. These four new structure sites (hereafter referred to as Tower A, Tower B, Tower C, Tower D, or "Towers" collectively) are located outside of the survey area¹ evaluated in the Original Report. To accommodate supplemental habitat assessment and preliminary waters surveys for the Towers, the Proposed Project survey area has since been expanded by approximately 526 acres. This Addendum was prepared to supplement the Original Report and details the findings of habitat assessments and preliminary waters surveys conducted within the approximately 526-acre survey area that was added (Tower survey area).

# 2 - PROJECT DESCRIPTION

#### 2.0 PROJECT LOCATION

As depicted in Figure 1: Project Overview Map, the Towers would be located at four separate sites spread along approximately 33 miles of PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. The approximately 526-acre Tower survey area is divided among the four discrete transposition structure locations. The survey areas associated with each transposition structure location are separate and do not overlap.

<sup>&</sup>lt;sup>1</sup> The survey area primarily consists of all terrestrial areas of the Proposed Project area north of the Sacramento River, as well as an approximately 10-acre buffer. Terrestrial areas south of Suisun Bay, in the vicinity of PG&E's existing Pittsburgh Substation, compose a small portion of the survey area.

Tower A, the northernmost transposition structure location, is located approximately 3 miles southeast of the City of Vacaville in Solano County. The Tower survey area associated with Tower A is approximately 214 acres.

Tower B is located approximately 7 miles southeast of Tower A and approximately 3 miles southeast of the community of Denverton in Solano County. The Tower survey area associated with Tower B is approximately 91 acres.

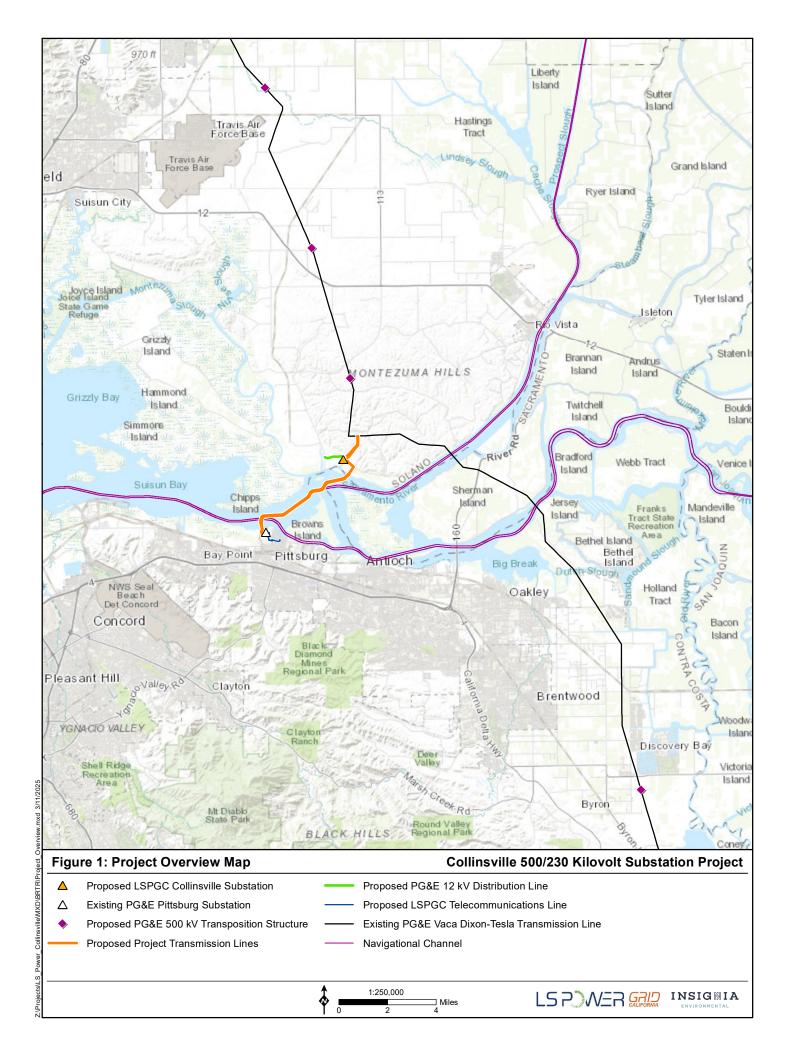
Tower C—the site of the removal of two existing LSPs and the replacement of two existing LSTs with two three-pole dead-end TSPs—is located approximately 5 miles southeast of Tower B and approximately 2 miles east of Birds Landing in Solano County. The Tower survey area associated with Tower C is approximately 146 acres.

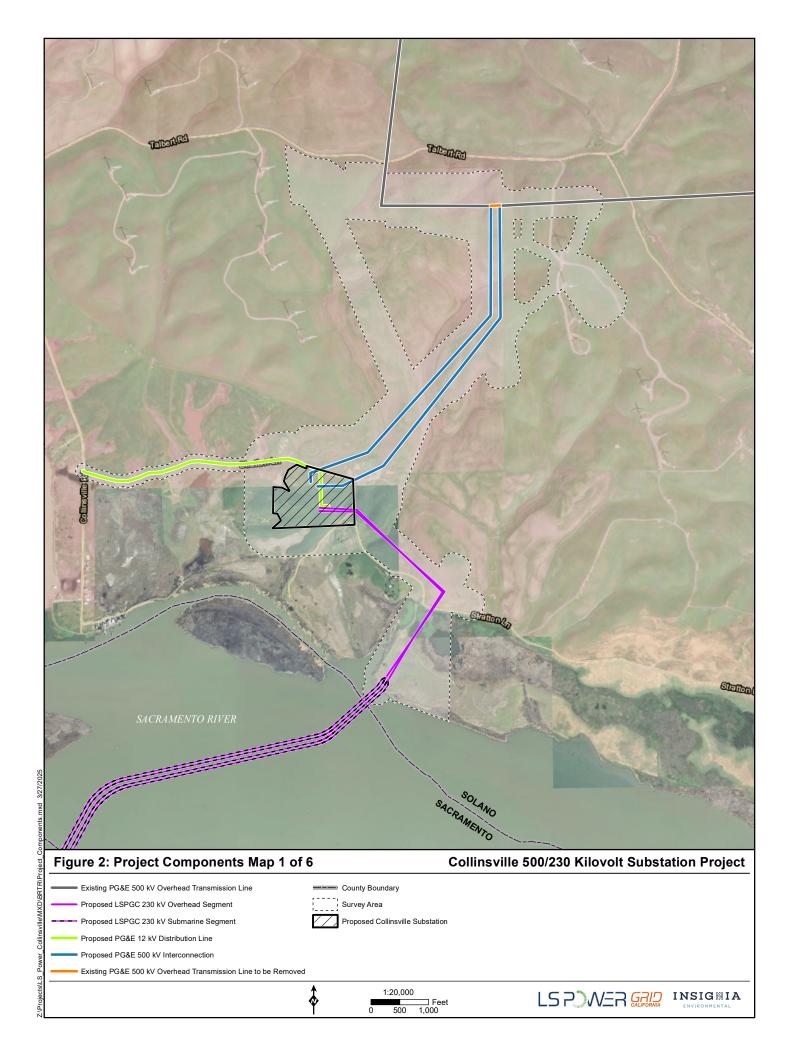
Tower D, the southernmost transposition structure installation, is located approximately 21 miles southeast of Tower C within the census designated place of Byron in Contra Costa County. The Tower survey area associated with Tower D is approximately 75 acres.

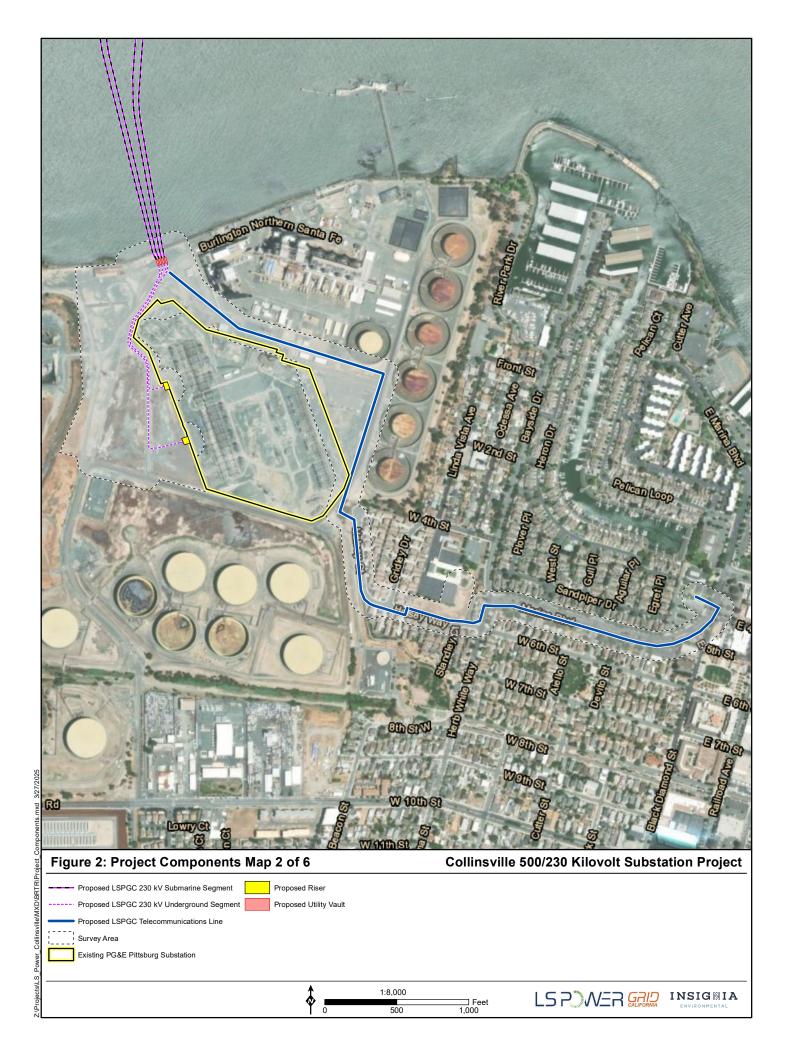
## 2.1 PROJECT COMPONENTS

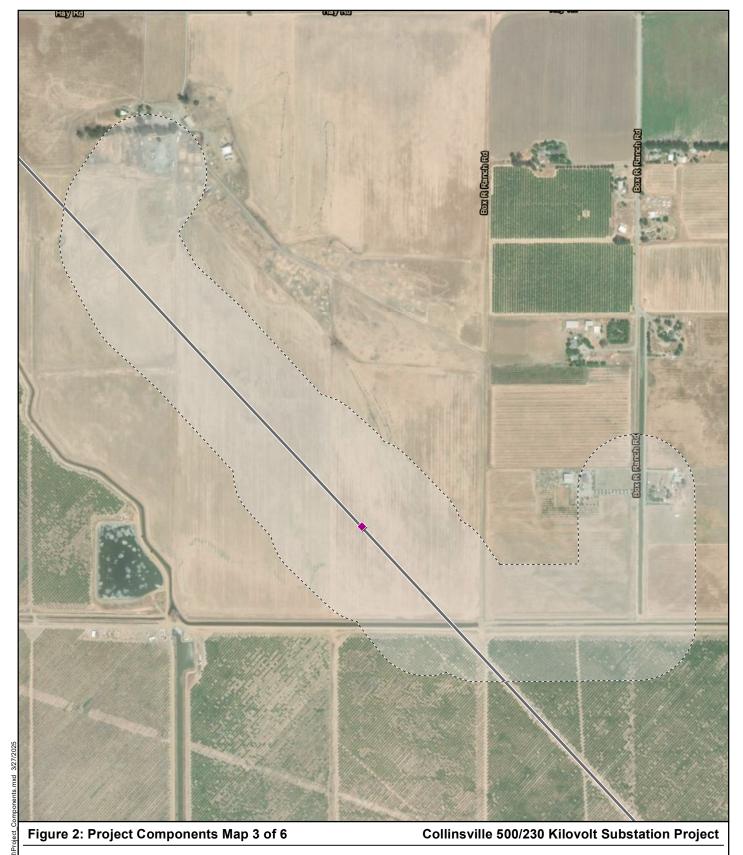
With the exception of the addition of the Towers, the main components of the Proposed Project remain largely unchanged from the Original Report. The main components are depicted on Figure 2: Project Components Map and include the following:

- Constructing a new 500/230 kV substation (the proposed LSPGC Collinsville Substation).
- Constructing two new approximately 1.2-mile-long, single-circuit 500 kV transmission line segments extending to interconnect (or "loop") PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation.
- Constructing a new approximately 6-mile-long, double-circuit 230 kV transmission line to connect the proposed LSPGC Collinsville Substation to PG&E's existing Pittsburg Substation.
- Extending and connecting PG&E's existing 12 kV Peabody 2107 Circuit distribution line to the proposed LSPGC Collinsville Substation.
- Constructing two new telecommunications paths to the proposed LSPGC Collinsville Substation—a new microwave tower would be constructed and owned by PG&E at the substation—and a new fiber optic path consisting of two fiber optic cables for redundancy would be installed between existing fiber in the City of Pittsburg and the proposed substation.
- Construction of three new PG&E 500 kV transposition structures, the removal of two existing LSPs, and the replacement of two existing LSTs with two new three-pole deadend TSPs along PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line.





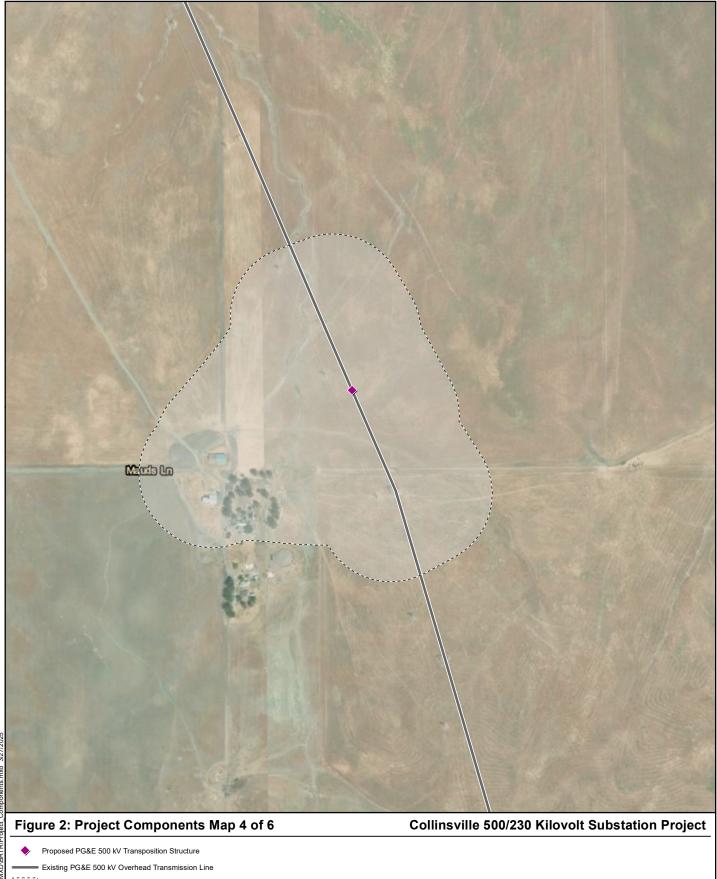




Proposed PG&E 500 kV Transposition Structure Existing PG&E 500 kV Overhead Transmission Line Survey Area



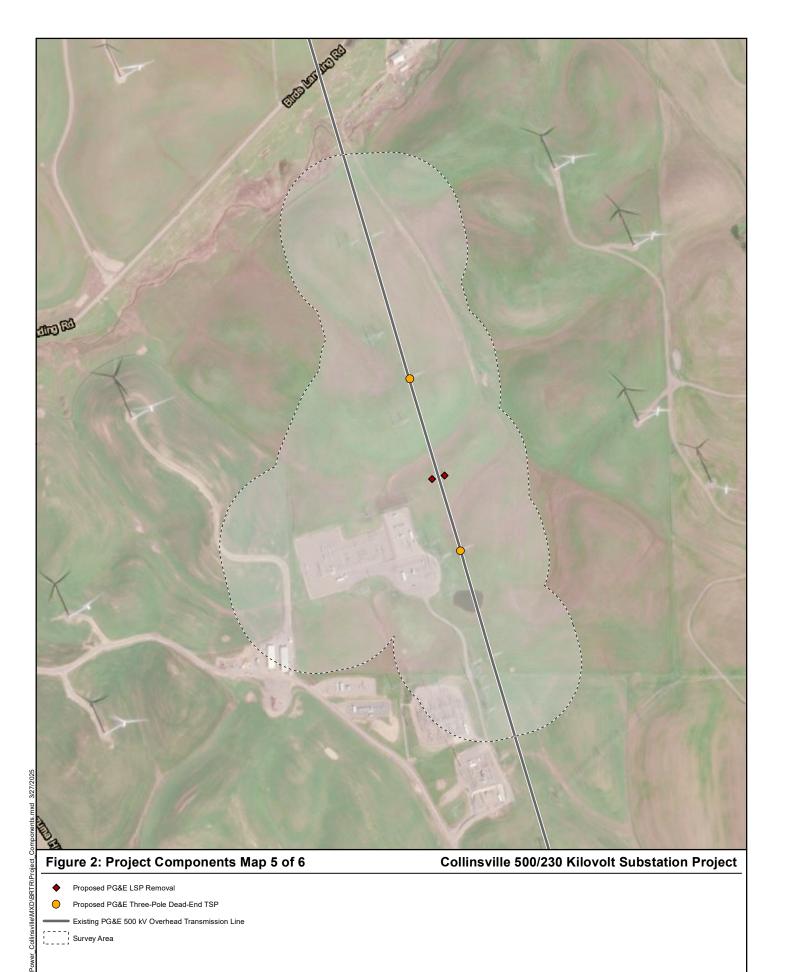




Survey Area







1:8,000 \_\_\_\_ Feet 1,000

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Figure 2: Project Components Map 6 of 6

Collinsville 500/230 Kilovolt Substation Project

Proposed PG&E 500 kV Transposition Structure Existing PG&E 500 kV Overhead Transmission Line Survey Area





## 3 – REGULATORY FRAMEWORK

The regulatory framework applicable to the Tower survey area is consistent with the framework established in the Original Report. The following federal, state, and local regulations apply to the Tower survey area:

#### Federal

- Federal Endangered Species Act (FESA)
- Migratory Bird Treaty Act (MBTA)
- Bald and Golden Eagle Protection Act (BGEPA)
- Clean Water Act (CWA) Sections 404, 402, and 401
- Plant Protection Act of 2000

#### California

- California Fish and Game Code Sections 3511, 4700, 5050, and 5515
- California Fish and Game Code Sections 3503, 3503.5, and 3513
- Porter-Cologne Water Quality Control Act
- Native Plant Protection Act
- California Code of Regulations (CCR)

#### Local

- Solano County General Plan
- Solano County Water Agency (SCWA) Solano Multispecies Habitat Conservation Plan
- East Contra Costa Habitat and Natural Community Conservation Plan
- PG&E Bay Area Operations and Maintenance Habitat Conservation Plan

## 4 - PRELIMINARY AGENCY CONSULTATION

No pre-survey contact with applicable wildlife agencies was conducted regarding this Addendum. No agency approvals were required for biologists conducting surveys. Agency protocols and best practices applied to the survey effort are detailed in Section 5.2 Biological Resource Survey Method of the Original Report.

## 5 - METHODS

Consistent with the methods and definitions outlined in the Original Report, Insignia performed a records search, a habitat assessment, and a preliminary jurisdictional delineation within the Tower survey area.

Surveys within the Tower survey area were conducted on February 20 and 21, 2025. Insignia biologists searched for areas of potential habitat by walking meandering transects that covered 100 percent of the Tower survey area that was accessible. Approximately 82 acres that were inaccessible due to lack of landowner permission were surveyed through binoculars to the

greatest extent feasible from accessible rights-of-way. The Tower survey area and areas where surveyor access was limited are shown in Attachment A: Biological Resources Map.

Surveys were conducted during daylight hours with clear to partly cloudy skies and did not occur in inclement weather conditions or fog cover. Temperatures ranged from 45 to 70 degrees Fahrenheit with wind speeds between 5 and 20 miles per hour.

#### 5.0 MODIFICATIONS FROM ORIGINAL REPORT

A fully floristic special-status plant survey was conducted in the survey area for the Original Report; however, this survey was not conducted within the Tower survey area for this Addendum. Therefore, the criteria for a special-status species' potential to occur in this Addendum differ from the Original Report and are as follows:

- Present: The species was incidentally observed during the habitat assessment surveys.
- High Potential: Suitable habitat for the species is present within the Tower survey area, and recent (i.e., within 30 years) occurrences have been reported within 1 mile of the Tower survey area; or marginal habitat is present, and recent occurrences have been recorded within 0.25 mile of the Tower survey area.
- Moderate Potential: Suitable habitat for the species is present, and the Tower survey area is located within the species' known range, but no recent (i.e., within 30 years) occurrences have been recorded between 1 and 5 miles from the Tower survey area; or marginal habitat is present, the Tower survey area is located within the species' known range, and multiple recent occurrences have been recorded between 1 and 5 miles from the Tower survey area.
- Low Potential: Poor or marginal habitat for the species exists, and no more than one recent occurrence has been recorded between 1 and 5 miles from the Tower survey area; barriers to migration/dispersal may be present; or suitable habitat for the species is present within the Tower survey area, but either no recent occurrences have been recorded between 1 and 5 miles from the Tower survey area or the Tower survey area is located outside of the species' known range.
- No Potential: No habitat exists for the species; no occurrences have been recorded between 1 and 5 miles from the Tower survey area, or the Tower survey area is outside of the species' known geographic or elevation range; and/or the species has been confirmed to be extirpated from the area.

## 6 - RESULTS

## 6.0 GEOGRAPHY, CLIMATE, AND HYDROLOGY

Precipitation, average air temperatures, and elevation data at each transposition tower location within the Tower survey area are detailed in Table 1: Geography, Climate, and Hydrology within the Tower Survey Area.

Table 1: Geography, Climate, and Hydrology within the Tower Survey Area

Matric		To	wer	
Metric	<b>A</b> *	B*	C*	D**
Average Rainfall (inches)	24.0	24.0	24.0	13.7
Period of Highest Rainfall	Dec-Mar	Dec-Mar	Dec-Mar	Dec-Feb
Average Annual Temperature Range (degrees Fahrenheit)	26-108	26-108	26-108	26-106
Elevation Range (feet)***	42-79	72-140	170-281	5-14

(\*National Oceanic and Atmospheric Administration [NOAA] 2025a)

(\*\*NOAA 2025b)

(\*\*\*Google Earth Pro 2025)

#### 6.1 RECORDS SEARCH

Results of the initial desktop analysis indicated that the areas surrounding the Tower survey area are primarily grassland habitat and agricultural areas, followed by some developed areas for farming or residential purposes. Grassland habitats, in general, may provide suitable habitat for special-status plants.

From this records search, Insignia compiled a list of 44 special-status plant species and 46 special-status wildlife species that have the potential to occur within the Tower survey area associated with each of the Towers, as well as 18 potential jurisdictional water features from a United States (U.S.) Geological Survey (USGS) National Wetlands Inventory (NWI) database review. Special-status species and water features found during the records search are broken down by transposition towers and are detailed in Table 2: Special-Status Plant and Wildlife Species Identified During Records Search and Table 3: Aquatic Resources Identified During Records Search of Water Features .

Table 2: Special-Status Plant and Wildlife Species Identified During Records Search within 5 Miles of the Tower Survey Area

Tawar	Special-Status Occurrences					
Tower	Plants	Wildlife				
А	33	20				
В	36	28				
С	33	31				
D	28	30				
All Towers*	44	46				

Note: The totals represent the cumulative special-status species count for the Towers. The total will not sum as the transposition tower records search either overlapped and captured the same occurrence data or independently recorded the same species within their respective search areas.

Table 3: Aquatic Resources Identified During Records Search of Water Features within the Tower Survey Area

Tower	Water Features		
A	8		
В	2		
С	2		
D	6		
Total	18		

#### 6.2 VEGETATION COMMUNITIES

Ten vegetation community alliances and land cover types were identified in the Tower survey area, as presented in Table 4: Vegetation Community Alliances and Land Cover Types and depicted in Attachment A: Biological Resources Map. The vegetation community and land cover locations are also documented in Attachment A: Biological Resources Map, and photographs are provided in Attachment B: Habitat Assessment Photographs. The natural communities observed in the Tower survey area are ranked S3, S4, and semi-natural alliance (SNA) (semi-natural stands dominated by non-native species). Two of the 10 natural communities observed are considered sensitive. The following subsections describe each vegetation community identified within the survey area.

Approximately 162 acres of the Tower survey area were not accessible to the field survey team on foot. However, these areas were assessed for habitat from adjacent accessible areas through a combination of binocular-assisted evaluation and desktop analysis. Although vegetation communities and land cover types were identified for portions of the inaccessible terrain, a preliminary jurisdictional delineation for waters was not feasible in areas with limited foot access.

# 6.2.0 Allenrolfea occidentalis Shrubland Alliance (S3)

This community is associated with dry lakebed margins, hummocks, playas perched above current drainages, and seeps. Iodine bush (*Allenrolfea occidentalis*) typically has a greater than 2-percent absolute cover in the shrub canopy and is dominant or co-dominant in the shrub and herbaceous layers with fourwing saltbush (*Atriplex canescens*), saltgrass (*Distichlis spicata*), and alkali heath (*Frankenia salina*). This community was observed within the Tower survey area associated with Tower D, along either side of Kellog Creek Road adjacent to roadside drainages.

## 6.2.1 Avena spp. – Bromus spp. Herbaceous Semi-Natural Alliance

This community is found in foothills, waste places, rangelands, and opening in woodlands. The dominant species include oats (*Avena* spp.) and bromes (*Bromus* spp.) in the herbaceous layer with at least 50-percent relative cover. Co-dominant species in the herbaceous layer may include Australian saltbush (*Atriplex semibaccata*) and barley (*Hordeum* spp.). This alliance is widespread across the Tower survey area associated with Tower B, Tower C, and Tower D. Areas where this community occurs are being used for active cattle grazing or agriculture.

**Table 4: Vegetation Community Alliances and Land Cover Types** 

Vegetation Community or Land Cover Type	Area Identified (acres)					
	Α	В	С	D		
Agriculture	22.4	*		31.4		
Allenrolfea occidentalis Shrubland Alliance**				0.6		
Avena spp. – Bromus spp. Herbaceous SNA		84.6	132.5	34.0		
Brassica nigra – Centaurea (solstitialis, melitensis) Herbaceous SNA	3.3			1.6		
Developed	2.0	1.1	12.2	1.0		
Disturbed	15.3	0.9	1.6	1.4		
Lolium perenne Herbaceous SNA	165.9					
Open water	1.1					
Ornamental Vegetation	4.2	3.9		2.7		
Schoenoplectus (acutus, californicus) Herbaceous Alliance**				2.0		
Total***	214.3	90.5	146.2	74.7		

<sup>\*</sup>This vegetation community or land cover type was not observed within the Tower survey area.

## 6.2.2 Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

This community is typically associated with disturbed areas where black mustard (*Brassica nigra*) and short-pod mustard (*Hirshfeldia incana*) achieve 80-percent relative cover in the herbaceous layer. Similar ruderal forbs, including tocolote (*Centaurea melitensis*) and yellow star thistle (*Centaurea solstitialis*), may achieve dominance or co-dominance. This community was observed within the Tower survey area associated with Tower A where active cattle grazing occurs and at Tower D along either side of agricultural canals.

## 6.2.3 Lolium perenne Herbaceous Semi-Natural Alliance

This community contains Italian rye grass (*Festuca perennis*) that is dominant or co-dominant with other non-natives in the herbaceous layer, including rip-gut brome (*Bromus diandrus*), sea barley (*Hordeum marinum*), and wild oat (*Avena fatua*). Typically, the herbaceous layer is continuous and often forms monocultures, which contributes to a poorly developed shrub layer. This alliance is widespread across the Tower survey area associated with Tower A, where the land is used for active cattle grazing and agriculture.

## 6.2.4 Schoenoplectus (acutus, californicus) Herbaceous Alliance (S3S4)

This community is found in a variety of wetland habitats, including brackish marshes, freshwater ponds, sloughs, swamps, and roadside ditches. The herbaceous layer is intermittent to continuous, forming thick stands that often result in a poorly developed shrub layer. Hardstem

<sup>\*\*</sup> This is a California Department of Fish and Wildlife- (CDFW-) designated sensitive natural community (State Rarity Rank S1-S3).

<sup>\*\*\*</sup> Due to rounding, the total may not sum.

bulrush (*Schoenoplectus acutus*) or giant bulrush (*Schoenoplectus californicus*) typically contain greater than 50-percent relative cover in the herbaceous layer. This community was observed within the Tower survey area associated with Tower D, in the middle of several agricultural canals that run between fallow and active agriculture fields.

#### 6.3 SPECIAL-STATUS PLANT SPECIES

Background research conducted for the Tower survey area generated a list of 41 special-status plant species that have the potential to occur in the Tower survey area. This list was generated by comparing the species' ranges and habitat requirements with the location of the Tower survey area and habitat types within it. These species are presented in Table 5: Special-Status Plant Species with the Potential to Occur, which provides the listing status, life history, and bloom period for each species. California Natural Diversity Database (CNDDB) occurrences of special-status plants are presented in Attachment C: CNDDB Occurrences of Special-Status Plant Species.

As documented in Table 5: Special-Status Plant Species with the Potential to Occur, seven species have a high potential to occur and 28 species have a moderate potential to occur.

#### 6.4 SPECIAL-STATUS WILDLIFE SPECIES

Based on the literature and database review, 46 special-status wildlife species were identified that have the potential to occur within the Tower survey area. The species name, listing status, life history, known locations, and a brief assessment of the potential to occur within the Tower survey area are provided for each species in Table 6: Special-Status Wildlife Species with the Potential to Occur. CNDDB occurrences of special-status wildlife are presented in Attachment D: CNDDB Occurrences of Special-Status Wildlife Species.

As documented in Table 6: Special-Status Wildlife Species with the Potential to Occur, two species (golden eagle [Aquila chrysaetos] and northern harrier [Circus cyaneus]) were incidentally observed during the habitat assessment surveys, eight species have a high potential to occur, and 19 species have a moderate potential to occur.

#### 6.5 GENERAL WILDLIFE SPECIES

Nineteen wildlife species were incidentally identified during the surveys, which includes two mammals and 17 birds. Noted wildlife species were identified by direct observation, vocalizations, or the observance of scat and tracks. The wildlife identified are not necessarily comprehensive accounts of all species that utilize the Tower survey area, because species that are nocturnal, secretive, or seasonally absent may not have been observed. Observed occurrences of wildlife species are shown in Table 7: Wildlife Species Observed within the Tower Survey Area.

Table 5: Special-Status Plant Species with the Potential to Occur

Common Name	Listing	Habitat Preferences,	Flowering		Potential to Occur in the Survey Area					
(Scientific Name)	(Scientific Name) Status <sup>2</sup> Distribution inform	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D		
alkali-sink goldfields ( <i>Lasthenia</i> <i>chrysantha</i> )	1B.2	This species occurs in vernal pools at elevations between 0 and 656 feet. (CNPS 2025b)	Feb-Apr	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential		
alkali milk-vetch (Astragalus tener var. tener)	1B.2	This species occurs in alkali playas, valley and foothill grasslands, and vernal pools at elevations between 5 and 195 feet. (CNPS 2025b)	Mar-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area.  High Potential		
Antioch Dunes evening-primrose (Oenothera deltoides ssp. howellii)	FE; SE; 1B.1	This species occurs in inland dunes at elevations between 0 to 100 feet. (CNPS 2025b)	Mar-Sep	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential		
Baker's navarretia (Navarretia leucocephala ssp. bakeri)	1B.1	This species occurs in a variety of habitats including cismontane woodland, lower montane coniferous forest, meadows and seeps. It may also be seen in valley or foothill grasslands and vernal pools at elevations between 16 and 5,709 feet. (CNPS 2025b)	Apr-Jul	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential		

Federal listing code: -FE: Federally listed as endangered

State listing code: -SE: State-listed as

endangered

California Native Plant Society (CNPS) California Rare Plant Ranks (CRPRs):

-1A: Presumed extinct in California and rare/extinct elsewhere

-1B: Rare or endangered in California and elsewhere

CRPR Threat Codes:

<sup>&</sup>lt;sup>2</sup> Explanation of federal and state listing codes:

<sup>-2</sup>B: Rare, threatened, or endangered in California, but more common elsewhere

<sup>-0.1:</sup> Seriously threatened in California (over 80 percent of occurrences threatened, high degree and immediacy of threat)

<sup>-0.2:</sup> Moderate Potentially threatened in California (20 to 80 percent of occurrences threatened, Moderate Potential degree and immediacy of threat)

Common Name	Listing	Habitat Preferences,	Flowering			Potential to Occur	in the Survey Area	
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Phenology Life Form	Tower A	Tower B	Tower C	Tower D
bearded popcornflower ( <i>Plagiobothrys</i> <i>hystriculus</i> )	1B.2	This species occurs in valley & foothill grassland and vernal pool at elevations between 0 to 900 feet. (CNPS 2025b)	Apr-May	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area.  High Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area.  High Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
Big tarplant ( <i>Blepharizonia</i> <i>plumosa</i> )	1B.1	This species occurs within valley and foothill grasslands at elevations between 98 and 1,657 feet. (CNPS 2025b)	Jul-Oct	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential
Boggs Lake hedge- hyssop (Gratiola heterosepala)	2B.2	This species occurs within marshes, swamps, and vernal pools at elevations between 33 and 7,792 feet. (CNPS 2025b)	Apr-Aug	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within the 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
Bolander's water- hemlock (Cicuta maculata var. bolanderi)	2B.2	This species occurs in marsh & swamp and salt marsh at elevations between 0 to 655 feet. (CNPS 2025b)	Jul-Sep	perennial herb	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  N Potential	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable marsh habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential
Brittlescale (Atriplex depressa)	2B.2	This species occurs in a variety of habitats including alkali playa, chenopod scrub, meadows and seep. It may also be observed in valley or foothill grasslands and vernal pools at elevations between 5 to 1,050 feet. (CNPS 2025b)	Apr-Oct	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential

Common Name	Listing	Habitat Preferences,	Flowering	lowering Life Form	Potential to Occur in the Survey Area				
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology		Tower A	Tower B	Tower C	Tower D	
California alkali grass (Puccinellia simplex)	2B.2	This species occurs in a variety of habitats including chenopod scrub, meadows and seeps. It may also be observed in valley or foothill grasslands and vernal pools at elevations between 7 and 3,051 feet. (CNPS 2025b)	Mar-May	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	
Caper-fruited tropidocarpum ( <i>Tropidocarpum</i> capparideum)	1B.1	This species occurs in valley and foothill grasslands at elevations between 3 and1,493 feet. (CNPS 2025b)	Mar-Apr	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area.  High Potential	
Carquinez goldenbush (Isocoma arguta)	1B.2	This species occurs in valley & foothill grassland at elevations between 5 to 65 feet. (CNPS 2025b)	Aug-Dec	perennial shrub	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	
chapparal ragwort (Senecio aphanactis)	2B.2	This species occurs in chaparral, cismontane woodland, and coastal scrub at elevations between 50 to 2,625 feet. (CNPS 2025b)	January to April	annual herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles from the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles from the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles from the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	
Colusa grass (Neostapfia colusana)	SE; 1B.2	This species occurs in vernal pools at elevations between 15 and 655 feet. (CNPS 2025b)	May-Aug	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented 5 miles of the survey area.  No Potential	

Common Name	Listing	Habitat Preferences,	Flowering			Potential to Occur	in the Survey Area	
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D
Contra Costa goldfields (Lasthenia conjugens)	FE; 1B.2	This species occurs in a variety of habitats such as alkali playa, cismontane woodland, and valley or foothill grasslands. It may also be found in vernal pools at elevations between 0 to 1,540 feet. (CNPS 2025b)	Mar-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential
Contra Costa wallflower (Erysimum capitatum var. angustatum)	FE; SE; 1B.1	This species occurs in inland dunes at elevations between 10 and 65 feet. (CNPS 2025b)	Mar-Jul	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey.  No Potential
Coulter's goldfields (Lasthenia glabrata ssp. coulteri)	1B.1	This species occurs within marshes and seeps, playas, and vernal pools at elevations between 5 and 4,005 feet. (CNPS 2025b)	Feb-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
Crampton's tuctoria or Solano grass ( <i>Tuctoria</i> <i>mucronata</i> )	1B.1	This species occurs in valley or foothill grasslands and vernal pools at elevations between 15 and 35 feet. (CNPS 2025b)	Apr-Aug	annual herb	Suitable grasslands are present within the survey area; however, the survey area is not within the known elevation range for this species. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Low Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Not Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential
Delta button-celery (Eryngium racemosum)	SE; 1B.1	This species occurs in riparian scrub at elevations between 10 and 100 feet. (CNPS 2025b)	Jun-Oct	annual/ perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area; however, this species' known range does not overlap with the survey area.  No Potential

Common Name	Listing	Habitat Preferences,	Flowering		Potential to Occur in the Survey Area				
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D	
Delta mudwort (Limosella australis)	2B.1	This species occurs in a variety of habitats such as brackish marsh, freshwater marsh, marsh or swamp. It may also be observed within riparian scrub at elevations between 0 to 10 feet. (CNPS 2025b)	May to August	perennial stoloniferous herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	
Delta tule pea ( <i>Lathyrus jepsoniil</i> var. <i>jepsonii</i> )	1B.2	This species occurs in marshes or swamps at elevations between 0 to 15 feet. (CNPS 2025b)	May to July	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	
diamond-petaled California poppy (Eschscholzia rhombipetala)	1B.1	This species occurs in valley or foothill grassland at elevations between 0 to 3,200 feet. (CNPS 2025b)	March to April	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	
dwarf downingia ( <i>Downingia pusilla</i> )	FE; 1B.1	This species occurs in valley or foothill grassland and vernal pool at elevations between 5 to 1,460 feet. (CNPS 2025b)	Mar-May	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	
fragrant fritillary ( <i>Fritillaria liliacea</i> )	1B.1	This species occurs in a variety of habitats, such as cismontane woodland and coastal prairie or scrub. It may also be observed in valley & foothill grassland at elevations between 10 to 1,345 feet often found in ultramafic soils. (CNPS 2025b)	Feb-Apr	perennial bulbiferous herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	

Common Name	Listing	Habitat Preferences,	Flowering			Potential to Occur	in the Survey Area	
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D
heartscale (Atriplex cordulata var. cordulata)	1B.1	This species occurs in chenopod scrub, meadow or seep, and valley or foothill grassland at elevations between 0 to 1,835 feet. (CNPS 2025b)	Apr-Oct	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
Heckard's pepper- grass (Lepidium latipes var. heckardii)	FT; SE; 1B.1	This species occurs in valley and foothill grasslands at elevations between 5 and 655 feet. (CNPS 2025b)	Mar-May	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
hispid salty bird's- beak ( <i>Chloropyron molle</i> ssp. hispidum)	FT; SE; 1B.1	This species occurs in meadows and seeps, playas, and valley or foothill grasslands at elevations between 5 and 510 feet. (CNPS 2025b)	Jun-Sep	annual herb (hemiparasitic)	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
Keck's checkerbloom (Sidalcea keckii)	FE, 1B.1	This species occurs in cismontane woodlands and valley or foothill grasslands at elevations between 245 to 2,135 feet, often found in ultramafic soils. (CNPS 2025b)	Apr-Jun	annual herb	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented within 0.25 mile of the survey area.  High Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
large flowered fiddleneck ( <i>Amsinkia</i> grandiflora)	FE;1B.1	This species occurs in foothill woodlands and valley grasslands at elevations between 0 and 1,000 feet. (CNPS 2025b)	Apr-May	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential

Common Name	Listing	Habitat Preferences,	Flowering			Potential to Occur	ntial to Occur in the Survey Area			
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D		
Legenere (Legenere limosa)	1B.1	This species occurs in vernal pools at elevations between 5 and 2,885 feet. (CNPS 2025b)	Apr-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential		
Long-styled sand- spurrey (Spergularia macrotheca var. longistyla)	1B.2	This species occurs in marshes, swamps, meadows, and seeps at elevations between 0 and 835 feet. (CNPS 2025b)	Feb-May	perennial herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential		
Mason's lilaeopsis ( <i>Lilaeopsis</i> masonii)	1B.1	This species occurs in freshwater marsh, marsh or swamp, and riparian scrub at elevations between 0 to 35 feet. (CNPS 2025b)	Apr-Nov	perennial rhizomatous herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential		
pappose tarplant (Centromadia parryi ssp. parryi)	1B.1	This species occurs in a variety of habitats such as chaparral, coastal prairie, meadow and seep. It may also be observed within marsh, swamp, and valley or foothill grasslands at elevations between 0 to 1,380 feet. (CNPS 2025b)	May-Nov	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential		
Recurved larkspur (Delphinium recurvatum)	1B.2	This species occurs in chenopod scrub, cismontane woodland, and valley or foothill grasslands at elevations between 10 and 2,590 feet. (CNPS 2025b)	Mar-Jun	perennial herb	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential		

Common Name	Listing	Habitat Preferences,	Flowering			Potential to Occur	in the Survey Area	
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D
saline clover (Trifolium hydrophilum)	1B.1	This species occurs in marshes and swamps, valley or foothill grasslands, and vernal pools at elevations between 0 and 985 feet. (CNPS 2025b)	Apr-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential
San Joaquin spearscale (Extriplex joaquinana)	1B.2	This species occurs in alkali playa, chenopod scrub, meadows and seeps. It may also be observed in valley or foothill grasslands at elevations between 5 to 2,740 feet. (CNPS 2025b)	Apr-Oct	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented within 0.25 mile of the survey area.  High Potential
San Joaquin Valley Orcutt grass (Orcuttia inaequalis)	FE; 1B.1	This species occurs in vernal pools at elevations between 35 and 2475 feet. (CNPS 2025b)	Apr-Sep	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
soft salty bird's- beak (Chloropyron molle ssp. molle)	FE; 1B.2	This species occurs in marshes and swamps at elevations between 0 and 10 feet. (CNPS 2025b)	Jun-Nov	annual herb (hemiparasitic)	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area and this species' known range does not overlap with the survey area  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species known range does not overlap with the survey area.  No Potential
spiny-sepaled button-celery ( <i>Eryngium</i> spinosepalum)	1B.2	This species occurs in valley or foothill grasslands and vernal pools at elevations between 260 and 3,200 feet. (CNPS 2025b)	Apr-Jun	annual/ perennial herb	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grasslands for this species are present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Low Potential

Common Name	Listing	Habitat Preferences,	Flowering			Potential to Occur	in the Survey Area		
(Scientific Name)	Status <sup>2</sup>	Distribution Information, and Additional Notes	Phenology	Life Form	Tower A	Tower B	Tower C	Tower D	
Suisun Marsh aster (Symphyotrichum lentum)	FE; 1B.1	This species occurs in marshes and swamps at elevations between 0 to 10 feet. (CNPS 2025b)	(Apr)May- Nov	perennial rhizomatous herb	Suitable grasslands for this species is present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Low Potential	Suitable grasslands for this species is present within the survey area; however, the survey area is outside the species' known elevation range. Therefore, marginally suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Low Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	
Suisun thistle (Circium hydrophilum var. hydrophilum)	1B.1; FE	This species occurs in marshes and swamps at elevations between 0 to 5 feet. (CNPS 2025b)	Jun-Sept	perennial herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and the species' known range does not overlap with the survey area.  No Potential	
two-fork clover ( <i>Trifolium</i> amoenum)	1B.2; FE	This species occurs in coastal bluff scrub and valley or foothill grasslands at elevations between 15 and 1360 feet. (CNPS 2025b)	Apr-Jun	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	
vernal pool smallscale (Atriplex persistens)	FE; SE; 1B.1	This species occurs in vernal pools at elevations between 35 and 275 feet. (CNPS 2025b)	Jun-Oct	annual herb	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	
Wooly rose-mallow (Hibiscus lasiocarpos var. occidentalis)	1B.2	This species occurs in marshes and swamps at elevations between 0 and 395 feet. (CNPS 2025b)	Jun-Sep	perennial/ rhizomatous herb	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has not been documented within 5 miles of the survey area.  No Potential	Suitable habitat and conditions for this species are not present within the survey area. This species has been documented between 1 and 5 miles of the survey area.  No Potential	

Table 6: Special-Status Wildlife Species with the Potential to Occur

Common Name	Linting Ctatus	Habitat and Life History	Potential to Occur within the Survey Area <sup>4</sup>				
(Scientific Name)	Listing Status <sup>3</sup>		Tower A	Tower B	Tower C	Tower D	
Amphibians							
California red-legged frog (Rana draytonii)	FT; SSC	This highly aquatic species typically inhabits quiet pools of streams, marshes and ponds, preferring habitat with extensive shoreline vegetation. Its diet is highly variable and may include various invertebrates, amphibians, and small mammals. In Northern California, breeding usually takes place between March and July. (USFWS 2025)	Marginal stream habitat that lacks the preferred shoreline vegetation for the species is present within the survey area. This species has not been recently (within 30 years) documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential	Although the species' known range overlaps with the survey area, suitable stream habitat is not present within the survey area. Additionally, this species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable stream habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  No Potential	Suitable stream habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential	
California tiger salamander - central California DPS ( <i>Ambystoma californiense</i> pop. 1)	FT; ST; WL	This species occupies grassland, savanna, or open woodland habitats and spends much of the year in underground refuges, especially ground squirrel ( <i>Ammospermopholis beechyi</i> ) burrows. Vernal pools or other seasonal water sources are required for breeding and egg laying. Adults may travel hundreds of meters across upland habitat to reach breeding ponds following seasonal rains during November to February. Its diet is highly variable and may include invertebrates, amphibians, or small mammals. (USFWS 2025)	Suitable grassland with ground squirrel burrows and seasonally ponded wetland habitat are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable grassland and seasonally ponded wetland habitat are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable grasslands are present within the survey area; however, small mammal burrows suitable for occupancy and seasonal wetlands were not observed. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential	
western spadefoot (Spea hammondii)	SSC; FPT	This species occurs predominantly in grasslands, but may also occur in valley-foothill hardwood woodlands. The western spadefoot consumes worms, insects, and other invertebrates and requires shallow, temporary pools of water from heavy winter rains for reproduction. (USFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Moderate Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area  Moderate Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Moderate Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Moderate Potential	

Federal listing codes:

<sup>&</sup>lt;sup>3</sup> Explanation of federal and state listing codes:

<sup>-</sup>FE: Federally listed as endangered

<sup>-</sup>FT: Federally listed as threatened

<sup>-</sup>FPT: Proposed to be federally listed as threatened

<sup>-</sup>BCC: United States (U.S.) Fish and Wildlife Service (USFWS) Bird of Conservation Concern

<sup>-</sup>BGEPA: Bald and Golden Eagle Protection Act

State listing codes:

<sup>-</sup>SE: State-listed as endangered

<sup>-</sup>ST: State-listed as threatened

<sup>-</sup>SCE: State candidate for listing as endangered

<sup>-</sup>SSC: Species of Special Concern

<sup>-</sup>FP: Fully protected species -WL: Watch List species

<sup>-</sup>WBWG-H: Western Bat Working Group high designation

<sup>&</sup>lt;sup>4</sup> Unless otherwise specified, all documented occurrences of special-status species were observed in the last 30 years

Common Name	Linting Status	Unhitet and Life History		Potential to Occur w	ithin the Survey Area⁴	4	
(Scientific Name)	Listing Status <sup>3</sup>	Habitat and Life History	Tower A	Tower B	Tower C	Tower D	
Birds							
burrowing owl (Athene cunicularia ssp. hypugaea)	SCE; SSC	This species can be found in a variety of open habitat types, including grassland, savanna, desert scrub, agricultural, and urban areas. Breeding occurs from March through October, and nesting takes place within abandoned burrows dug by burrowing mammals. This species preys on large insects and small mammals. (USFWS 2025)	Suitable grassland and agricultural habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential (Nesting)  High Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  Moderate Potential (Nesting)  High Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  High Potential (Foraging)	Suitable grassland and agricultural habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  High Potential (Foraging)	
California black rail (Laterallus jamaicensis coturniculus)	ST; FP	This species is found in tidal emergent wetlands dominated by pickleweed ( <i>Salicornia</i> spp.) or in brackish marshes supporting bulrushes in association with pickleweed. Breeding occurs from March to June, and nests are concealed in dense vegetation (often pickleweed) near the upper limits of tidal flooding. (CDFW 2025a)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable tidal marsh habitat is not present within the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable tidal marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable tidal marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	
California condor (Gymnogyps californianus)	FE; SE; FP	This species uses extensive territories in open grasslands, oak savannah foothills, and beaches adjacent to coastal mountains for foraging, roosting, and nesting. Nests are built in caves and ledges in steep, rocky terrain. This species may also use cavities and broken tops of conifers for nesting locations. Juveniles remain dependent on their parents for 1 to 2 years while they learn to forage on their own. The species will consume carrion and carcasses. (USFWS 2025)	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area, and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area, and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area, and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable open grassland habitat is present within the survey area; however, steep, rocky terrain is not. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  Moderate Potential (Foraging)	
California least tern (Sternula antillarum browni)	FE; SE; FP	This species is found throughout California and requires undisturbed stretches of beach and coastline. Adults forage in bays and estuaries for a variety of fish species. The California least tern nests in colonies on relatively open beaches where vegetation is limited by natural scouring from tidal action. However, to avoid humans, tern colonies have been known to move to inland mud flats and dredge fill sites. The breeding season typically begins in early to mid-May, and nests are constructed directly on the ground. (USFWS 2025)	Suitable mudflat, beach, or coastline is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable mudflat, beach, or coastline is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range overlaps with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable mudflat, beach, or coastline is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable mudflat, beach, or coastline is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	
California Ridgeway's rail (Rallus obsoletus)	FE; SE; FP	This species occurs almost exclusively in tidal and brackish marshes with unrestricted daily tidal flow, adequate invertebrate prey food supply, well-developed tidal channel networks, and suitable nesting and escape cover to provide habitat during extreme high tides. (CDFW 2025a)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable tidal marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	

Common Name	Listing Ctatus?	Habitat and Life History	Potential to Occur within the Survey Area <sup>4</sup>				
(Scientific Name)	Listing Status <sup>3</sup>		Tower A	Tower B	Tower C	Tower D	
golden eagle (Aquila chrysaetos)	FP; WL; BGEPA	This species is an uncommon resident and migrant in California, favoring rolling foothills, mountains, and open terrains for hunting lagomorphs and rodents. It nests on cliffs and large trees, requiring rugged habitats with cover. This bird exhibits year-round diurnal activity and may migrate seasonally. (CDFW 2025a)	Suitable open terrain habitat for hunting is present within the survey area; however, marginal nesting habitat within trees are present. This species has not been recently documented within 5 miles of the survey area; however, this species' range does overlap with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable open terrain habitat for hunting is present within the survey area; however, marginal nesting habitat within trees are present. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable open terrain habitat for hunting is present within the survey area; however, marginal nesting habitat within trees are present. This species has been recently documented between 0.25 and 1 mile of the survey area.  Low Potential (Nesting)  High Potential (Foraging)	A pair of golden eagles was observed on during field surveys within the Tower survey area associated with Tower D. The pair was seen perching in a PG&E transmission tower, adjacent to a small stick nest whose approximate location is shown in Attachment A: Biological Resources Map. No nest building, or incubation was observed during the survey. During a subsequent site visit by PG&E staff on February 27, 2025, the pair of eagles was not observed at this location and no evidence of nest-tending by any species was observed. This species has been recently documented between 1 and 5 miles of the survey area. Low Potential (Nesting)	
grasshopper sparrow (Ammodramus savannarum)	SSC	This species is a summer resident in California's dry, dense grasslands, particularly in foothills and lowlands. It requires thick cover of grasses and forbs for nesting and foraging. This secretive species primarily feeds on insects and may breed up to 1,500 meters elevation. (CDFW 2025a)	Marginally suitable dense grassland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Marginally suitable dense grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Marginally suitable dense grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Marginally suitable dense grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	
mountain plover (Charadrius montanus)	SSC	This species prefers open grasslands and plowed fields with low vegetation for feeding and roosting. It is a winter resident in California's Central Valley and foothill valleys, relying on short grasslands. The species is declining, with specific habitat needs for foraging and nesting. (USFWS 2025)	Suitable grassland and plowed fields are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland and plowed field habitat are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  No Potential (Nesting)  High Potential (Foraging)	Suitable grassland and plowed fields are present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable grassland and plowed fields are present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	

Common Name	Listin a Otston?	Habitat and History	Potential to Occur within the Survey Area⁴				
(Scientific Name)	Listing Status <sup>3</sup>	Habitat and Life History	Tower A	Tower B	Tower C	Tower D	
northern harrier (Circus hudsonius)	SSC; BCC	This species is found in a variety of open grassland, wetland, and agricultural habitats. Open wetland habitats used for breeding include marshy meadows, wet and lightly grazed pastures, freshwater and brackish marshes. Breeding habitat also includes dry upland habitats, such as grassland, cropland, drained marshland, and shrub-steppe in cold deserts. Wintering habitat includes open areas dominated by herbaceous vegetation, such as grassland, pastures, cropland, coastal sand dunes, brackish and freshwater marshes, and estuaries. (CDFW 2025a)	Suitable open grassland and agricultural habitat is present within the survey area. This species was observed during field surveys and has been recently documented between 1 and 5 miles of the survey area  Moderate Potential (Nesting)  Present (Foraging)	Suitable open grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area Moderate Potential (Nesting) Moderate Potential (Foraging)	Suitable open grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  Moderate Potential (Foraging)	Suitable open grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Low Potential (Foraging)	
prairie falcon (Falco mexicanus)	WL	This species is an uncommon permanent resident found in California's grasslands, savannahs, rangelands, and desert scrub. It requires open areas for foraging and sheltered cliff ledges for nesting. This species primarily feeds on small mammals and exhibits diurnal activity patterns. (USFWS 2025)	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has not been recently documented within 5 miles of the survey area.  No Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area; however, no suitable nesting habitat is present. This species has been recently documented between 0.25 and 1 mile of the survey area.  No Potential (Nesting)  High Potential (Foraging)	
saltmarsh common yellowthroat (Geothlypis trichas sinuosa)	SSC; BCC	This species occurs in freshwater and saltwater marshes. It requires thick, continuous cover down to the water surface for foraging, and tall grasses, tule patches, and willows for nesting. (CDFW 2025a)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area  No Potential (Nesting)  No Potential (Foraging)	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Marginal tule habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	
short-eared owl (Asio flammeus)	SSC; BCC	This species occurs in agricultural fields, grazed and ungrazed grasslands, and freshwater and saltwater marshes. This species requires open country that supports concentrations of microtine rodents and herbaceous cover sufficient to conceal its nest from predators. Its nests are built on the ground. This species' diet consists of small mammals and is particularly affected by the 3- to 4-year cycle of the California vole ( <i>Microtus californicus</i> ). Its breeding season occurs from April through July. (USFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential (Nesting)  Low Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	

Common Name		Habitat and Life History	Potential to Occur within the Survey Area⁴				
(Scientific Name)	Listing Status <sup>3</sup>		Tower A	Tower B	Tower C	Tower D	
song sparrow ("Modesto" population) ( <i>Melospiza melodia</i> pop. 1)	SSC	This species inhabits freshwater marshes, riparian thickets, sparsely vegetated irrigation canals, and valley oak restoration sites. It seeks cover and nests in willow and nettle thickets, growths of tules and cattails, and riparian oak forests with a sufficient understory of blackberry. (CDFW 2025a)	Suitable riparian and irrigation canal habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable riparian and irrigation canal habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable riparian and irrigation canal habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	
Suisun song sparrow (Melospiza melodia maxillaris)	SSC	This species occurs throughout California, primarily in saltwater and brackish marshes. The species requires dense vegetation as protection from predators and high tide, for perching, and for nesting habitat. Breeding season is from early March through July. (CDFW 2025a)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area  Low Potential (Nesting)  Low Potential (Foraging)	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area  Low Potential (Nesting)  Low Potential (Foraging)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	
Swainson's hawk (Buteo swainsoni)	ST	This species occurs in open grasslands, prairies, and farmlands that have nearby trees for nesting. It nests in bushes and in several tree species, including oaks ( <i>Quercus</i> spp.), willow, and eucalyptus, and usually nests in trees in riparian areas near open fields. This species primarily hunts small rodents, rabbits, birds, and reptiles during the breeding season. It largely lives off insects, such as grasshoppers and beetles, during the nonbreeding season. It reproduces from March through April, incubates for 34 to 35 days, and fledges 6 weeks later. (CDFW 2025a)	Suitable grassland and farmland habitat are present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential (Nesting)  High Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential (Nesting)  Moderate Potential (Foraging)	Suitable grassland habitat is present within the survey area; however, there is marginally suitable tree habitat. This species has been recently documented between 0.25 and 1 mile of the survey area.  Low Potential (Nesting)  High Potential (Foraging)	
tricolored blackbird (Agelaius tricolor)	ST; SSC; BCC	This highly colonial species requires open water, protected nesting substrate, and foraging areas adjacent to the colony with insect prey. Breeding occurs near fresh water, often in emergent wetlands with tall, dense cattails or tules, but also in thickets of willow; blackberry; wild rose; or tall, dense forbs. Seeds and cultivated grains, such as rice and oats, compose most of its fall and winter diet. Tricolored blackbird forages on the ground in croplands, grassy fields, flooded land, and along edges of ponds. The breeding season usually occurs from mid-April to late July. (USFWS 2025)	Suitable wetland habitat is not present within the survey area; however, grassy fields are. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable wetland habitat is not present within the survey area; however, grassy fields are. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable wetland habitat is not present within the survey area; however, grassy fields are. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	Suitable wetland habitat and grassy fields are present within the survey area, This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential (Nesting)  Moderate Potential (Foraging)	

Common Name	Lietie e Otetera	Habitat and Pfe History		Potential to Occur wi	thin the Survey Area⁴	
(Scientific Name)	Listing Status <sup>3</sup>	Habitat and Life History	Tower A	Tower B	Tower C	Tower D
western snowy plover (Charadrius nivosus nivosus)	FT; SSC	This species thrives on sandy marine and estuarine shores, nesting from April to August in shallow depressions on sandy or gravelly substrates. Key habitats include coastal beaches, salt ponds, and alkali lakes, where it feeds on insects and relies on camouflage for cover. (USFWS 2025)	Suitable shore and sandy habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable shore and sandy habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable shore and sandy habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable shore and sandy habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)
white-tailed kite (Elanus leucurus)	FP	This species nests in riparian or oak woodland adjacent to undisturbed, open fields and grasslands, meadows, farmlands, and emergent wetlands, where it hunts rodents. Breeding generally occurs from February through October. White-tailed kite lays three to five eggs, which it incubates for 30 to 32 days, after which fledging occurs at 5 to 6 weeks of age. (CDFW 2025a)	Suitable riparian or oak woodland habitat adjacent to open fields and grasslands is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable riparian or oak woodland habitat adjacent to open fields are not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area No Potential (Nesting)  No Potential (Foraging)	Suitable riparian or oak woodland habitat adjacent to open fields are not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area No Potential (Nesting)  No Potential (Foraging)	Suitable riparian or oak woodland habitat adjacent to open fields and grasslands is not present within the survey area. This species has not been recently documented within 5 miles of the survey area; however, this species' known range overlaps with the survey area.  No Potential (Nesting)  No Potential (Foraging)
yellow rail (Coturnicops noveboracensis)	SSC	This species breeds in densely vegetated, shallow freshwater marshes and wet meadows. Breeding occurs from May through September. Wintering birds frequent mature salt marshes well above the water line. (Green 1992)	Suitable marsh and wet meadow habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable marsh and wet meadow habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)	Suitable marsh and wet meadow habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area No Potential (Nesting)  No Potential (Foraging)	Suitable marsh and wet meadow habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential (Nesting)  No Potential (Foraging)
Fish						
Delta smelt (Hypomesus transpacificus)	FT; SE	Delta smelt are an euryhaline species (i.e., a species adapted to living in fresh and brackish water) that occupies estuarine areas with salinities below 2 parts per thousand. This species is found only from the San Pablo Bay upstream through the Sacramento-San Joaquin River Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. Delta smelt spawn in shallow, fresh, or slightly brackish water upstream from the brackish water habitat associated with the mixing zone. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Marginal aquatic habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential

Common Name	Listing Status <sup>3</sup>	Habitat and Life History	Potential to Occur within the Survey Area⁴				
(Scientific Name)	Listing Status		Tower A	Tower B	Tower C	Tower D	
eulachon ( <i>Thaleichthys pacificus</i> )	FT; SSC	Eulachon require clean, cold freshwater rivers for spawning and coastal marine environments for growth; they migrate upstream to spawn in late winter to early spring, exhibiting a semelparous life cycle. (McCaughran and Heggenes 2010)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential	
green sturgeon - southern DPS (Acipenser medirostris pop. 1)	FT; SSC	This species is found in a variety of estuarine and freshwater habitats within the San Francisco Bay, San Pablo Bay, and Sacramento-San Joaquin River Delta. Spawning occurs in the Sacramento, Feather, and Yuba rivers in cool (11 to 15 degrees Celsius) sections of mainstem rivers in deep pools (i.e., 8 to 9 meters) with substrate containing small- to medium-sized sand, gravel, cobble, or boulders. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable aquatic habitat is not present within the survey area.  No Potential	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable aquatic habitat is not present within the survey area.  No Potential	Although this species has been recently documented between 1 and 5 miles of the survey area, suitable aquatic habitat is not present within the survey area.  No Potential	
longfin smelt – San Francisco Bay-Delta DPS ( <i>Spirinchus thaleichthys</i> pop. 2)	FE; ST	The known range of this species extends from the San Francisco Bay Estuary and Sacramento-San Joaquin Delta (Bay-Delta) in California northward to the Cook Inlet in Alaska. In the Bay-Delta, longfin smelt spawn primarily in freshwater in the lower reaches of the Sacramento and San Joaquin rivers. Juvenile and adult longfin smelt have been found throughout the year in salinities ranging from pure freshwater to pure seawater. Once past the juvenile stage, they are typically collected in waters with salinities ranging from 14 to 28 parts per thousand. The life cycle of most longfin smelt generally requires estuarine conditions. Longfin smelt occur in the Bay-Delta typically from January to April. (Moyle and Baltz 1985)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Marginal aquatic habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential	
Sacramento splittail (Pogonichthys macrolepidotus)	SSC	The Sacramento splittail requires shallow, slow-moving waters with abundant vegetation for spawning and rearing, primarily inhabiting the Sacramento-San Joaquin Delta. They migrate for spawning in floodplain habitats. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Marginal aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	

Common Name	Listing Otstans		Potential to Occur within the Survey Area⁴				
(Scientific Name)	Listing Status <sup>3</sup>	Habitat and Life History	Tower A	Tower B	Tower C	Tower D	
steelhead - Central Valley DPS (Oncorhynchus mykiss irideus pop. 11)	FT; SSC	This DPS of steelhead represents a population that spawns in freshwater habitats located in California's Central Valley. This species is anadromous, meaning they are born in freshwater, migrate to the ocean to grow and mature, and return to their natal streams to spawn. Suitable freshwater breeding habitats include rivers, streams, and tributaries with clean, cold water and gravel substrate. After hatching, the young steelhead spend several years in fresh water before migrating to the ocean, where they feed on a variety of prey, including small fish, invertebrates, and plankton. (CDFW 2025a)	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	
Invertebrates							
Conservancy fairy shrimp (Branchinecta conservatio)	FE	This species occurs within vernal pool habitats in California's Central Valley. It mostly lives in relatively large, turbid freshwater vernal pools called playa pools. This species can be found at elevations ranging from 16 to 5,577 feet in grassland, rural, and wetland habitats. This species opportunistically filter-feeds on various planktonic food sources including algae and protozoa. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	
Delta green ground beetle (Elaphrus viridis)	FT	This species is currently only known to live in the Jepson Prairie region of Solano County. The Delta green ground beetle requires moist, grassy habitats near wetlands, with a life history involving predation on other insects and a lifecycle that includes egg, larval, pupal, and adult stages. (USFWS 2025)	Suitable prairie habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable prairie habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable prairie habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable prairie habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	
Lange's metalmark butterfly (Apodemia mormo langei)	FE	This species is associated with the Antioch Dunes, a riverbank dune system along the San Joaquin River. Currently, this species can only be found in the Antioch Dunes National Wildlife Refuge, the last remnants of the Antioch Dunes. All life stages are closely associated with naked-stemmed buckwheat ( <i>Eriogonum nudum</i> var. <i>psychicola</i> ), which is the primary nectar source for adults, is used to lay eggs, and is a larval food plant. The leaves of the larval host plant provide both food and shelter throughout the larval instar phases. (Nature Serve)	Suitable riverbank dune habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable riverbank dune habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable riverbank dune habitat is not present within the survey area. This species has been recently documented within 0.25 mile of the survey area.  No Potential	Suitable riverbank dune habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	

Common Name				Potential to Occur w	thin the Survey Area⁴	
(Scientific Name)	Listing Status <sup>3</sup>	Habitat and Life History	Tower A	Tower B	Tower C	Tower D
longhorn fairy shrimp ( <i>Branchinecta longiantenna</i> )	FE	Longhorn fairy shrimp require temporary freshwater pools for breeding, with a life cycle that includes a dormant egg stage, hatching in response to seasonal rainfall. They thrive in vernal pools. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area; however, this species' known range does not overlap with the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable seasonally ponded wetland habitat is present within the survey area; however, this species' known range does not overlap with the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable seasonally ponded wetland habitat is not present within the survey area; however, this species' known range does not overlap with the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable seasonally ponded wetland habitat is not present within the survey area; however, this species' known range overlaps with the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  No Potential
monarch butterfly (Danaus plexippus)	FPT	This species requires milkweed and flowering plants for suitable habitat. Although adults only need to feed on nectar from flowers, milkweed is the only place where they can lay eggs. Most individuals of this species live 2 to 5 weeks, but overwintering individuals may live 6 to 9 months. (USFWS 2025)	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Suitable habitat with milkweed is not present within the survey area; however, other species flowering plants are present. Therefore, marginally suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential
Valley elderberry longhorn beetle (Desmocerus californicus dimorphus)	FT	This species is extremely dependent on the elderberry (Sambucus nigra ssp. canadensis), which is a shrub found in riparian areas and foothill oak woodlands. Adults and juveniles exclusively eat the stems, leaves, and flowers of the elderberry. Individuals are only found on the valley floor and low foothills. The typical lifespan of this species is 1 to 2 years. (USFWS 2025)	Suitable riparian habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable riparian habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable riparian habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Marginally suitable riparian habitat is present within the survey area; however, no elderberry shrubs are present within these habitats. This species has not been recently documented within 5 miles of the survey area.  No Potential
vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	FT	This species occurs within vernal pool habitats throughout California. Female vernal pool fairy shrimp carry fertilized eggs in a sac on the underside of their body. The eggs are either dropped to the pool bottom or remain in the brood sac until the mother dies and sinks to the bottom of the pool. This species opportunistically filter-feeds on various planktonic food sources, including algae and protozoa. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 0.25 and 1 mile of the survey area.  High Potential	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential
vernal pool tadpole shrimp ( <i>Lepidurus packardi</i> )	FE	This species occurs within vernal pool habitats with a patchy distribution within California's Central Valley. Female vernal pool tadpole shrimp produce up to six clutches of eggs containing 32 to 61 eggs per clutch during each wet season. They carry fertilized eggs in a sac on the underside of their body. The eggs are either dropped to the pool bottom or remain in the brood sac until the mother dies and sinks to the bottom of the pool. This species opportunistically filter-feeds on other fairy shrimp ( <i>Branchinecta</i> spp.), invertebrates, and waste from other vernal pool species. (USFWS 2025)	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable seasonally ponded wetland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area  Moderate Potential	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable seasonally ponded wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential

Common Name	1:-4:2	Habitat and History		Potential to Occur w	ithin the Survey Area <sup>4</sup>	
(Scientific Name)	Listing Status <sup>3</sup>	Habitat and Life History	Tower A	Tower B	Tower C	Tower D
western bumble bee (Bombus occidentalis)	SCE	This species can be found throughout the western United States and Canada and are not limited to any particular host plant. (Xerces Society)	Suitable habitat is present within the survey area. This species has been documented between 1 and 5 miles of the survey area; however, this occurrence is over 30 years old.  Moderate Potential	Suitable habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential	Suitable habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Suitable habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential
Mammals						
American badger ( <i>Taxidea taxus</i> )	SSC	This species is an uncommon, permanent resident in California, thriving in drier, open habitats with friable soils. It primarily feeds on fossorial rodents and digs burrows for cover and reproduction. This species plays a crucial role in controlling small mammal populations. (WDFW)	Suitable dry, open habitat with fossorial rodent burrows is present within the survey area; however, these burrows are not suitably large enough for this species. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Marginal grassland habitats lacking suitably sized rodent burrows are present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Marginal grassland habitats lacking suitably sized rodent burrows are present within the survey area. This species has not been recently documented within 5 miles of the survey area.  Low Potential	Marginal grassland habitats lacking suitably sized rodent burrows are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Low Potential
San Joaquin kit fox (Vulpes macrotis mutica)	FE; ST	This species inhabits a variety of open habitats, including grasslands, chenopod scrublands, and semi-arid regions. Breeding occurs from January to March, with a gestation period of 49 to 55 days. The female constructs a den in the ground, often utilizing existing burrows dug by other animals. Its diet primarily consists of small mammals, such as rodents, rabbits, and ground squirrels. (USFWSUSFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential
salt-marsh harvest mouse (Reithrodontomys raviventris)	FE; SE; FP	This species inhabits salt marshes in California and is adapted to live in marsh vegetation, including pickleweed and cordgrass, which provide cover, food sources, and breeding habitats. Breeding typically occurs between March and October. Its diet consists of marsh vegetation, including seeds, stems, and leaves. (USFWS 2025)	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area  No Potential	Suitable marsh habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area  No Potential	Suitable marsh habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential
Western red bat (Lasirurs blossevillii)	SSC, WBWG- H	This species occurs in a variety of habits, including forests, woodlands, and riparian areas. It roosts and forages among trees and vegetation and exhibits a preference for mixed coniferous and deciduous forests. Breeding occurs in the spring and early summer. This species typically seeks out tree foliage, such as leaves or branches, to create roosting sites. The diet consists mainly of insects, such as moths, beetles, and flies. (CDFW 2025a)	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area.  Low Potential (Roosting)  Low Potential (Foraging)	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area.  Low Potential (Roosting)  Low Potential (Foraging)	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area.  Low Potential (Roosting)  Low Potential (Foraging)	Marginally suitable roosting habitat is present within the survey area within the limited stands of trees, and suitable foraging habitat is present. This species has not been recently documented between 1 and 5 miles from the survey area.  Low Potential (Roosting)  Low Potential (Foraging)

Common Name		Habitat and Life History	Potential to Occur within the Survey Area⁴			
(Scientific Name)	Listing Status <sup>3</sup>		Tower A	Tower B	Tower C	Tower D
Reptiles	•				·	·
Alameda whipsnake (Masticophis lateralis euryxanthus)	FT; ST	This species inhabits grasslands, chaparral, and oak woodlands within Alameda and Contra Costa counties. It is primarily diurnal, being active during the day and seeking shelter in vegetation or underground burrows at night. Breeding typically occurs in the spring and summer months. The diet consists of small vertebrates, including lizards, rodents, and birds. (USFWS 2025)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' known range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential
coast horned lizard ( <i>Phrynosoma blainvillii</i> )	SSC	Blainville's horned lizard (Phrynosoma blainvillii) thrives in open, sandy habitats with scattered shrubs, including valley-foothill hardwood, conifer, and grasslands across California. It forages primarily on the ground, consumes ants, and relies on camouflage for protection. This species is diurnal and hibernates in loose soil during winter. (Nature Serve)	Suitable sandy habitats with scattered shrubs are not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable sandy habitats with scattered shrubs are not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Suitable sandy habitats with scattered shrubs are not present within the survey area. This species has not been recently documented within 5 miles of the survey area.  No Potential	Marginally suitable sandy habitats with scattered shrubs are present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential
giant gartersnake (Thamnophis gigas)	FT; ST	This semi-aquatic species inhabits marshes, wetlands, and slow-moving bodies of water. It is often closely associated with water sources, which serve as its hunting grounds. Breeding typically occurs in the spring and early summer. After mating, females give birth to live young. The diet primarily consists of small fish, amphibians, and aquatic invertebrates. (USFWS 2025)	Suitable marsh and wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential	Suitable marsh and wetland habitat is not present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential	Suitable marsh and wetland habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Marginal slow moving linear drainage habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential
Northern California legless lizard (Anniella pulchra)	SSC	This species is found in grasslands, chaparral, and open woodlands and requires loose, friable soils for burrowing. Breeding typically occurs in the spring or early summer. Females lay small clutches of eggs in underground burrows or hidden areas. The diet primarily consists of small invertebrates, such as insects, spiders, and other arthropods. (CDFW 2025a)	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has not been recently documented within 5 miles of the survey area and this species' range does not overlap with the survey area.  No Potential	Suitable grassland habitat is present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  Moderate Potential
northwestern pond turtle (Actinemys marmorata)	FPT; SSC	This freshwater turtle species primarily inhabits ponds, lakes, and slow-moving streams with suitable basking sites. It spends a significant amount of time basking on logs or rocks. Breeding typically occurs in the spring and early summer. Females dig nests in sandy or gravelly areas near water, where they lay their eggs. The hatchlings emerge several months later and make their way to the water. The diet is omnivorous and consists of various aquatic plants, insects, small fish, and amphibians. (USFWS 2025)	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Suitable aquatic habitat is not present within the survey area. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential	Marginal slow-moving aquatic habitat is present within the survey area; however, these areas lack suitable basking sites. This species has been recently documented between 1 and 5 miles of the survey area.  No Potential

Table 7: Wildlife Species Observed within the Tower Survey Area

Common Name	Scientific Name
American crow	Corvus brachyrhynchos
Black phoebe	Sayornis nigricans
Black-tailed jackrabbit	Lepus californicus
European starling	Sturnus vulgaris
Golden eagle	Aquila chrysaetos
Horned lark	Eremophila alpestris
House finch	Haemorhous mexicanus
Loggerhead shrike	Lanius Iudovicianus
Mourning dove	Zenaida macroura
Northern harrier	Circus hudsonius
Northern mockingbird	Mimus polyglottos
Raccoon	Procyon lotor
Red-tailed hawk	Buteo jamaicensis
Red-winged blackbird	Agelaius phoeniceus
Ring-necked pheasant	Phasianus colchicus
Song sparrow	Melospiza melodia
Tree swallow	Tachycineta bicolor
Western meadowlark	Sturnella neglecta
White-crowned sparrow	Zonotrichia leucophrys

#### 6.6 CRITICAL HABITAT

Critical habitat for delta smelt (*Hypomesus transpacificus*) is present at the Tower survey area associated with Tower D. However, this area lacks several of the primary constituent elements (PCEs) for delta smelt, including physical habitat and river flow. Physical habitat requires proper substrate with water depth variation and channel morphology for spawning adults and potential foraging habitat for rearing juveniles along marsh edges. The agricultural canals within the Tower survey area associated with Tower D have been extensively manipulated and lack the variation in depth and morphology required by the species. Further, the canals within the Tower survey area associated with Tower D lack large-scale riverine flows that provide open water habitats preferred by the species.

However, the canals within the Tower survey area associated with Tower D may contain the requisite salinity necessary to satisfy the PCEs for critical habitat for this species, and the emergent vegetation along the shorelines of the canals may provide some physical habitat. However, the marginal suitability of the habitat within the Tower survey area associated with Tower D makes it unlikely that Delta smelt are present within these canals.

#### 6.7 NATIVE WILDLIFE CORRIDORS AND NURSERY SITES

Wildlife migration corridors are areas that connect suitable wildlife habitats in a region that would otherwise be fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features (e.g., canyon drainages, ridgelines, or areas with vegetation cover) provide corridors for wildlife travel. Wildlife corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high-population or highdensity areas; and facilitate genetic diversity. California Environmental Quality Act Guidelines require that project proponents disclose and mitigate for significant impacts on wildlife corridors. Impacts to wildlife corridors, such as human disturbance and development, can cause harm to migrating species, cause species to exceed population thresholds in fragmented patches, or prevent healthy gene flow between populations. The California Essential Habitat Connectivity Project (CEHC) maintains a statewide Essential Habitat Connectivity Map, which broadly depicts large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas) (Spencer et al. 2010). One Essential Connectivity Area lies within the Tower survey area associated with Tower C, as depicted in Attachment E: Essential Connectivity Areas (CDFW 2025c), and no Natural Landscape Blocks overlap with the Tower survey area (CDFW 2025d).

The Proposed Project lies within the Pacific Flyway, which is an important north-south migration corridor that runs along the Pacific coast of the Americas from Alaska to Patagonia, including all of North America west of the Rocky Mountains. The Pacific Flyway links breeding grounds to the north with wintering areas to the south and is used by many different species of birds during migration. Many birds (especially waterfowl) use locations in California's Sacramento Valley as a stopover point or wintering area. One of those major locations is Suisun Marsh, which is less than 10 miles from the Tower survey area. At the Tower survey area's latitude, the Pacific Flyway extends inland from the Pacific Ocean for approximately 700 miles. As a result, the

Tower survey area's components would be placed in less than 0.3 percent of the width of the Pacific Flyway. The Tower survey area does not occur in any nursery sites.

#### 6.8 AQUATIC RESOURCES

Insignia biologists identified 13 linear drainages within the Tower survey area that are potentially under the jurisdiction of the Regional Water Quality Control Board (RWQCB) and CDFW. Three of these drainages may are potentially under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Further, 19 potentially jurisdictional wetland features were observed within the Tower survey area. Attachment A: Biological Resources Map depicts the locations of the potentially jurisdictional water features within the Tower survey area. Attachment F: Linear Water Feature Photographs presents upstream and downstream photographs of the mapped ephemeral linear water feature. Attachment G: Wetland Feature Photographs presents representative photographs of each wetland feature. Attachment H: Potentially Jurisdictional Water Features Table lists the unique feature identification number, feature type, length, ordinary high water mark width and depth, top-of-bank width and depth, Cowardin classification (for wetlands), and the approximate extent of potential USACE, RWQCB, and/or CDFW jurisdictions.

## 7 - RECOMMENDATIONS

Proposed Project-specific avoidance and minimization measures would need to be developed to reduce the potential for impacts to all special-status species with moderate or high potential to occur within the Proposed Project area, as well as species that are present within the Tower survey area.

Prior to initiating Proposed Project activities, the following pre-construction surveys would be required as follows:

- Pre-construction nesting bird and raptor surveys would be conducted within 48 hours prior to work occurring between February 1 and September 30 each year. Surveys would be conducted within 500 feet of all Proposed Project work areas.
- A pre-construction California red-legged frog survey would be conducted between January 1 and February 28 within the Tower survey area associated with Tower D in accordance with the U.S. Fish and Wildlife Service's (USFWS's) Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog guidelines (USFWS 2005).
- A pre-construction California tiger salamander survey would occur at all Towers within the Tower survey area in accordance with the USFWS's Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding on the California Tiger Salamander guidelines (USFWS 2003).
- A pre-construction golden eagle survey would occur within the Tower survey area associated with Tower D in accordance with the MBTA's Interim Golden Eagle Breeding

Survey Recommendations in Nevada: FWS R8 Migratory Birds June 13, 2023 guidelines (MBTA 2023).

- A pre-construction Swainson's hawk survey would occur at all Towers within the Tower survey area in accordance with the Swainson's Hawk Technical Advisory Committee's (SHTAC's) Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley guidelines (SHTAC 2000).
- A pre-construction survey for San Joaquin kit fox would occur in the Tower survey area associated with Tower D in accordance with the USFWS's Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (USFWS 2011).
- Pre-construction burrowing owl surveys would be conducted in all Towers within the Tower survey area that may provide suitable nesting habitat in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012). The take avoidance surveys, consisting of up to four visits, would be initiated within 30 days of and completed at least 14 days before construction is initiated at a given location. In areas with burrows or refuge that could potentially support burrowing owls, a clearance visit would be conducted within 24 hours of construction.
- A formal wetland delineation would be required once further engineering is complete and prior to work commencing within the Tower survey area. Once complete, a preliminary jurisdictional determination would be presented to the USACE that includes all data sheets, including NWI maps that show all proposed facilities (as shown in Attachment I: National Wetlands Inventory Map).

For all federally listed species with a moderate or high potential to occur, if the Proposed Project has the potential to adversely affect the species or its habitat, consultation under Section 7 of the FESA would be necessary.

If any state-listed species are observed in the Tower survey area and the Proposed Project has the potential to adversely affect them, an incidental take permit (ITP) issued by the CDFW may be required to mitigate for potential take of those species.

Although the 16 of the 17 bird species identified in Table 7: Wildlife Species Observed within the Tower Survey Area do not carry listing statuses under the FESA or California Endangered Species Act, they are protected under the MBTA, California Fish and Game Code, and CCR. One wildlife species observed, the golden eagle, is protected under the BGEPA.

Several regulatory approvals, authorizations, or permits are required for the Proposed Project, as provided in Table 8: Anticipated Biological Resource Permits and Authorizations. These approvals may include conditions that afford additional protection to species and/or their habitat.

**Table 8: Anticipated Biological Resource Permits and Authorizations** 

Agency	Permit/Approval/Consultation	Jurisdiction/Purpose of Permit				
Federal A	Federal Agencies					
USACE	CWA Section 404 Nationwide Permit	Permanent and temporary fill of waters of the U.S.				
USFWS	FESA Section 7 Consultation	Construction activities such as vegetation clearing or removal that may affect federally listed species or their habitats				
State Agencies						
CDFW	California Fish and Game Code Section 1600 Streambed Alteration Agreement	Activities that will substantially disturb the bed or bank of a jurisdictional waterbody				
RWQCB	CWA Section 401 Water Quality Certification	Activities authorized by federal agencies that may affect state water quality				

### 8 - REFERENCES

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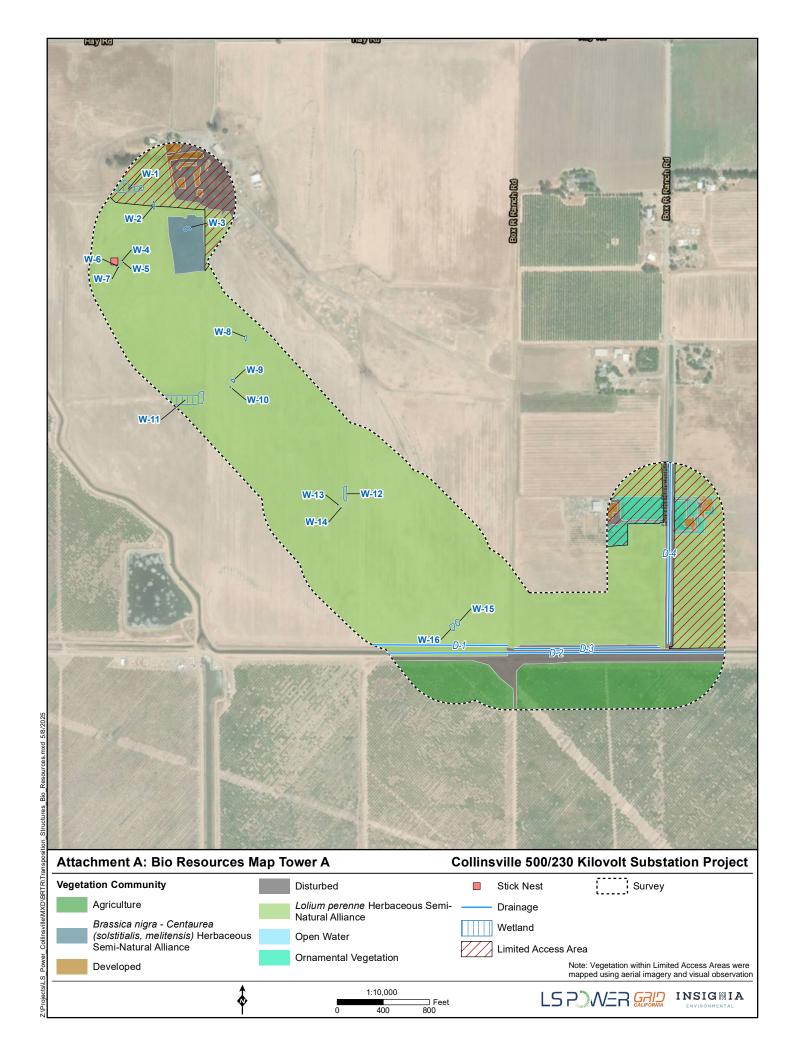
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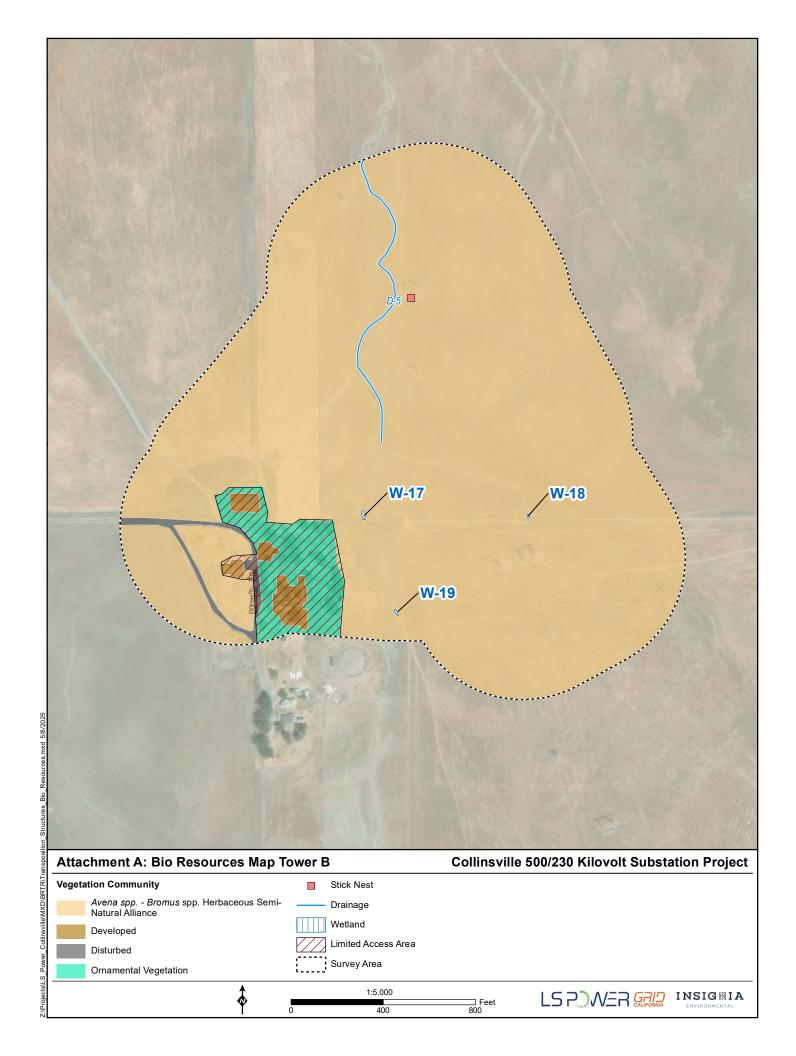
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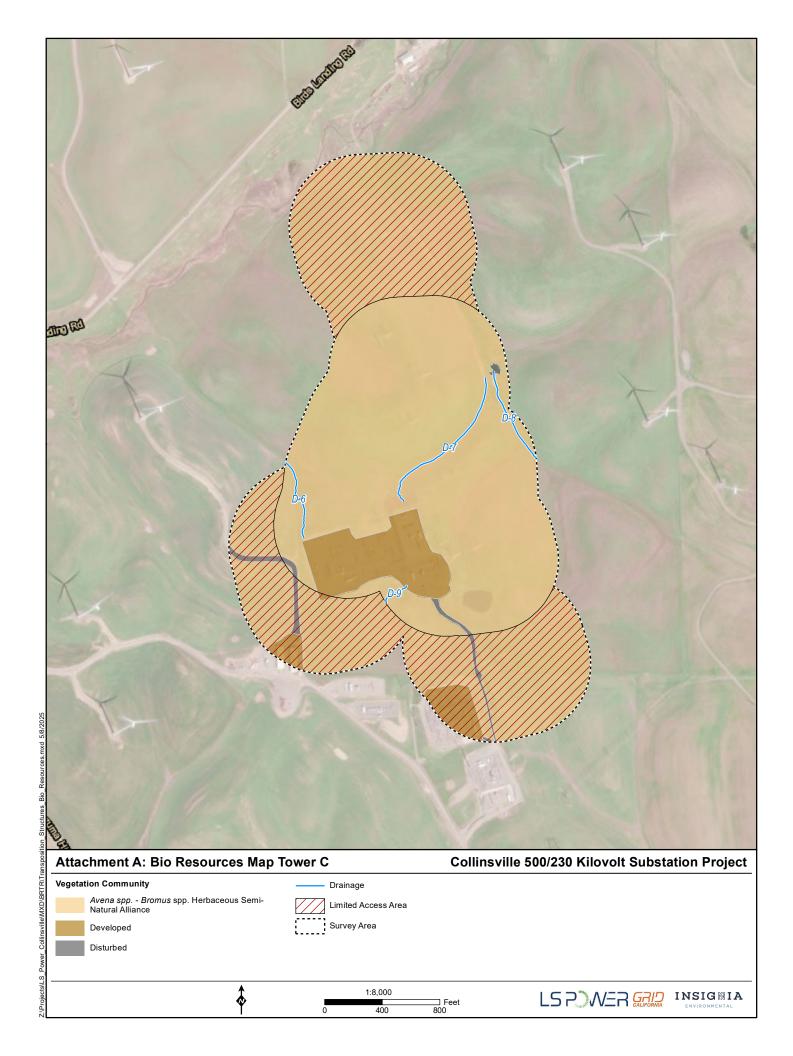
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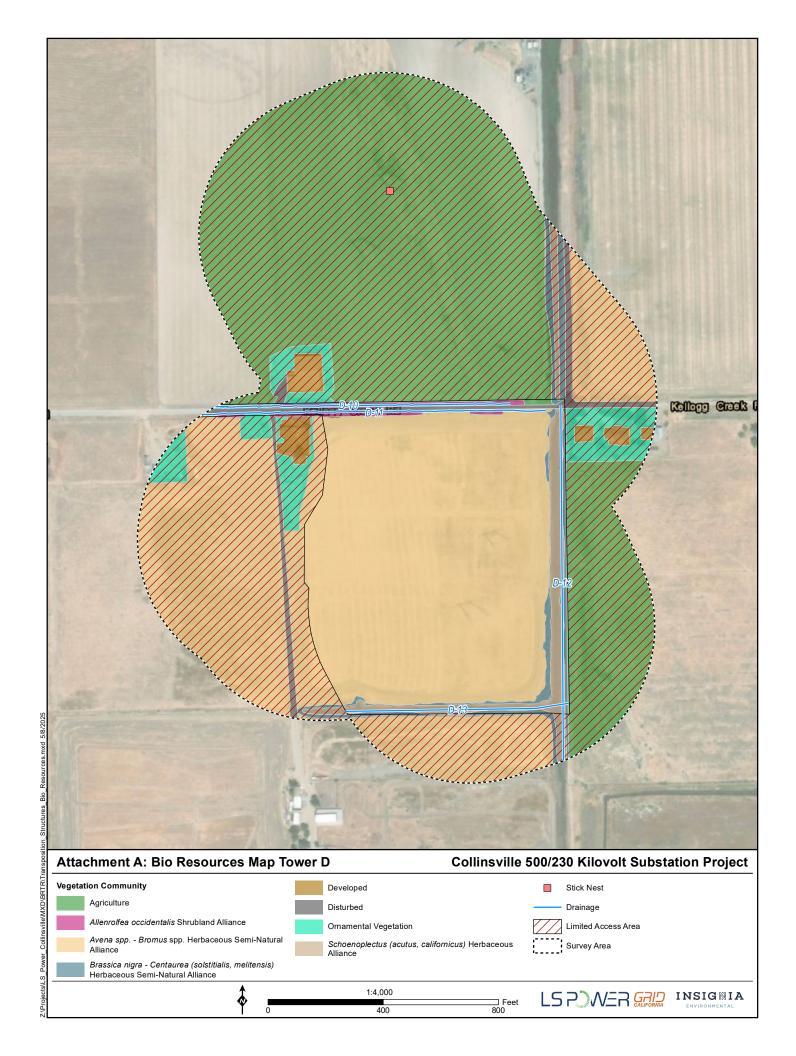
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# ATTACHMENT A: BIOLOGICAL RESOURCES MAP









# ATTACHMENT B: HABITAT ASSESSMENT PHOTOGRAPHS

# ATTACHMENT B: HABITAT ASSESSMENT PHOTOGRAPHS



Photograph 1: Agriculture land cover type, facing southwest.



Photograph 2: Allenrolfea occidentalis
Shrubland
Alliance, facing south.



Photograph 3: Avena spp. Bromus spp.
Herbaceous
Semi-Natural
Alliance (SNA),
facing south.



Photograph 4:
Brassica nigra Centaurea
(solstitialis,
melitensis)
Herbaceous
SNA, facing
east.



Photograph 5: Disturbed land cover type, facing north

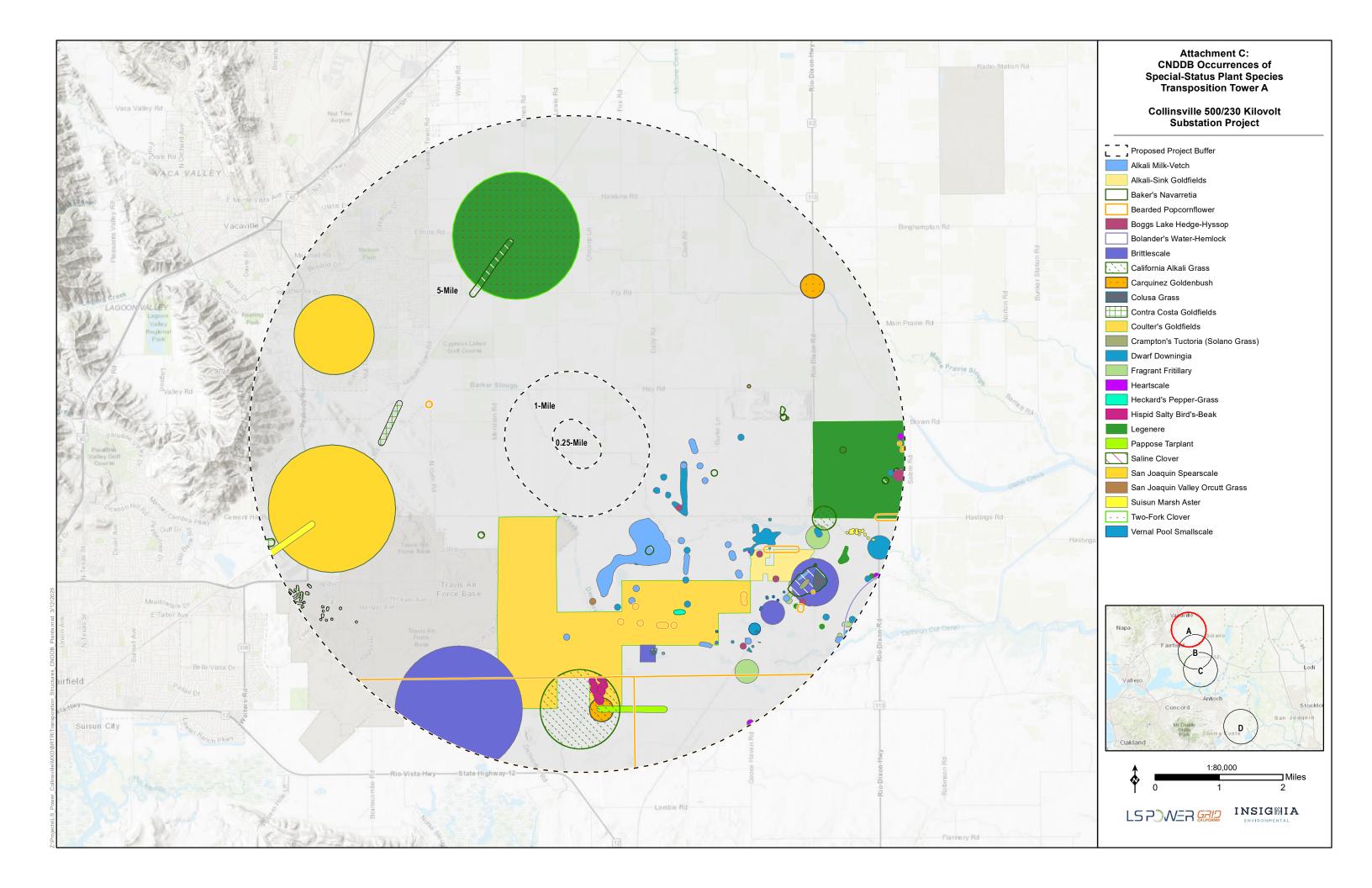


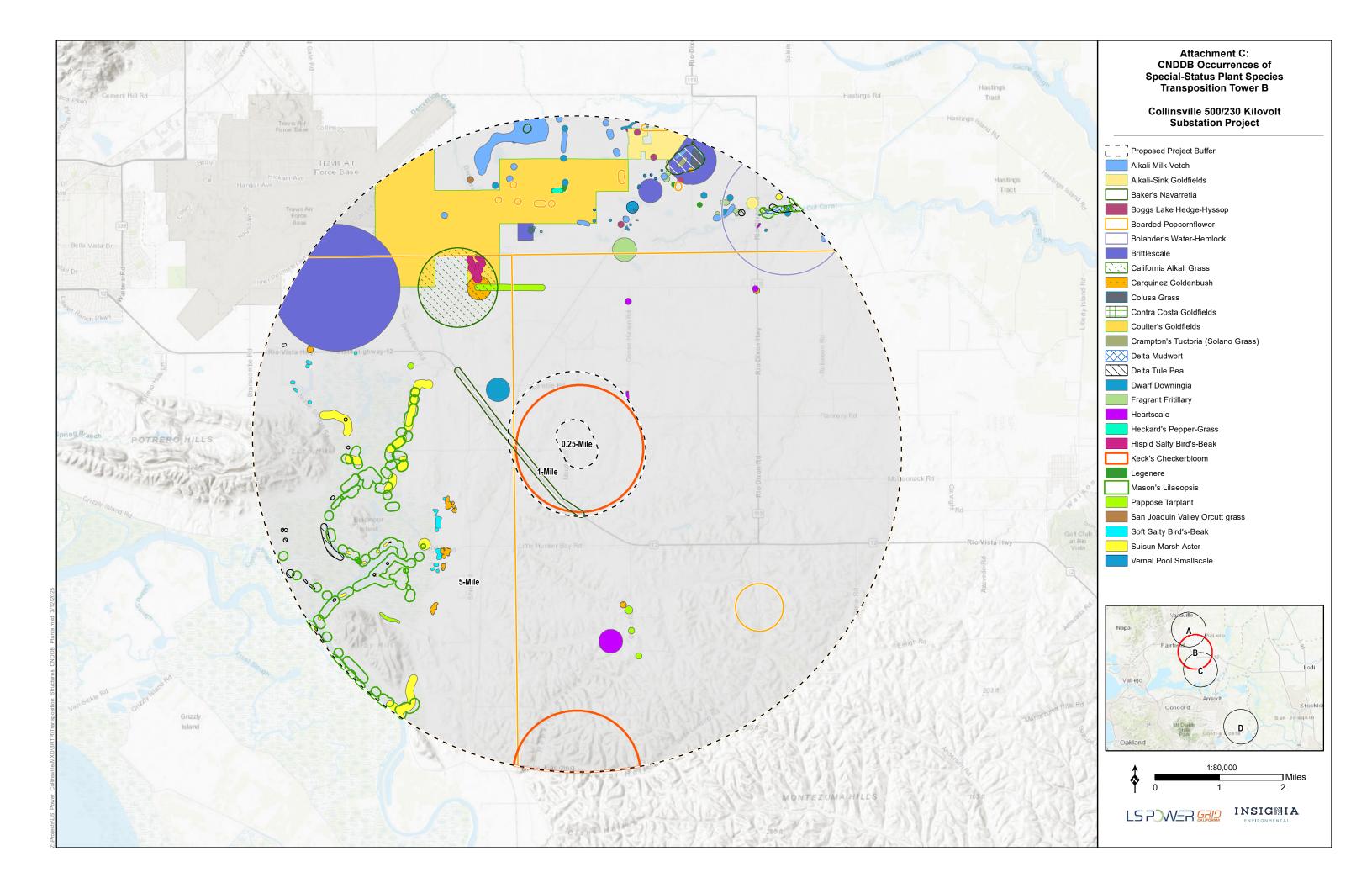
Photograph 6: Lolium perenne Herbaceous SNA, facing southwest.

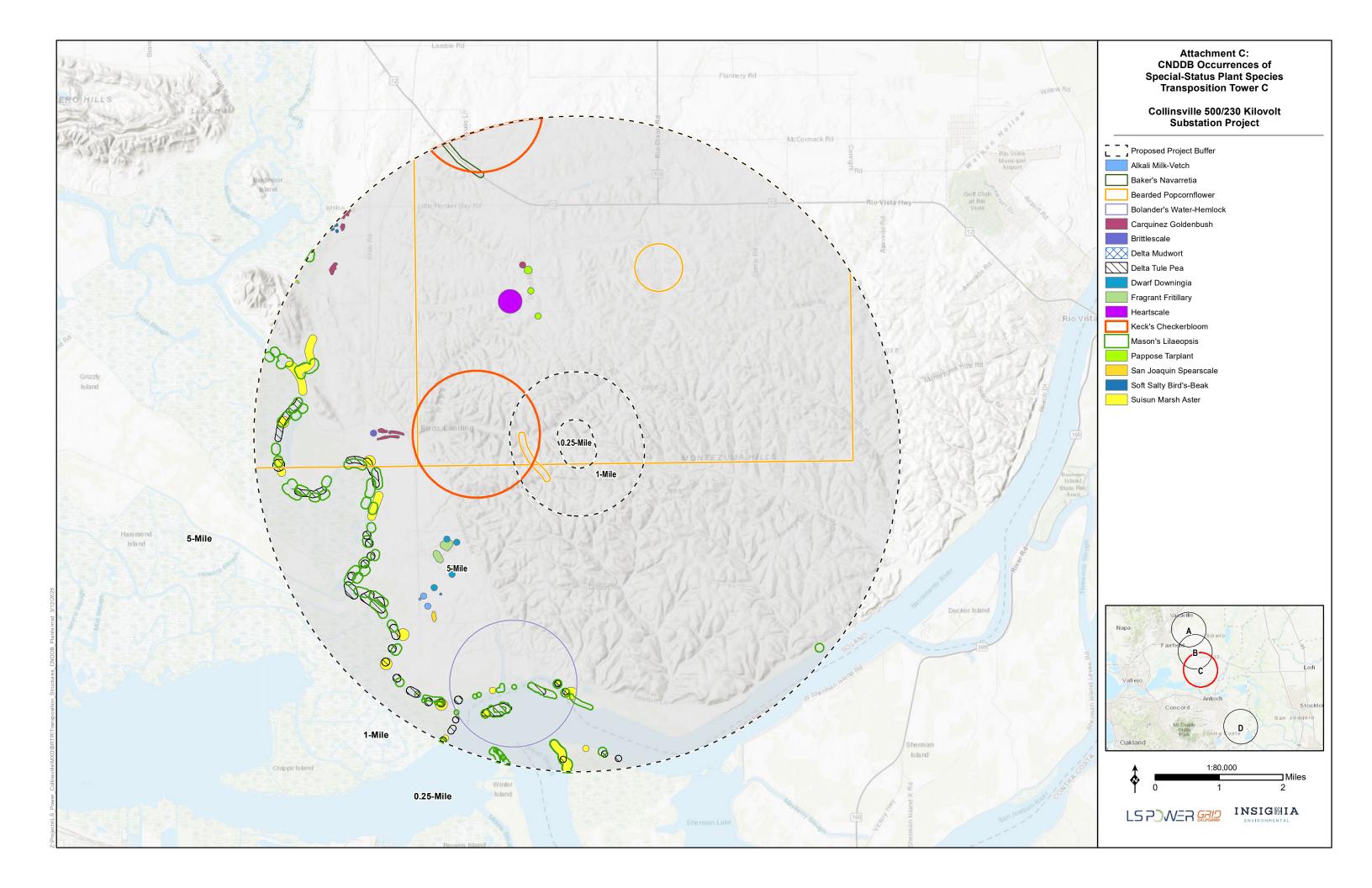


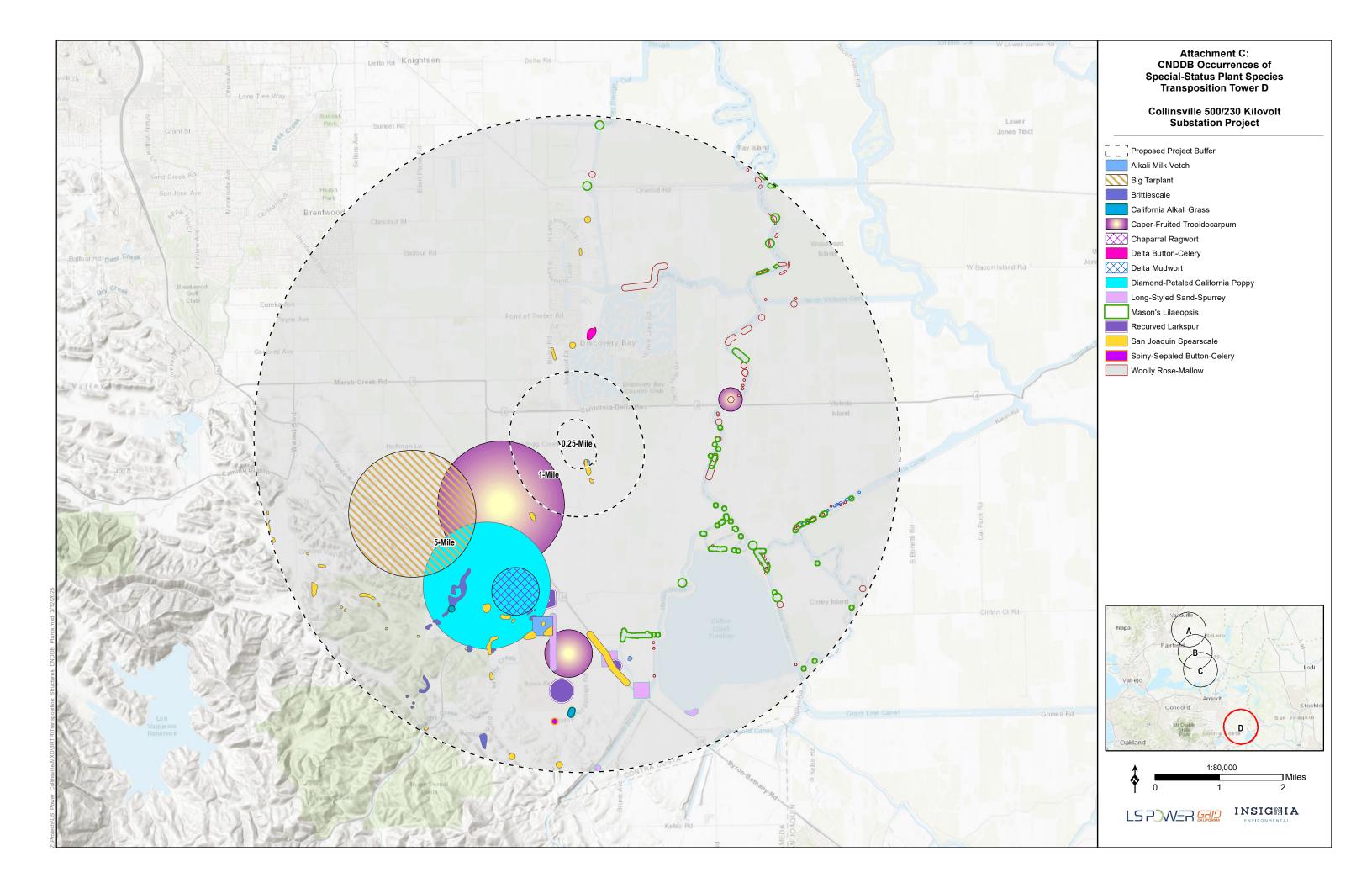
Photograph 7: Schoenoplectus (acutus, californicus) Herbaceous Alliance, facing north.

ATTACHMENT C: CNDDB OCCURRENCES OF SPECIAL-STATUS PLANT SPECIES

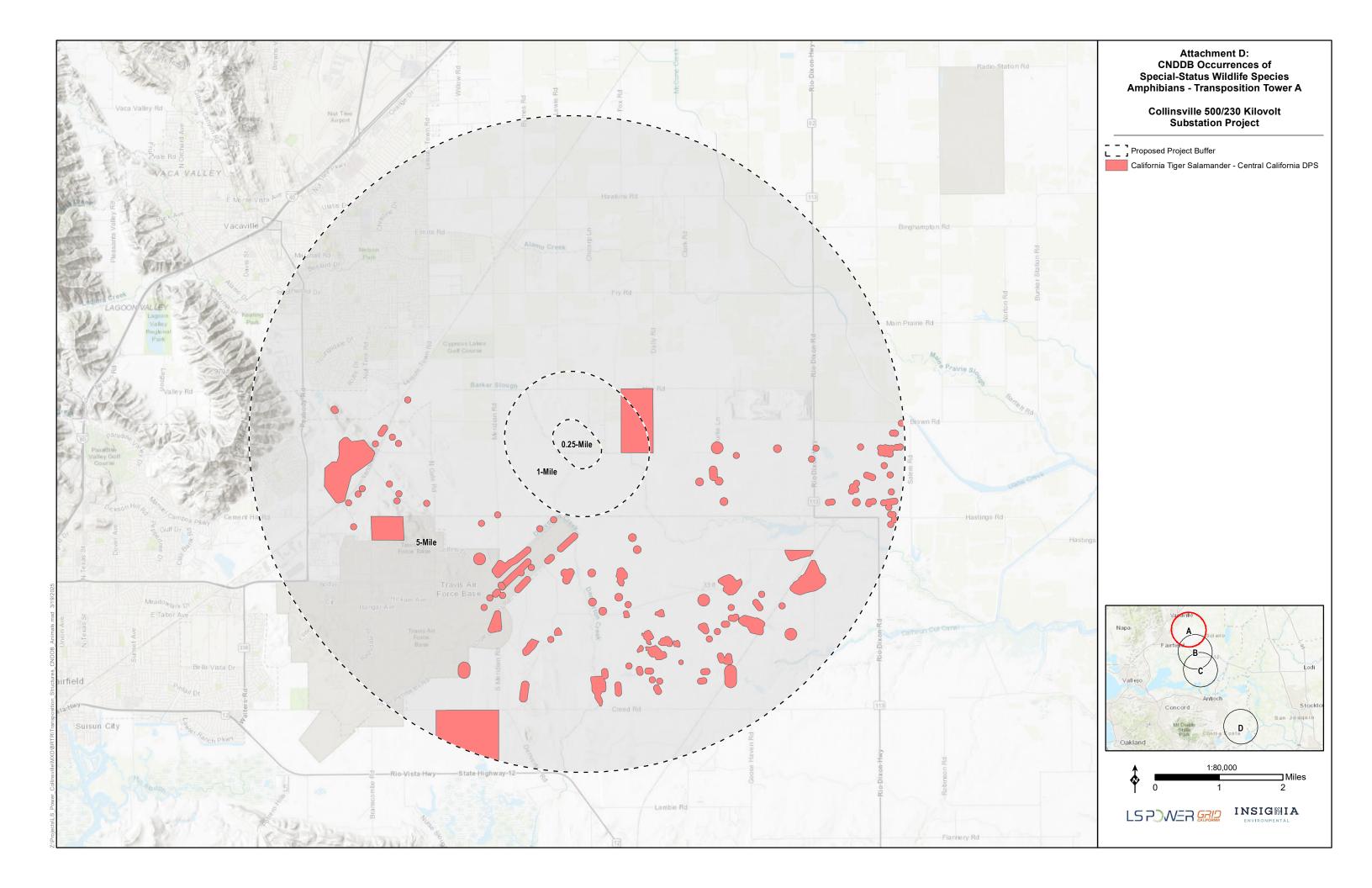


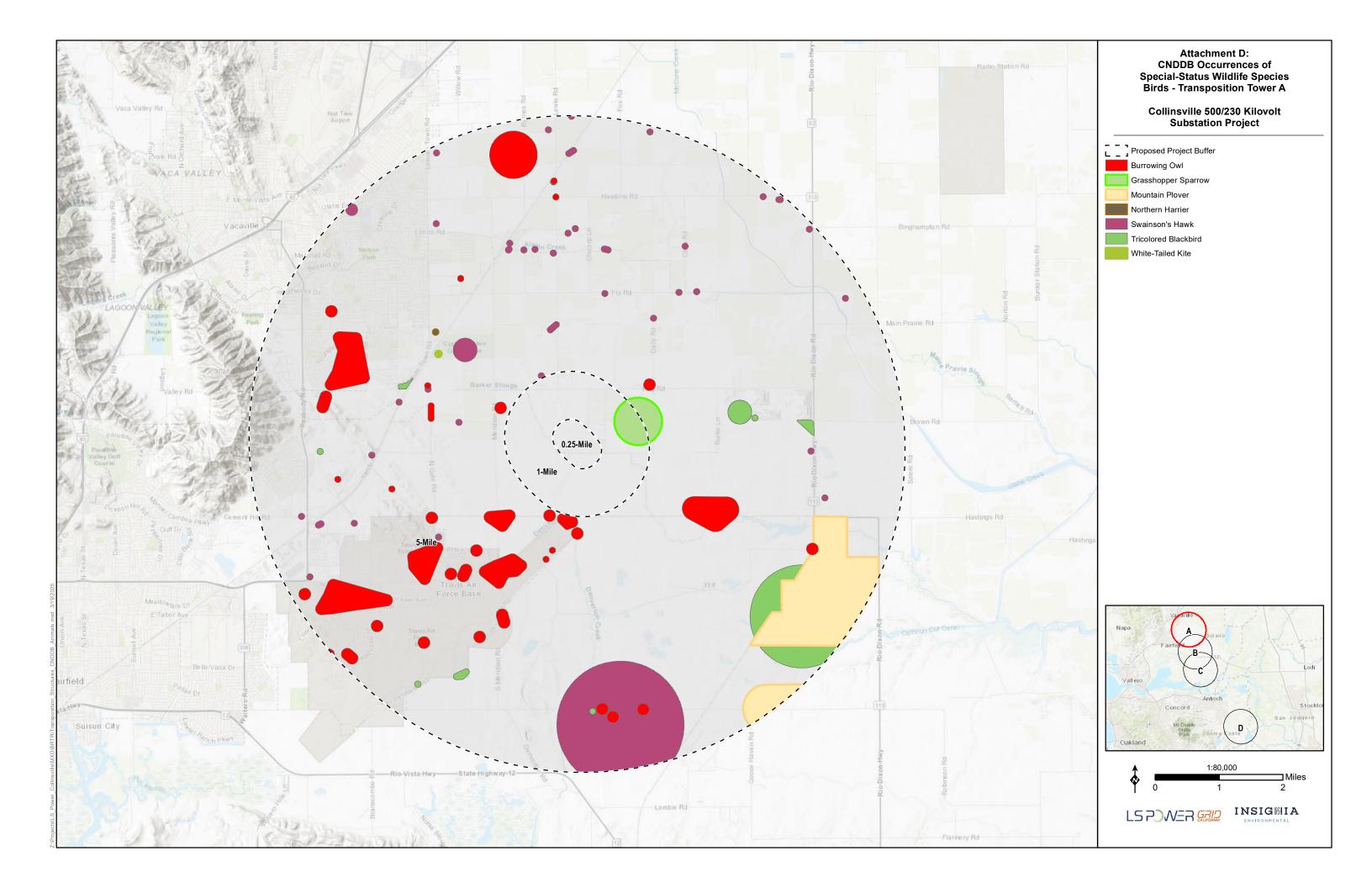


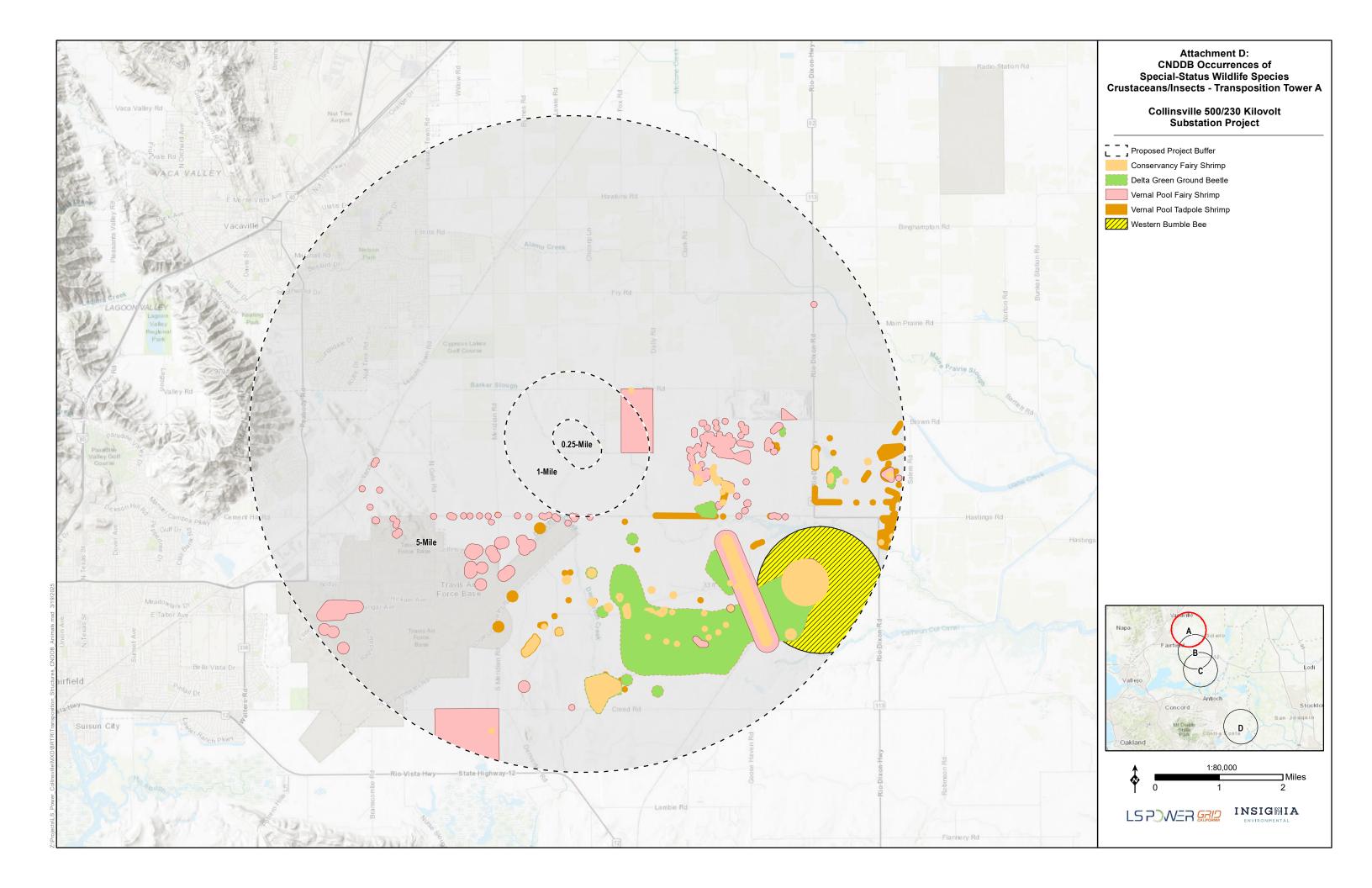


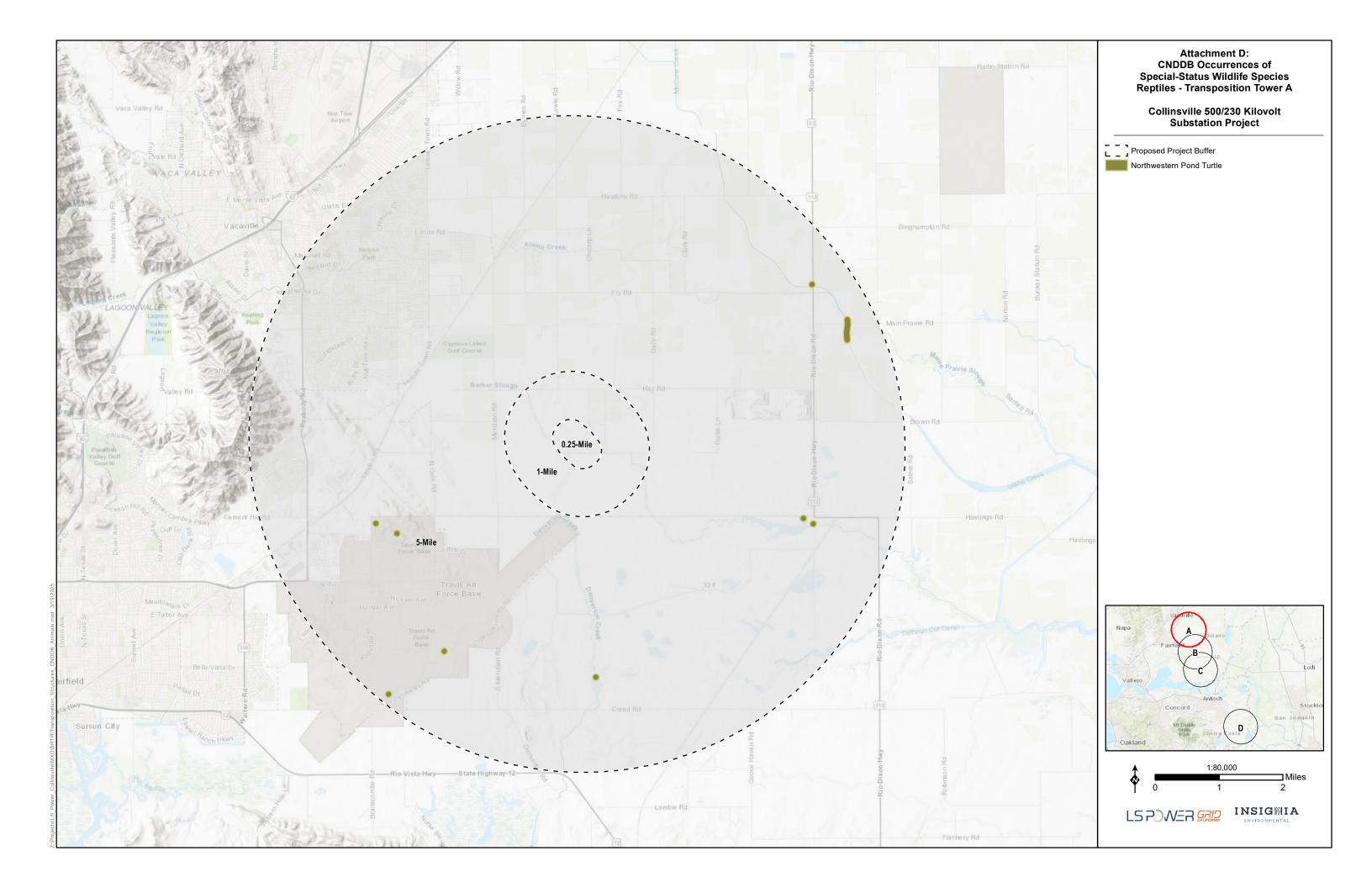


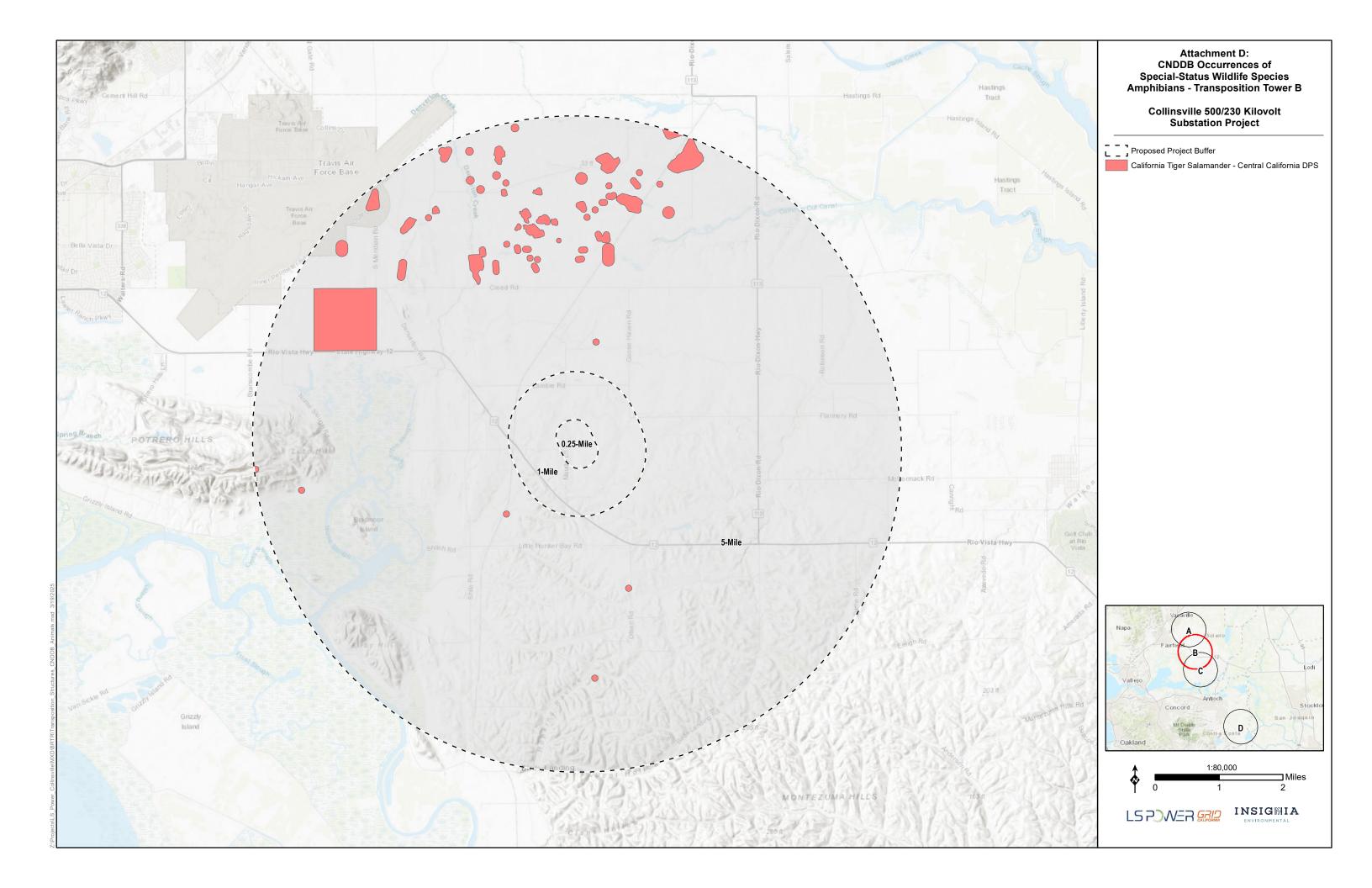
ATTACHMENT D: CNDDB OCCURRENCES OF SPECIAL-STATUS WILDLIFE SPECIES

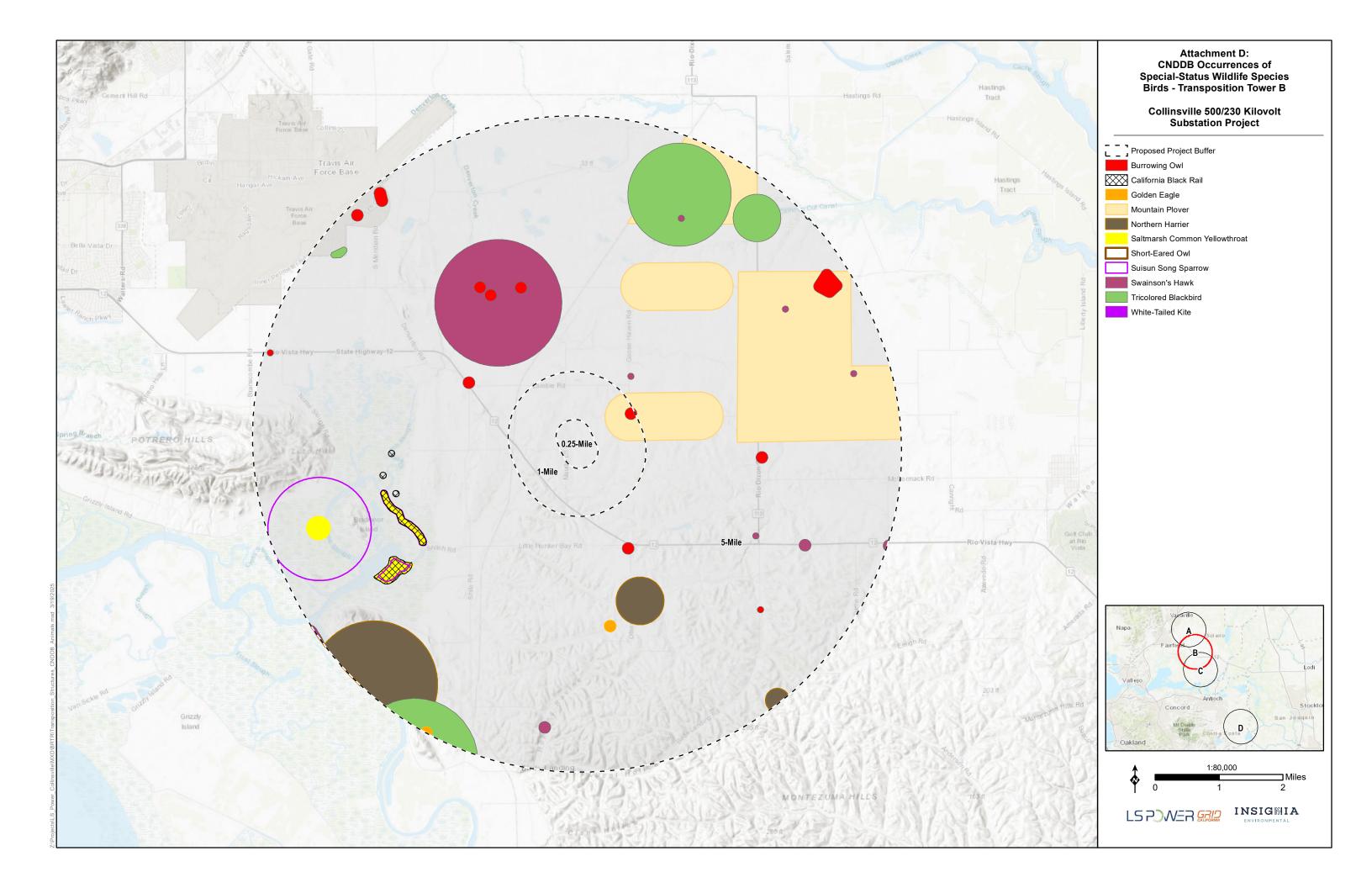


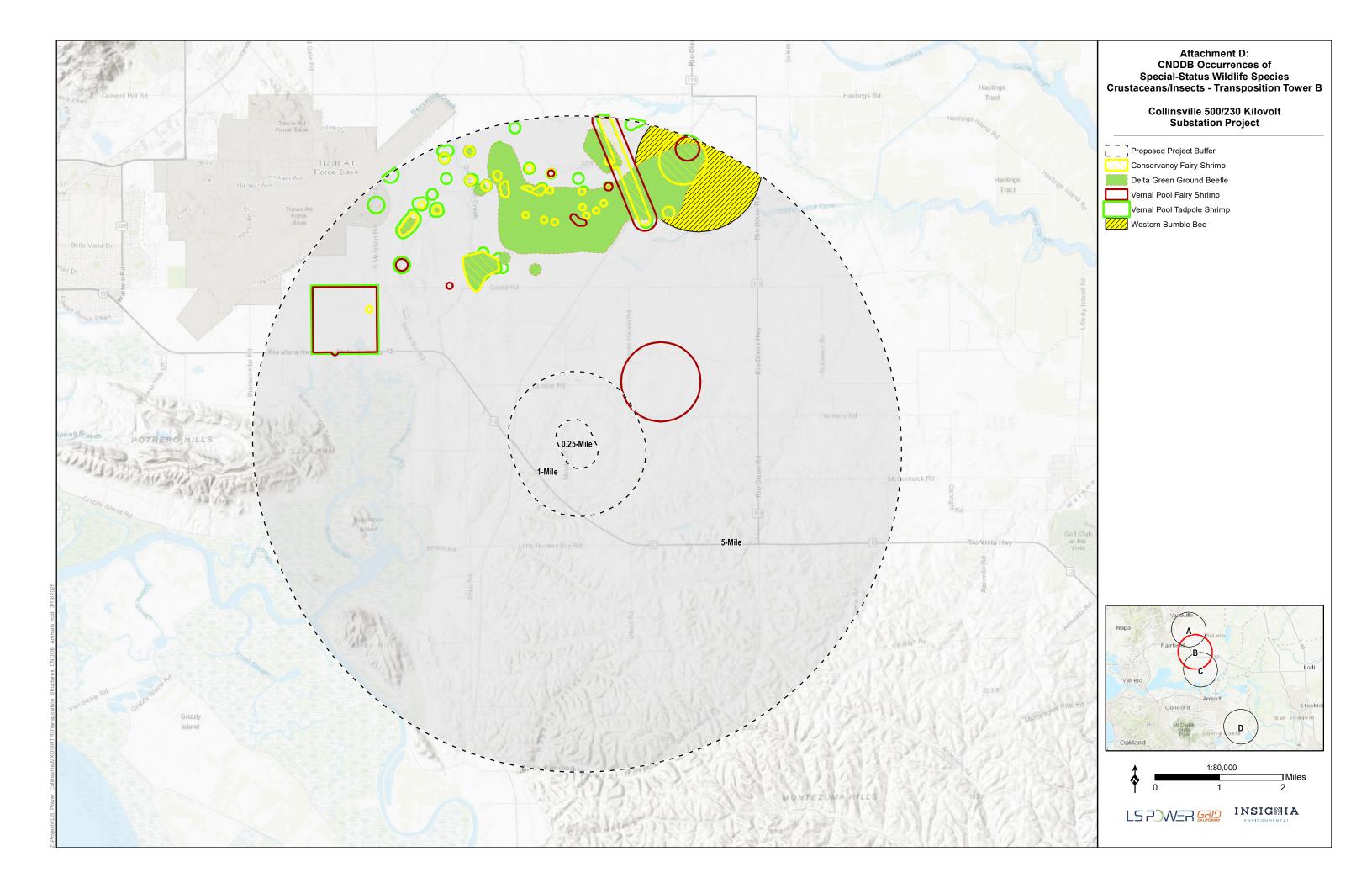


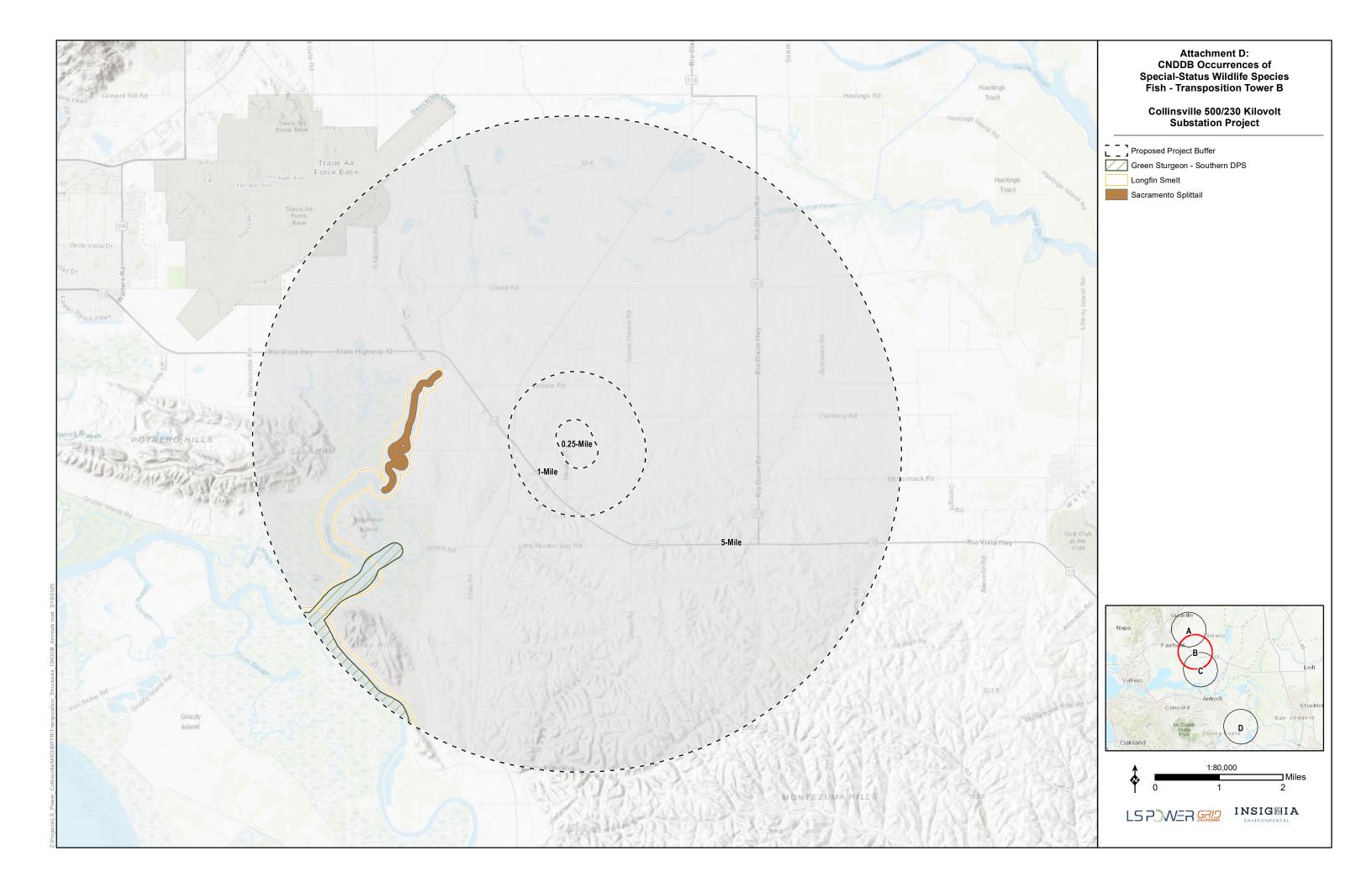


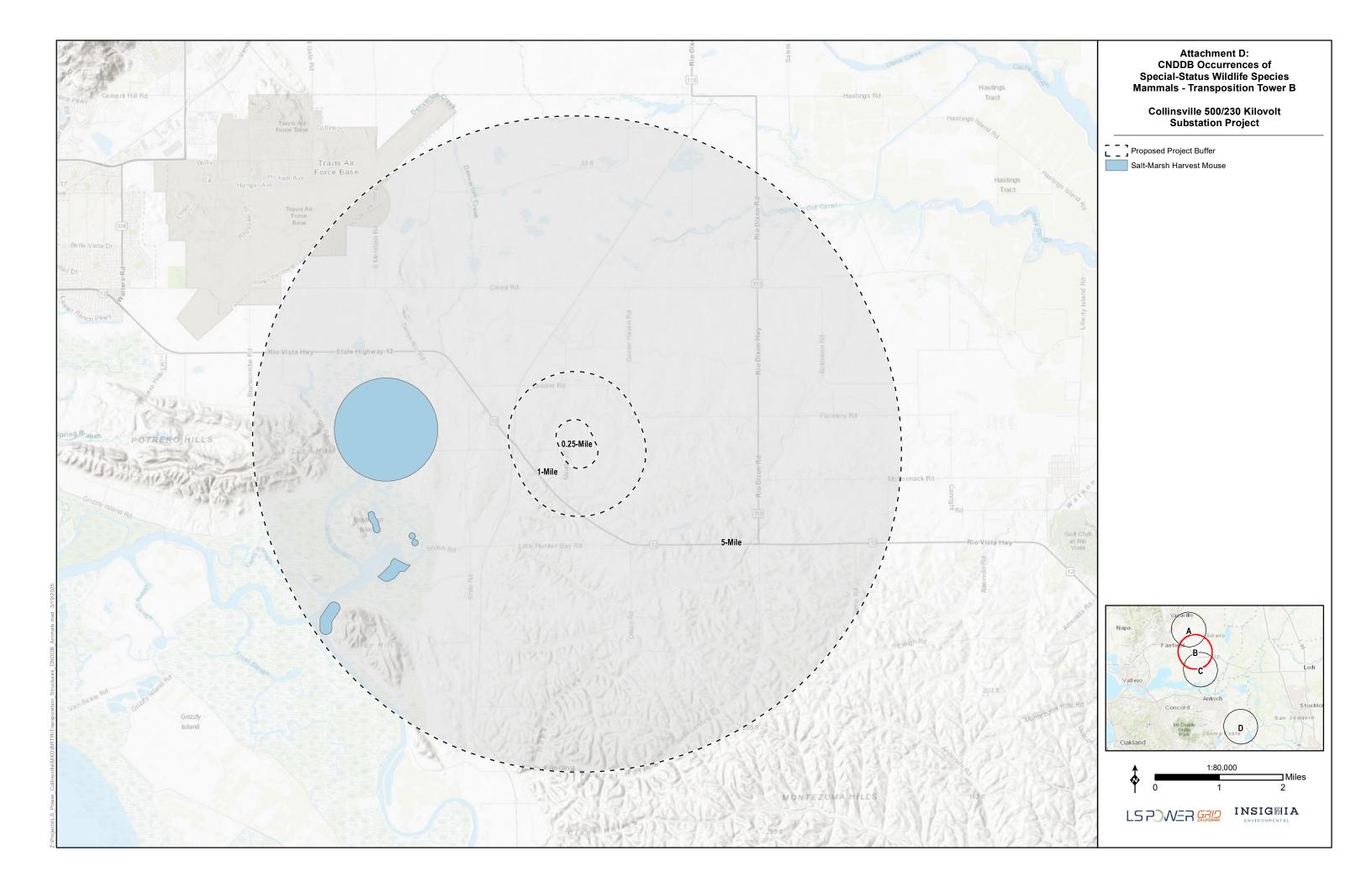


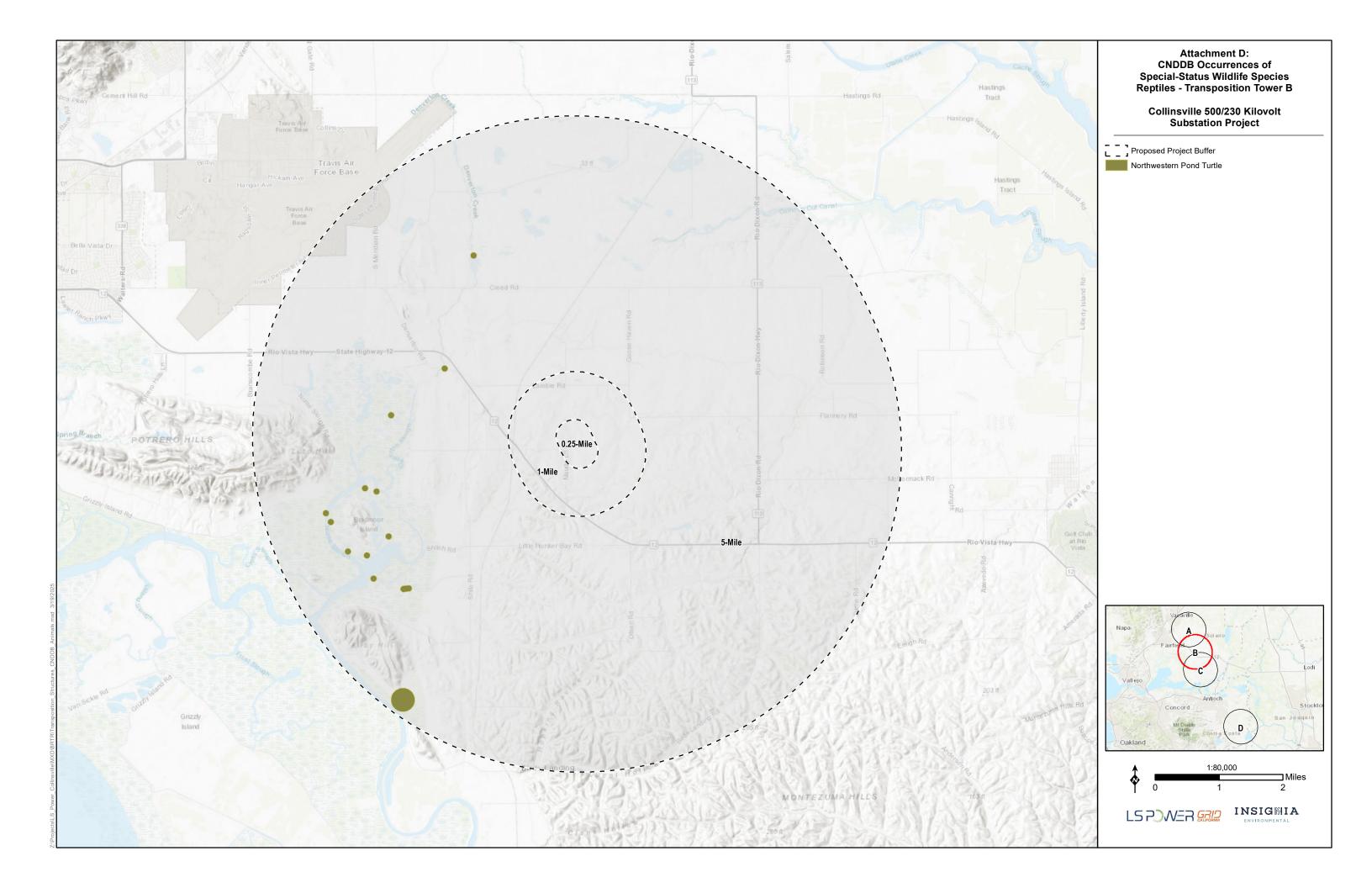


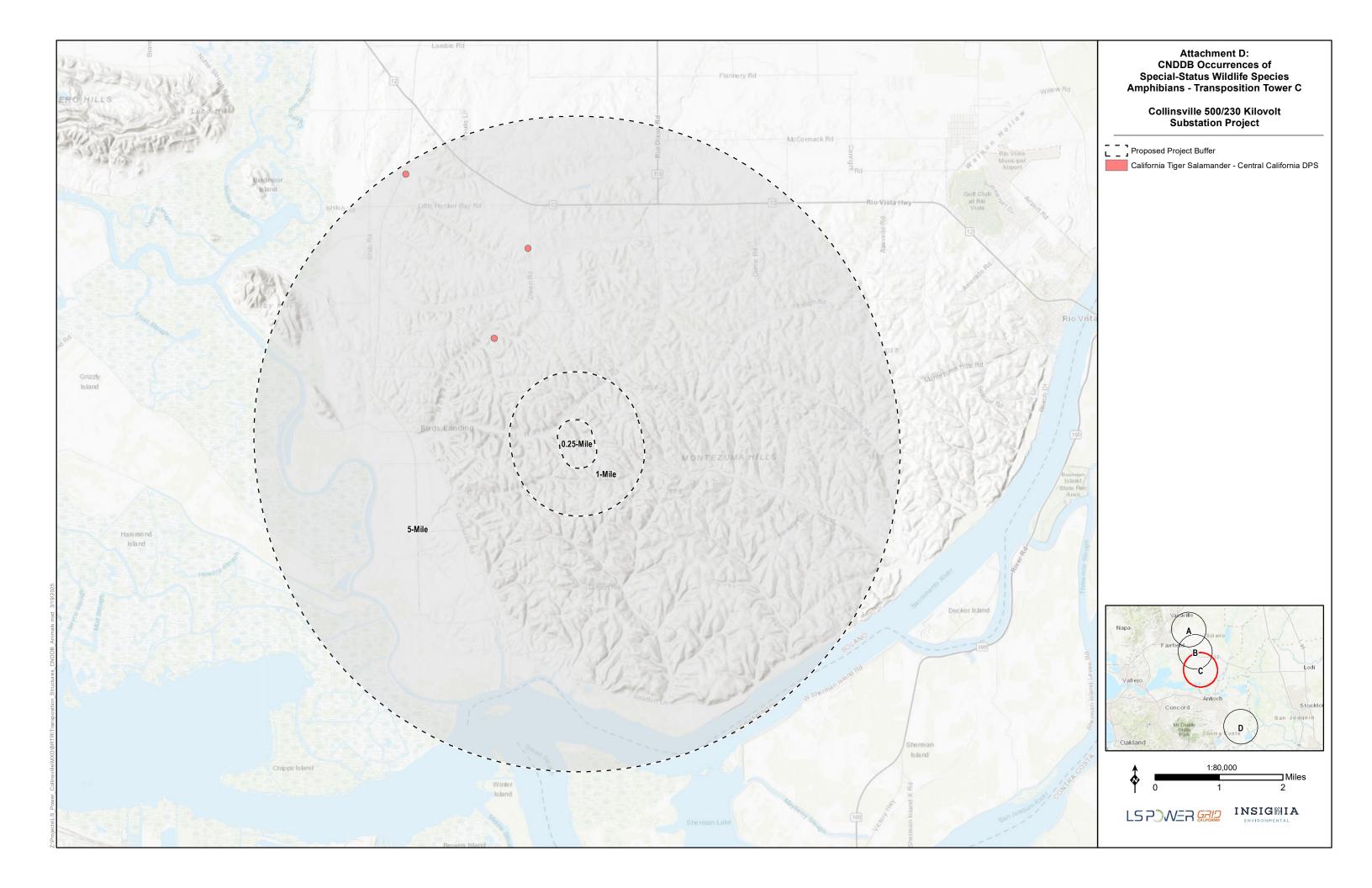


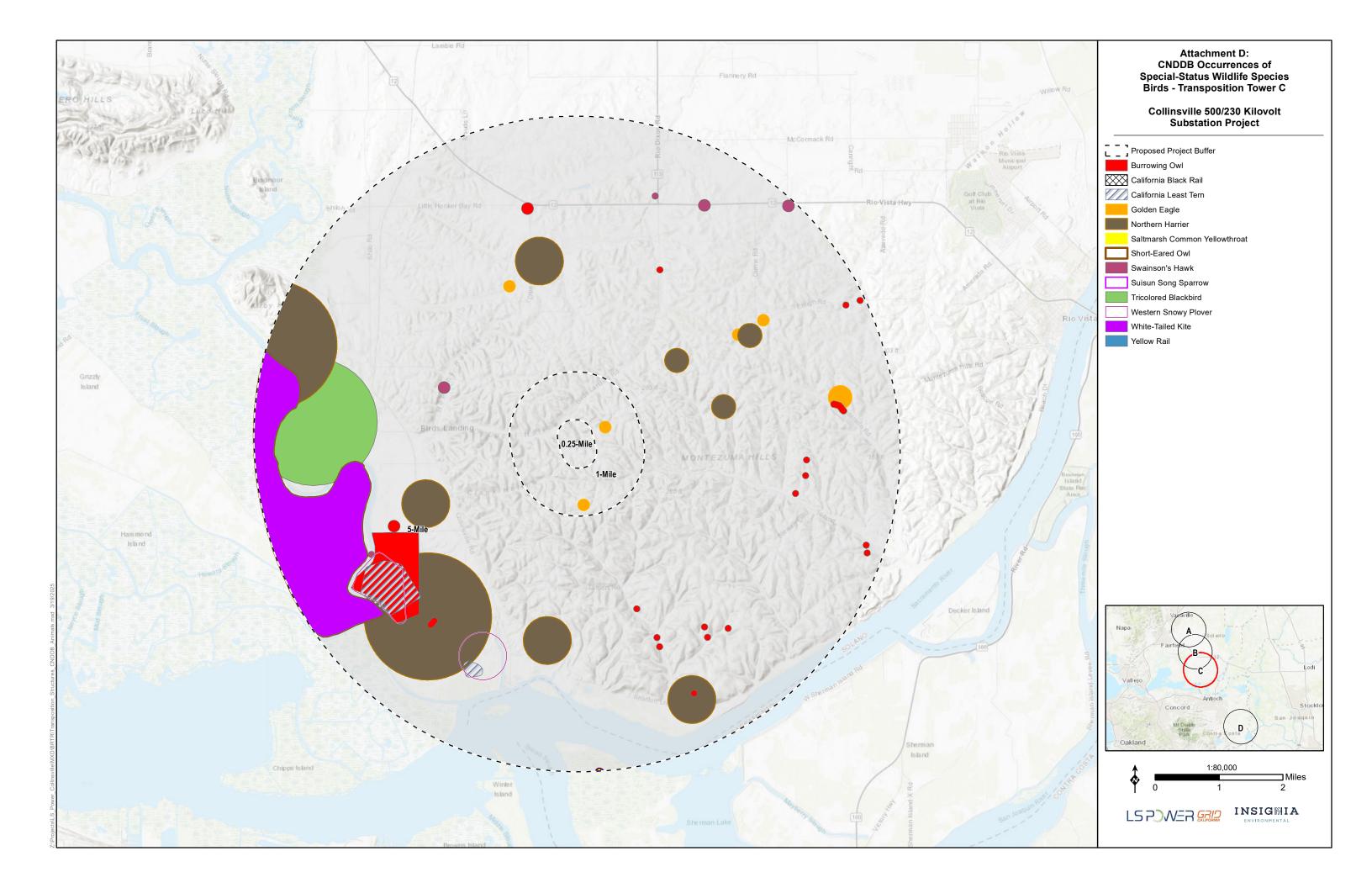


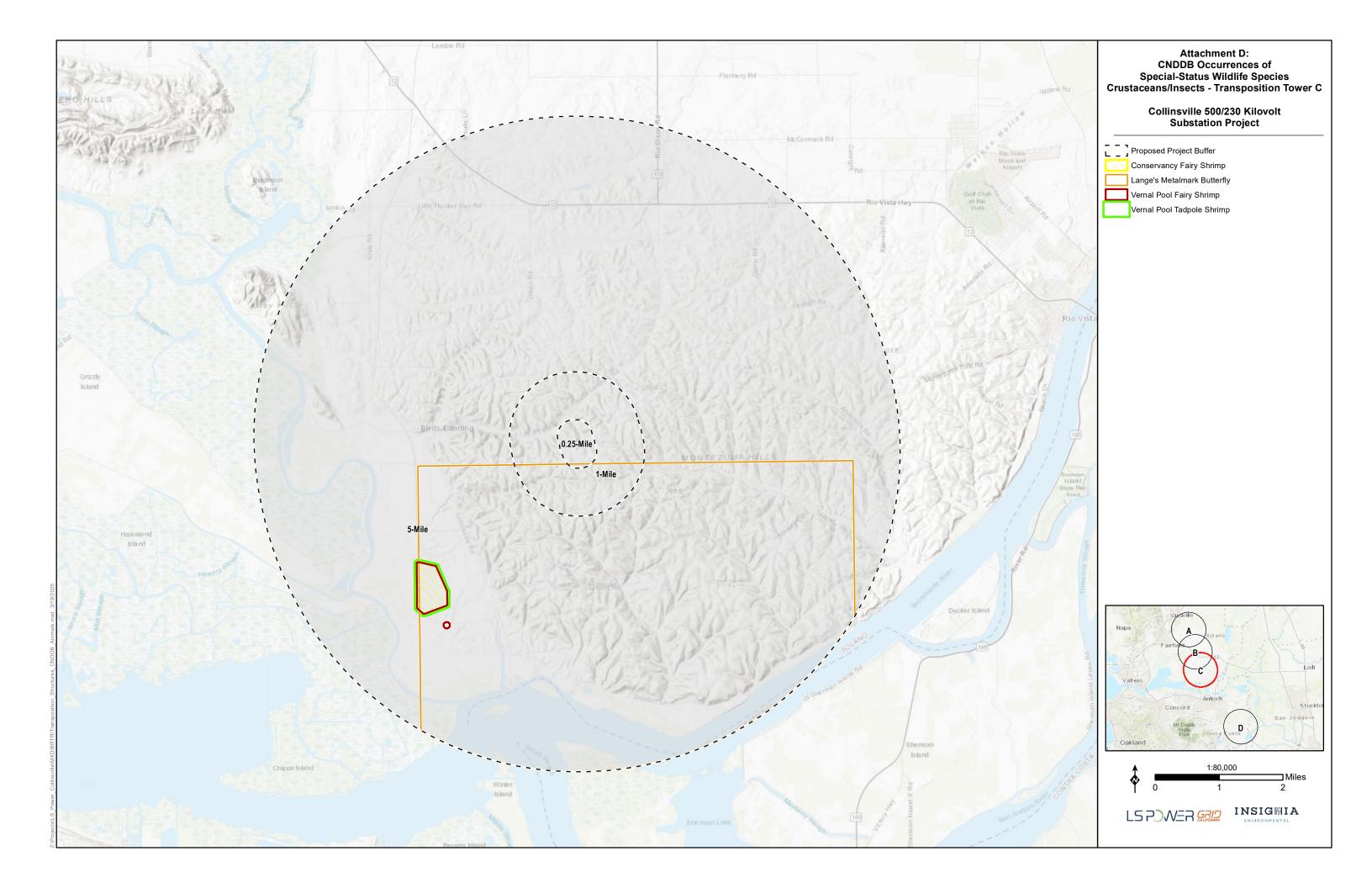


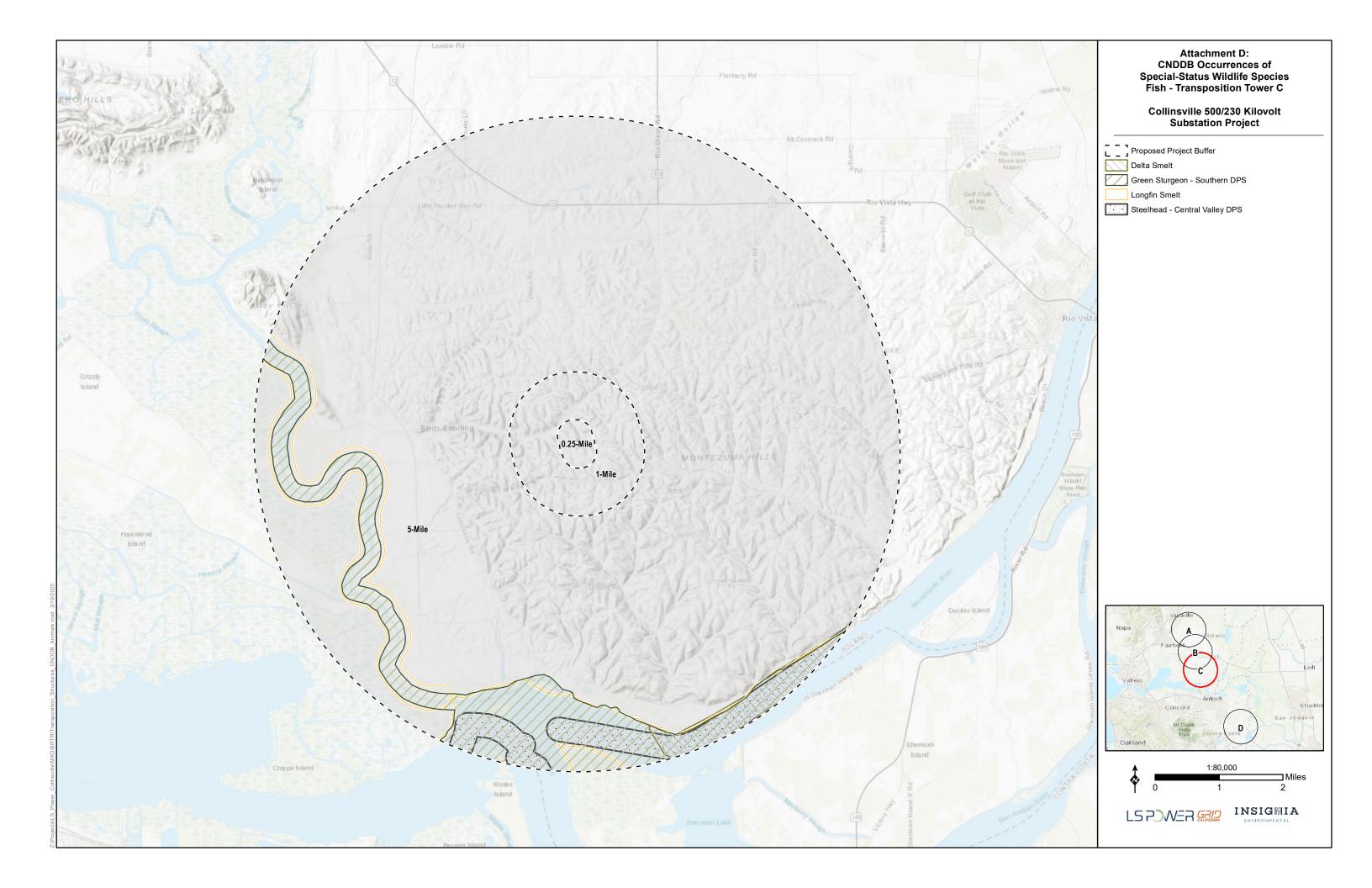


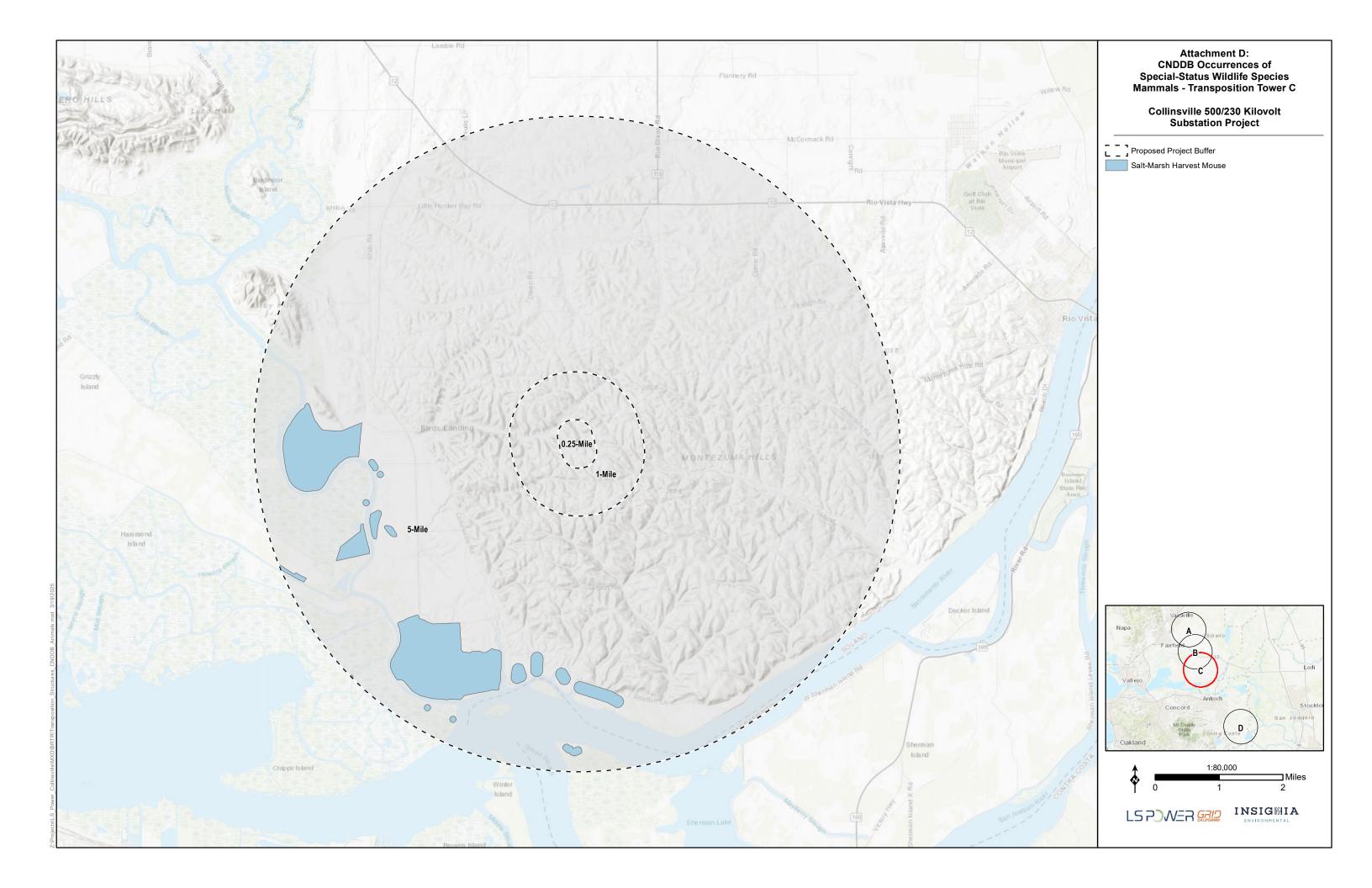


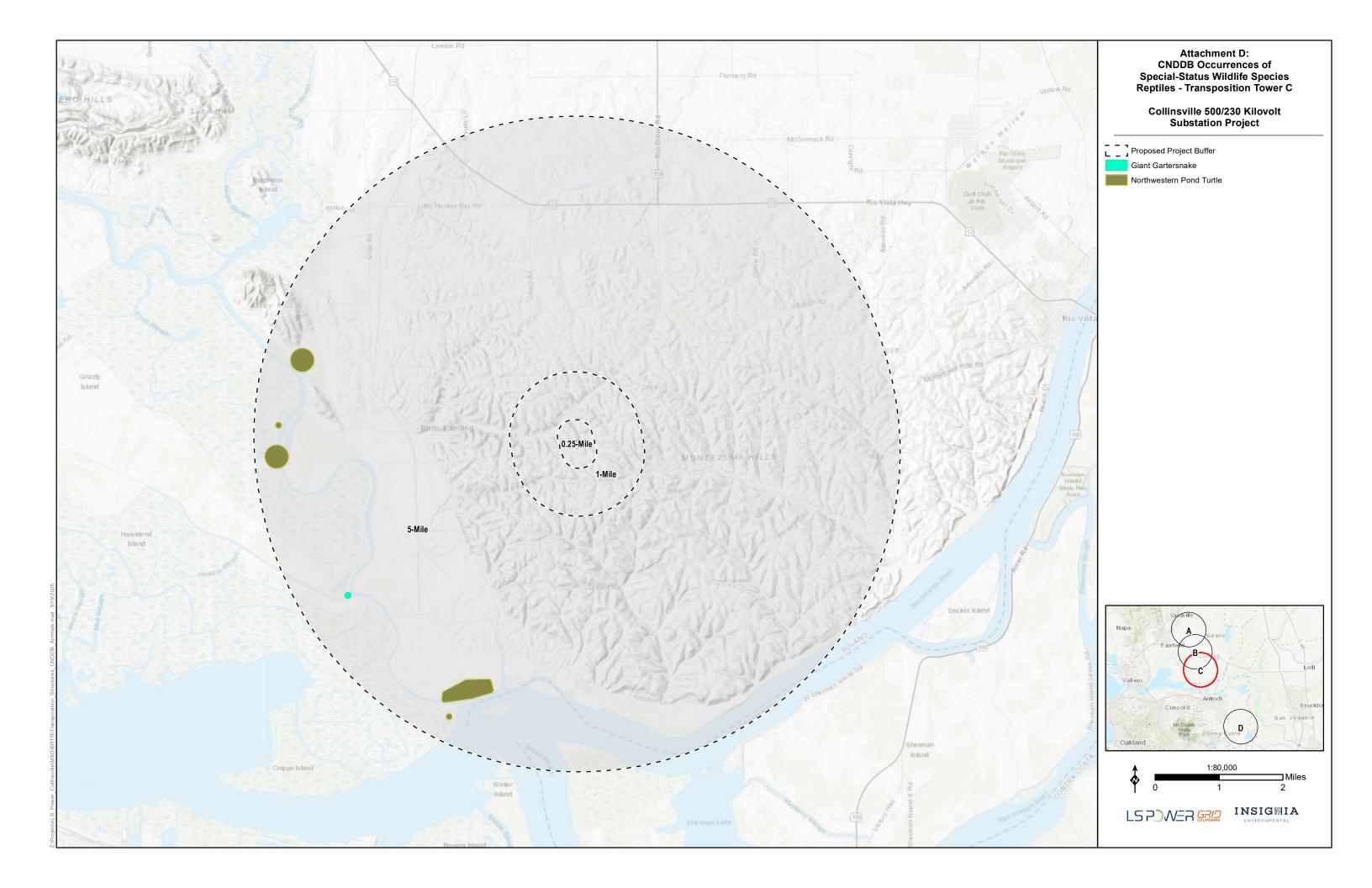


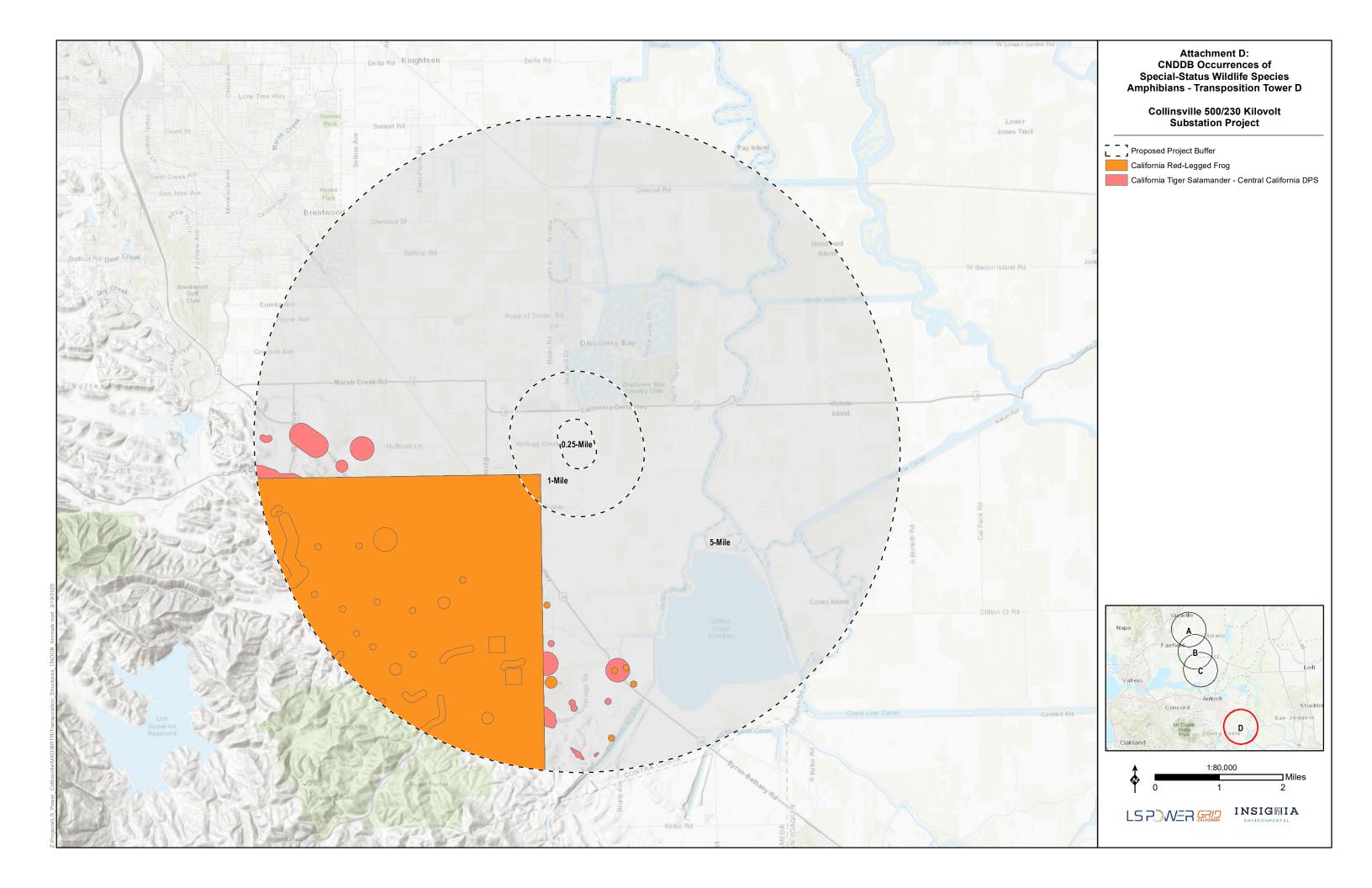


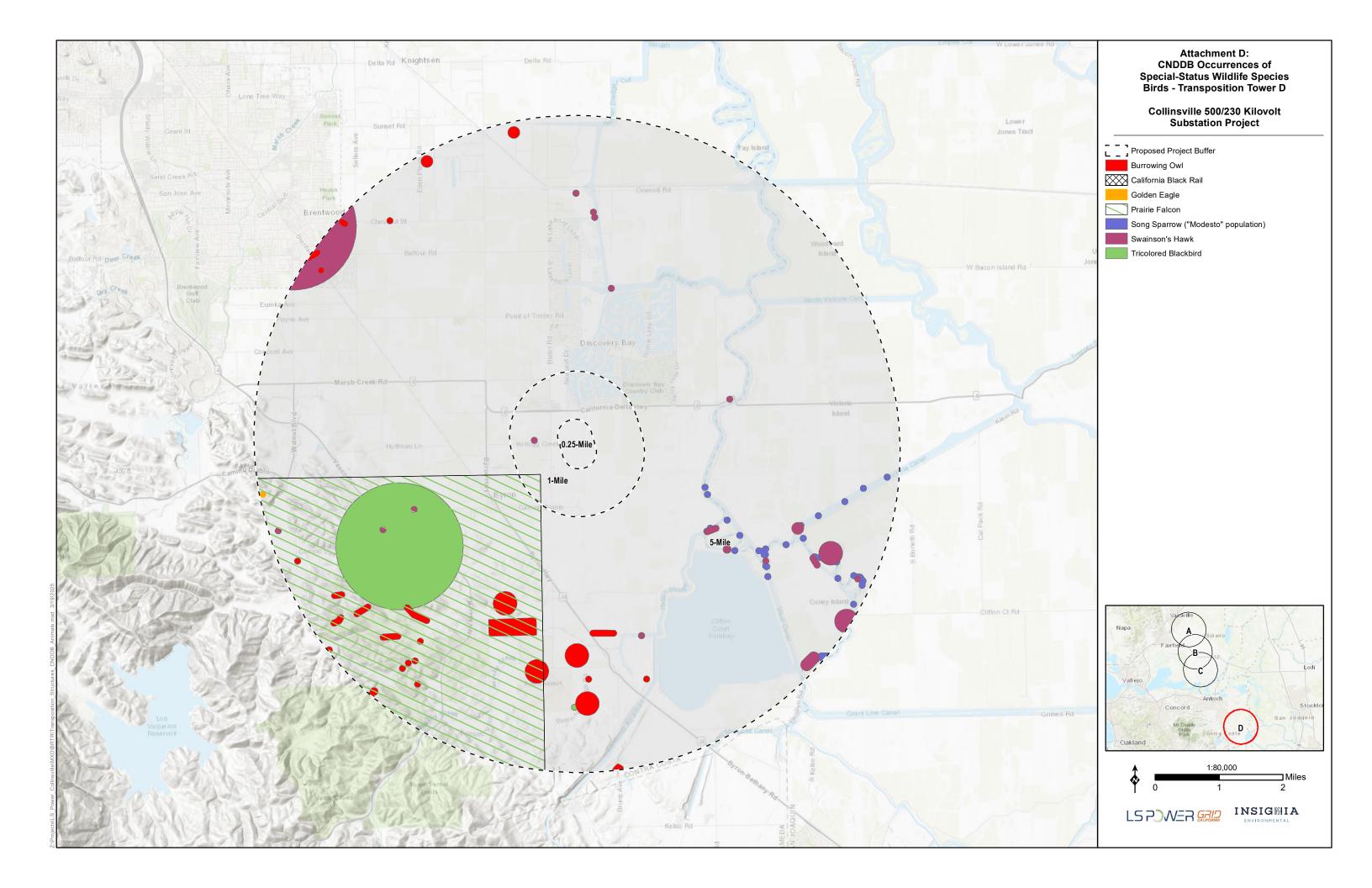


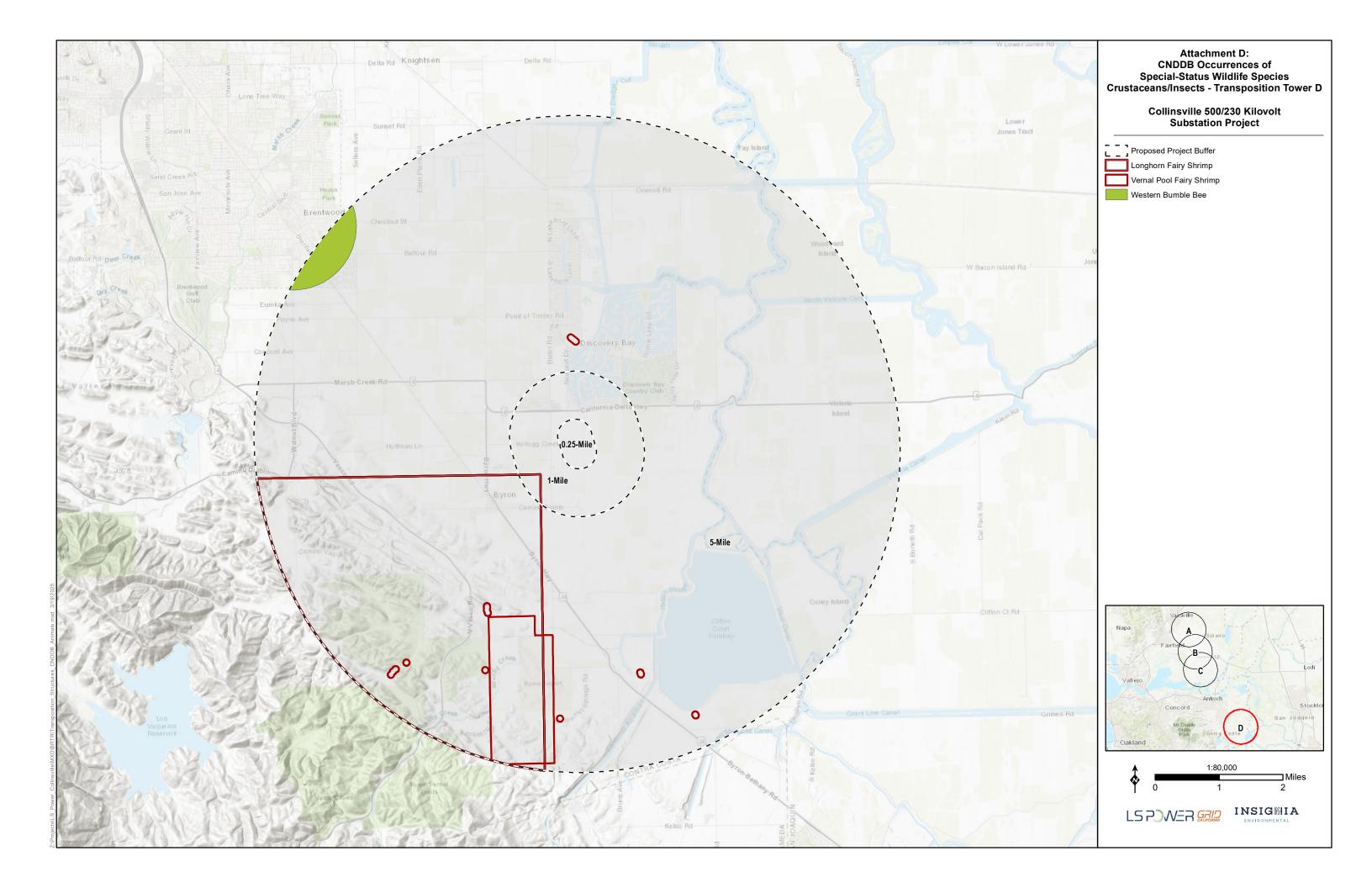


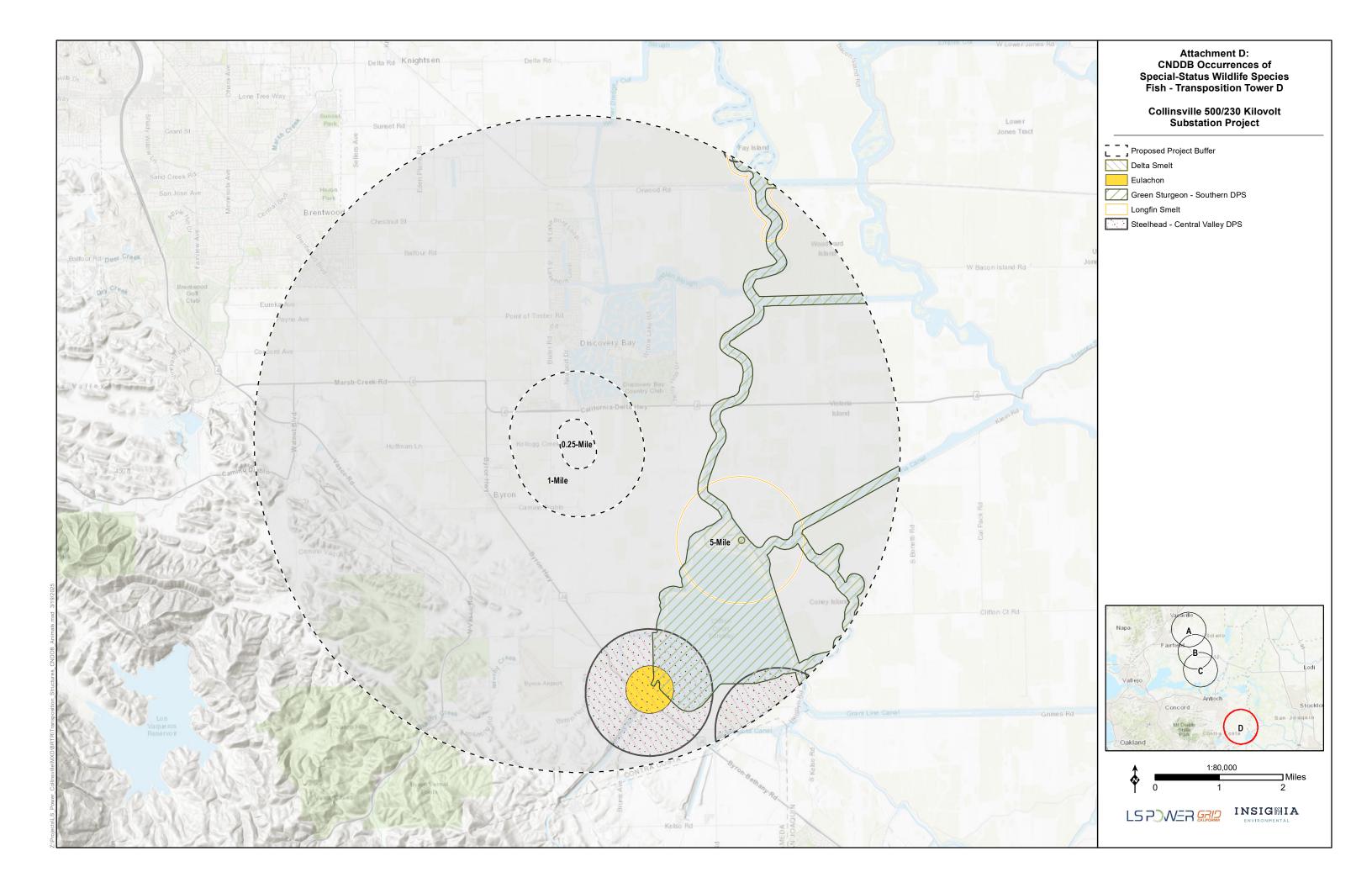


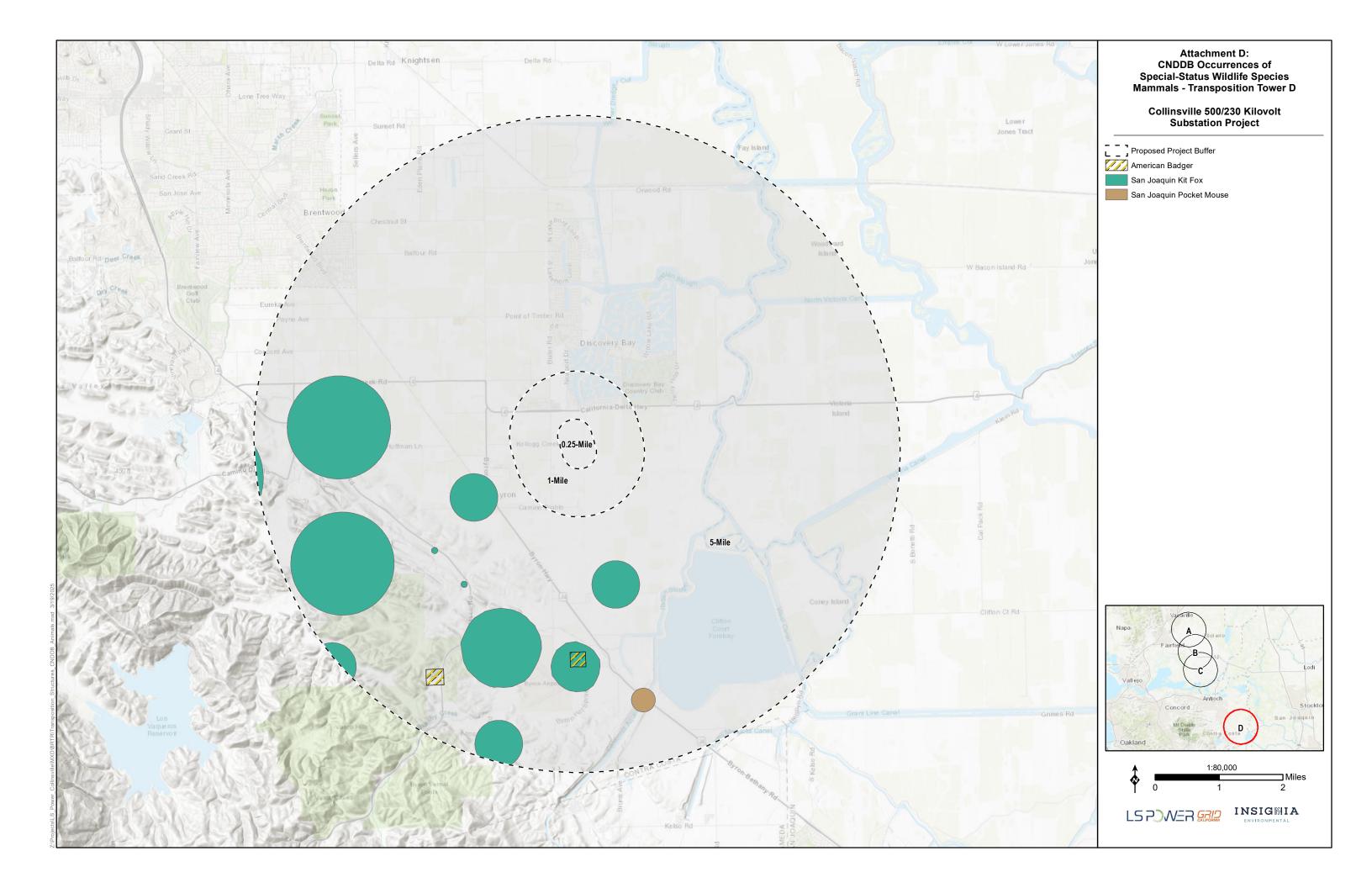


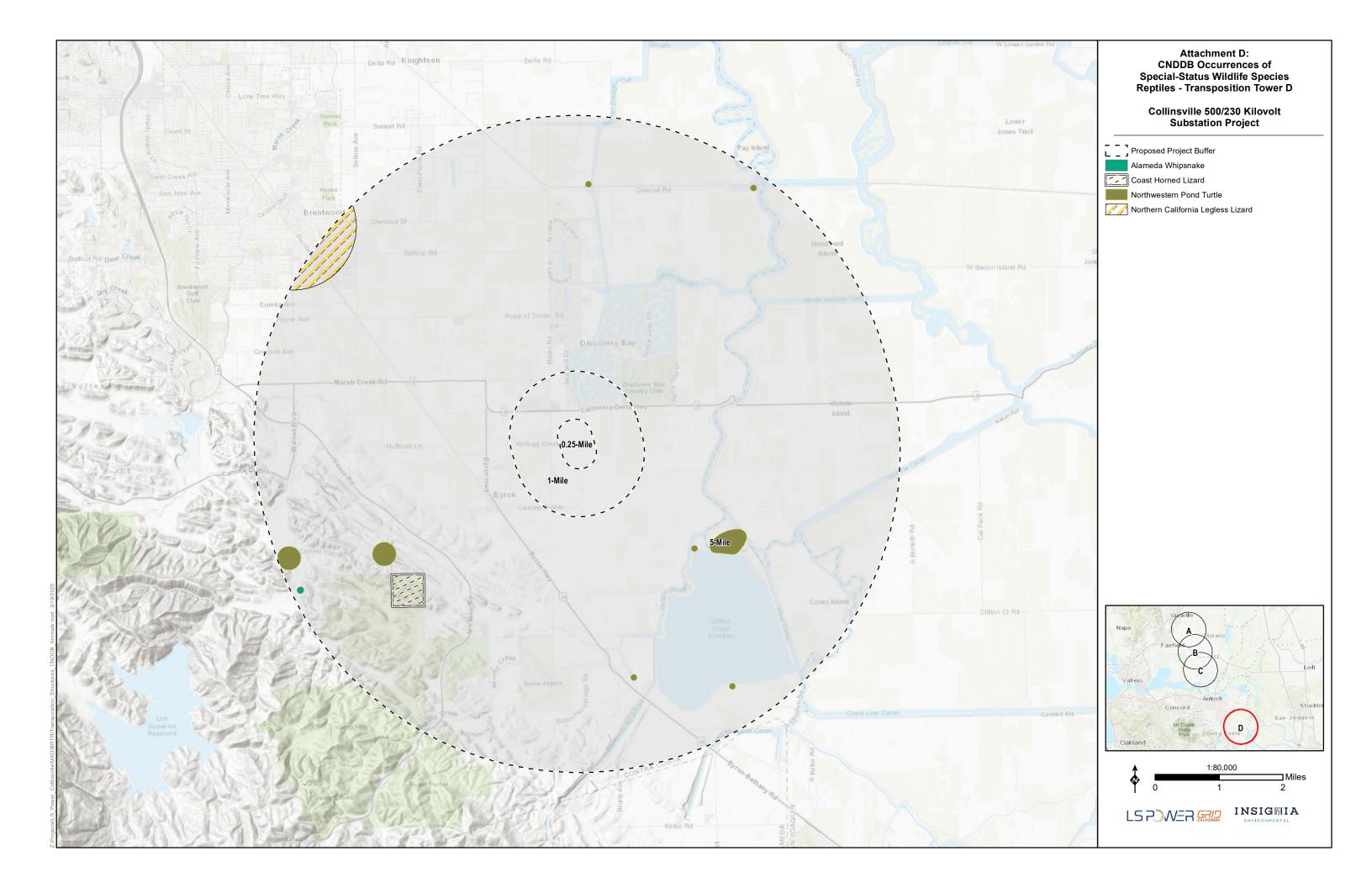




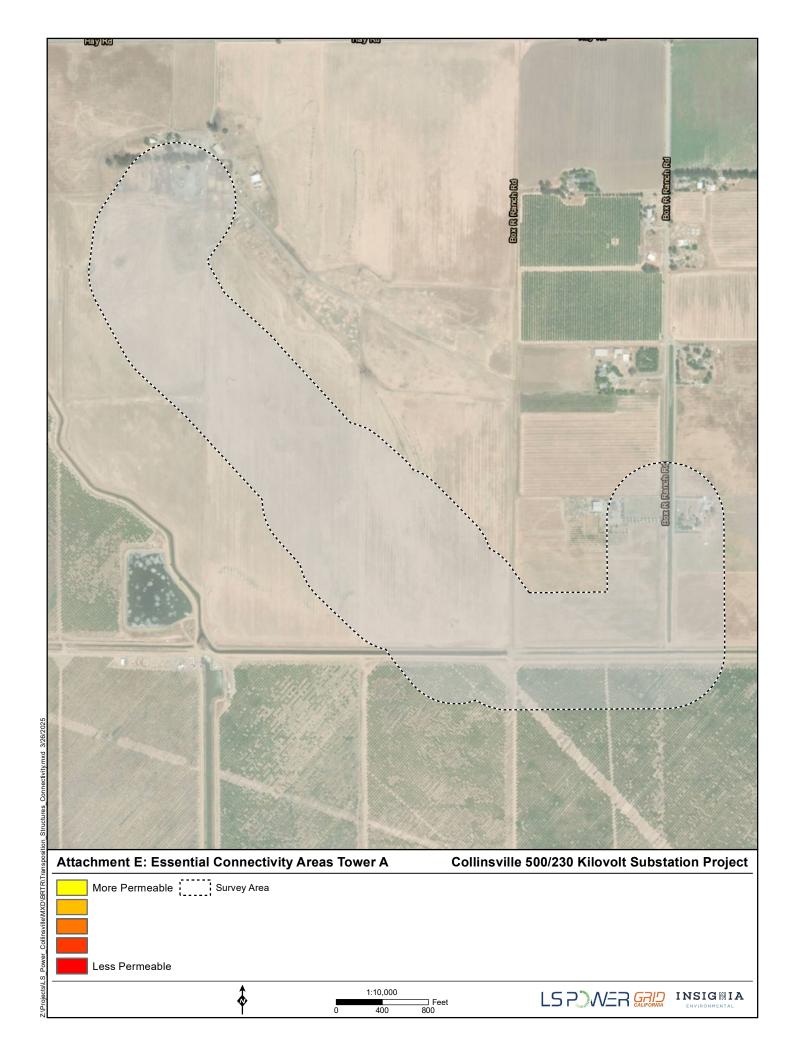


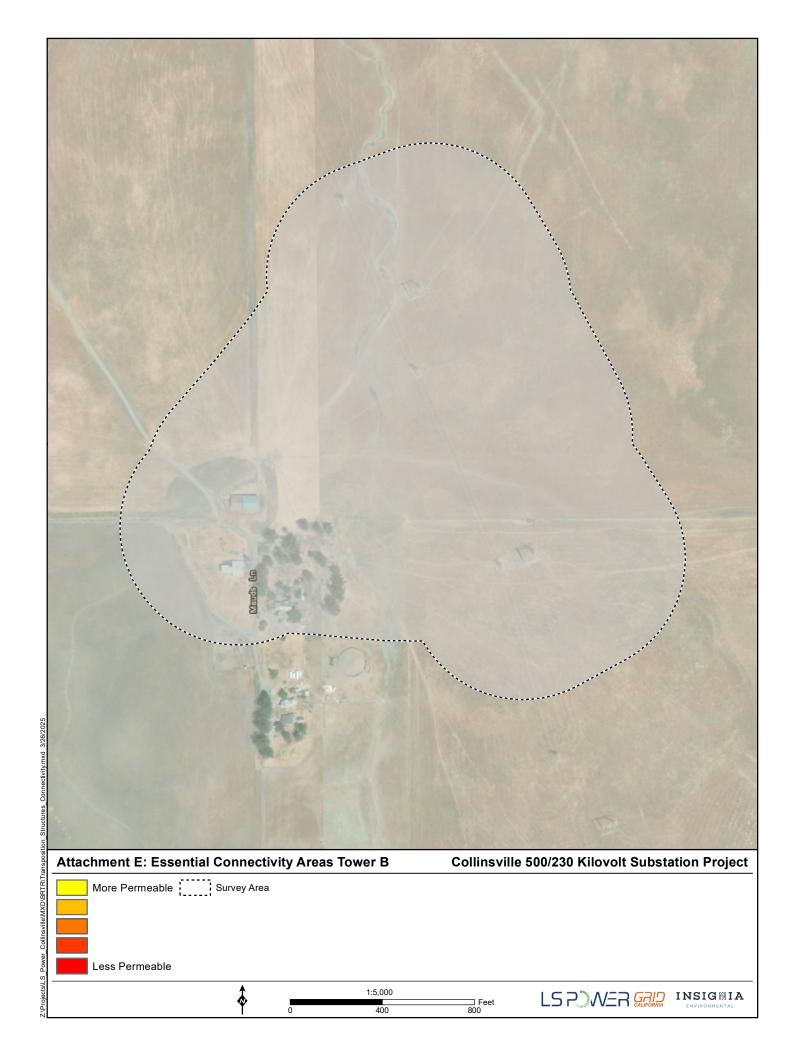


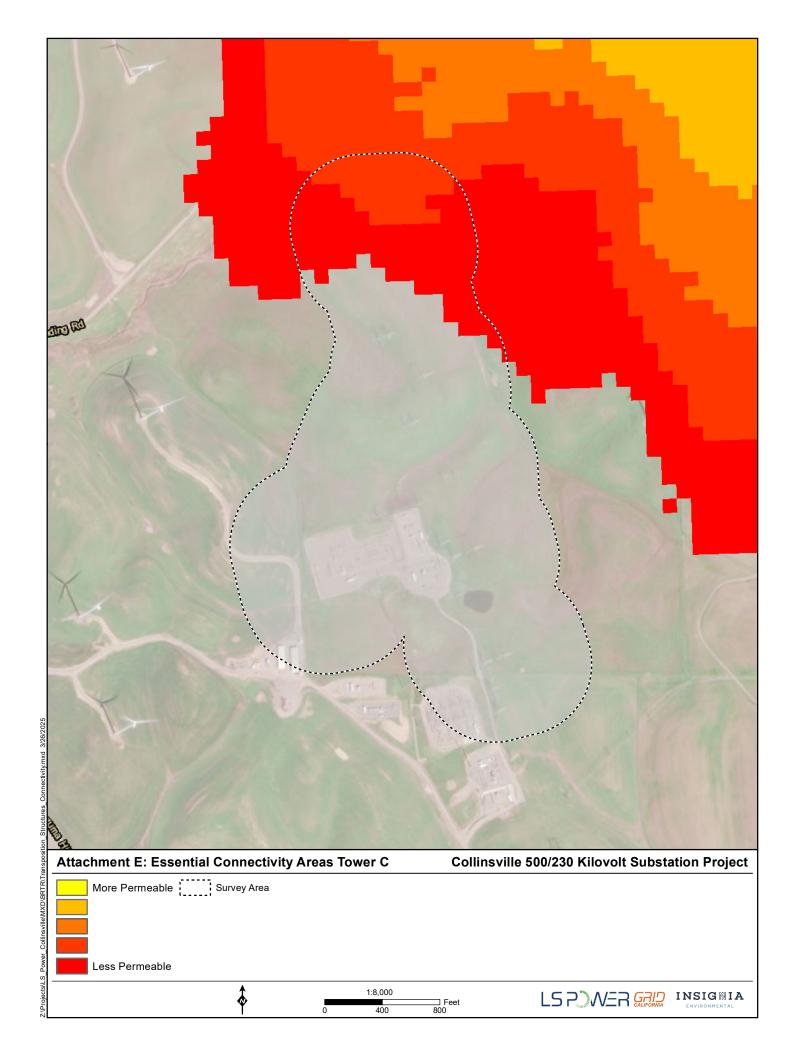


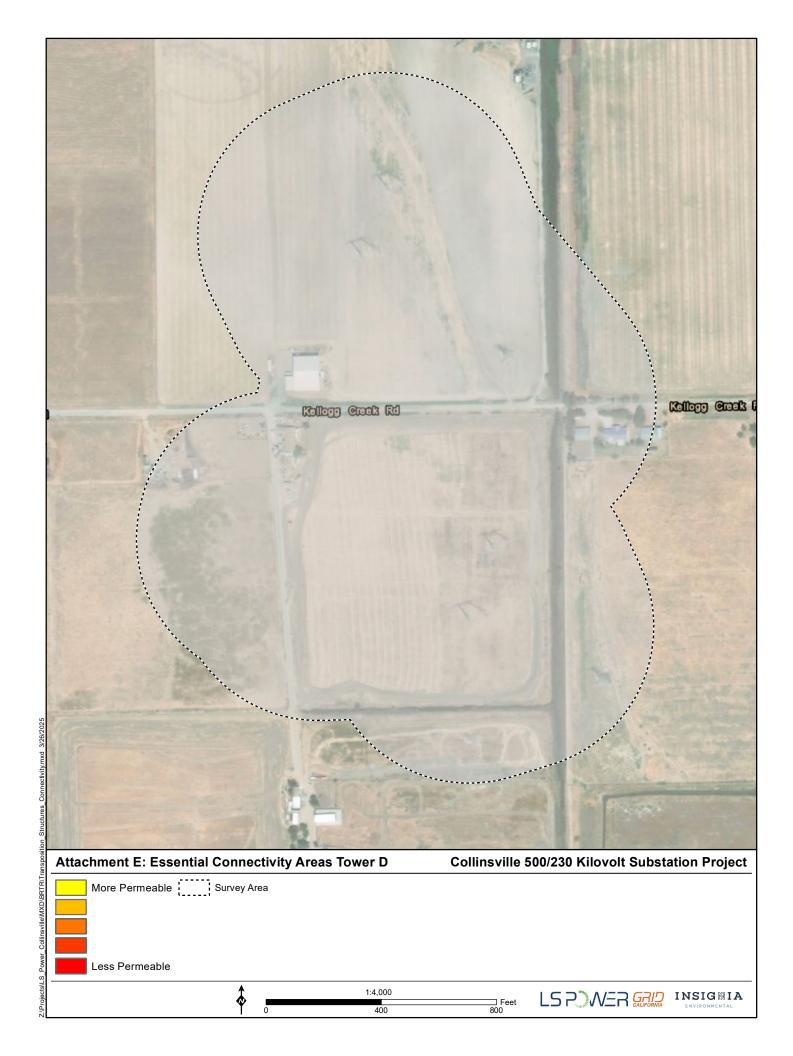


## ATTACHMENT E: ESSENTIAL CONNECTIVITY AREAS









## ATTACHMENT F: LINEAR WATER FEATURE PHOTOGRAPHS

# ATTACHMENT F: LINEAR WATER FEATURE PHOTOGRAPHS

#### **TOWER A**



Photograph 1: D-1, facing upstream and west.



Photograph 2: D-1, facing downstream and east.



Photograph 3: D-2, facing upstream and east.



Photograph 4: D-2, facing downstream and west.



Photograph 5: D-3, facing upstream and east.



Photograph 6: D-3, facing downstream and west.



Photograph 7: D-4, facing upstream and south.



Photograph 8: D-4, facing downstream and north.

## **TOWER B**



Photograph 9: D-5, facing upstream and south.



Photograph 10: D-5, facing downstream and northeast.

## **TOWER C**



Photograph 11: D-6, facing upstream and southeast.



Photograph 12: D-6, facing downstream and northeast.



Photograph 13: D-7, facing upstream and southwest.



Photograph 14: D-7, facing downstream and northwest.



Photograph 15: D-8, facing upstream and south.



Photograph 16: D-8, facing downstream and north.



Photograph 17: D-9, facing upstream and north.



Photograph 18: D-9, facing downstream and south.

## **TOWER D**



Photograph 19: D-10, facing upstream and west.



Photograph 20: D-10, facing downstream and east.



Photograph 21: D-11, facing upstream and east.



Photograph 22: D-11, facing downstream and west.



Photograph 23: D-12, facing upstream and south.



Photograph 24: D-12, facing downstream and north.



Photograph 25: D-13, facing upstream and southwest.



Photograph 26: D-13, facing downstream and southeast.

#### ATTACHMENT G: WETLAND FEATURE PHOTOGRAPHS

# ATTACHMENT G: WETLAND FEATURE PHOTOGRAPHS



Photograph 1: W-1, facing north.<sup>1</sup>



Photograph 2: W-2, facing north.

<sup>&</sup>lt;sup>1</sup> Foot access for surveys was restricted due to landowner access. Photos were taken from the nearest accessible area.



Photograph 3: W-3, facing southeast.



Photograph 4: W-4, facing south.



Photograph 5: W-5, facing north.



Photograph 6: W-6, facing east.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Photographs of W-7 are not available; however, this feature closely resembles W-4, W-5, and W-6 in size, shape, observed hydrology, and vegetation community.



Photograph 7: W-8, facing north.



Photograph 8: W-9, facing north.



Photograph 9: W-10, facing west.



Photograph 10: W-11, facing north.



Photograph 11: W-12, facing west.



Photograph 12: W-13, facing north.



Photograph 13: W-14, facing north.



Photograph 14: W-15, facing northeast.



Photograph 15: W-16, facing southwest.



Photograph 16: W-17, facing north.



Photograph 17: W-18, facing southeast.



Photograph 18: W-19, facing northwest.

ATTACHMENT H: POTENTIALLY JURISDICTIONAL WATER FEATURES TABLES

## ATTACHMENT H: POTENTIALLY JURISDICTIONAL WATER FEATURES TABLES

**Table H-1: Potentially Jurisdictional Wetland Features** 

Wetland Identification Number	Vegetation Type	Cowardin Classification	Page Number in Attachment A	Potential USACE- Jurisdictional Area within Survey Area (acres)	Potential RWQCB- Jurisdictional Area within Survey Area (acres)	Potential CDFW- Jurisdictional Area within Survey Area (acres)
Tower A						
W-1	Lolium perenne Herbaceous Semi-Natural Alliance	PEM2*	1		0.36	
W-2	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC**	1		0.02	
W-3	Brassica nigra – Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance	PUBC	1		0.03	
W-4	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-5	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-6	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-7	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-8	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		0.01	
W-9	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		0.01	
W-10	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-11	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		0.54	
W-12	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		0.08	
W-13	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-14	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		<0.01	
W-15	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1		0.04	

Wetland Identification Number	Vegetation Type	Cowardin Classification	Page Number in Attachment A	Potential USACE- Jurisdictional Area within Survey Area (acres)	Potential RWQCB- Jurisdictional Area within Survey Area (acres)	Potential CDFW- Jurisdictional Area within Survey Area (acres)
W-16	Lolium perenne Herbaceous Semi-Natural Alliance	PUBC	1	-	0.05	
Tower B						
W-17	Avena spp. – Bromus spp. Herbaceous Semi-Natural Alliance	PUBC	2		0.01	
W-18	Avena spp. – Bromus spp. Herbaceous Semi-Natural Alliance	PUBC	2		<0.01	
W-19	Avena spp. – Bromus spp. Herbaceous Semi-Natural Alliance	PUBC	2		<0.01	
Total***					1.19	

\*PEM2 = Palustrine Emergent Non-persistent Wetland

\*\*PUBC = Palustrine Unconsolidated Bottom, Seasonally Flooded

\*\*\*Due to rounding, totals may not sum.

Notes: USACE = United States Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife

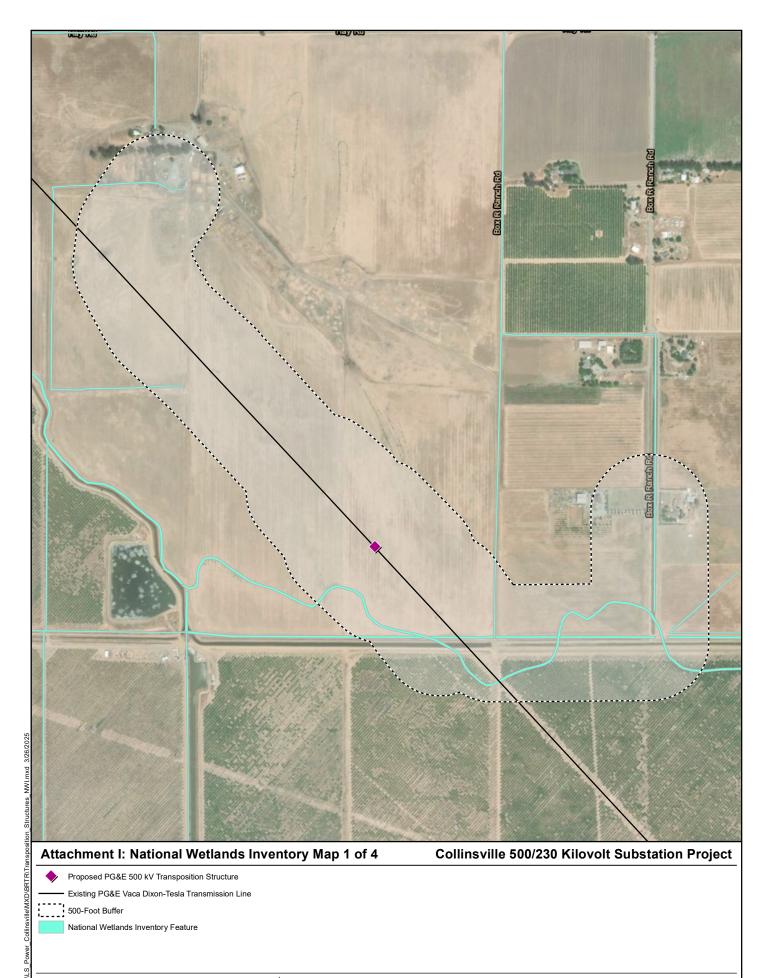
**Table H-2: Potentially Jurisdictional Linear Water Features** 

ID	Feature	Page Number in Attachment		Average Measurements (feet)				Jurisdictional Areas (acres)		reas
	Туре	Α	Length	OHWM Width	OHWM Depth	TOB Width	TOB Depth	USACE	RWQCB	CDFW
Tower A										
D-1	Ephemeral	1	1,180.1	4.0	0.4	67.0	0.3		0.11	1.84
D-2	Ephemeral	1	2,923.1	2.0	0.4	35.0	10.0	0.13	0.13	2.35
D-3	Ephemeral	1	1,267.5	4.0	0.2	15.0	6.5		0.12	0.44
D-4	Ephemeral	1	1,574.9	40.0	2.0	60.0	15.0		1.46	2.20
Tower B	3									
D-5	Ephemeral	2	1,208.1	14.9	0.6	17.2	1.7		0.48	0.56
Tower C										
D-6	Ephemeral	3	588.9	1.5	0.4	8.5	3.25		0.02	0.12
D-7	Ephemeral	3	1,154.2	0.8	0.1	4.2	0.1		0.02	0.11
D-8	Ephemeral	3	687.4	1.2	0.1	1.2	0.1		0.02	0.02
D-9	Ephemeral	3	210.8	1.0	0.2	3.25	3.1		<0.01	0.02
Tower D	)									
D-10	Ephemeral	4	1,303.5	1.2	0.5	4.0	2.0		0.12	0.12
D-11	Ephemeral	4	1,363.2	0.7	0.1	3.0	1.0		0.09	0.09
D-12	Perennial	4	1,234.9	20.0	2.0	44.0	13.0	0.57	0.57	1.26
D-13	Perennial	4	774.4	20.0	2.0	40.0	15.0	0.36	0.36	0.73
Total*							-	0.93	3.51	9.85

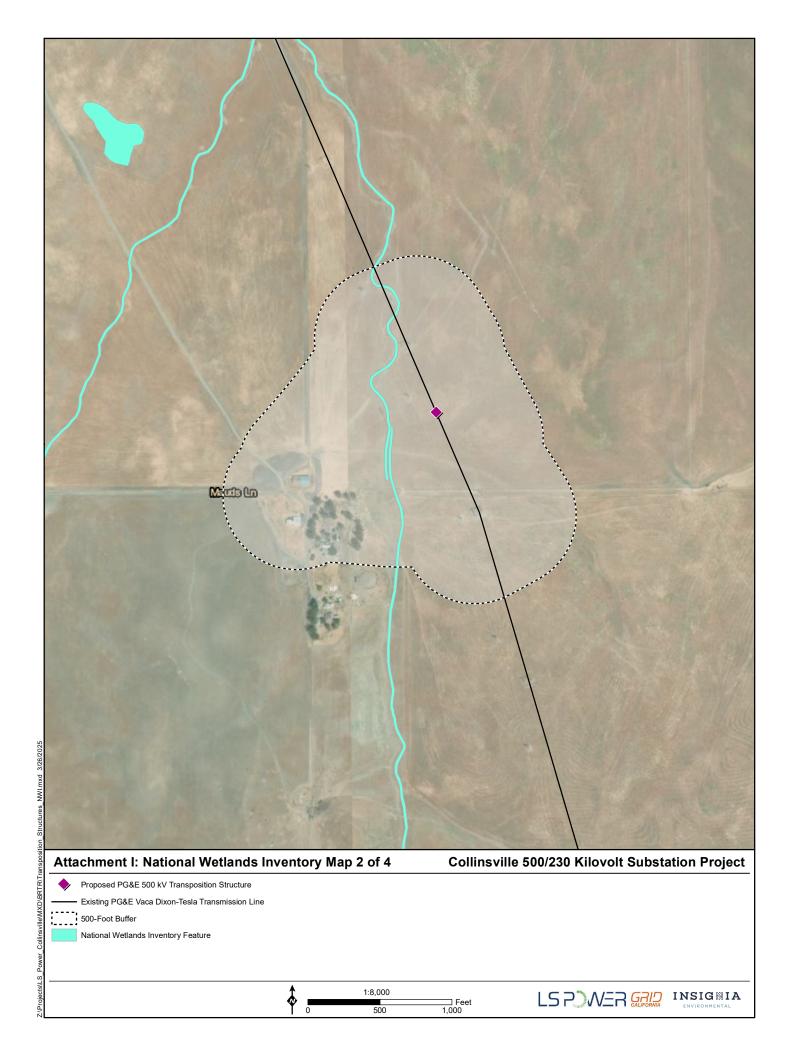
\*Due to rounding, totals may not sum.

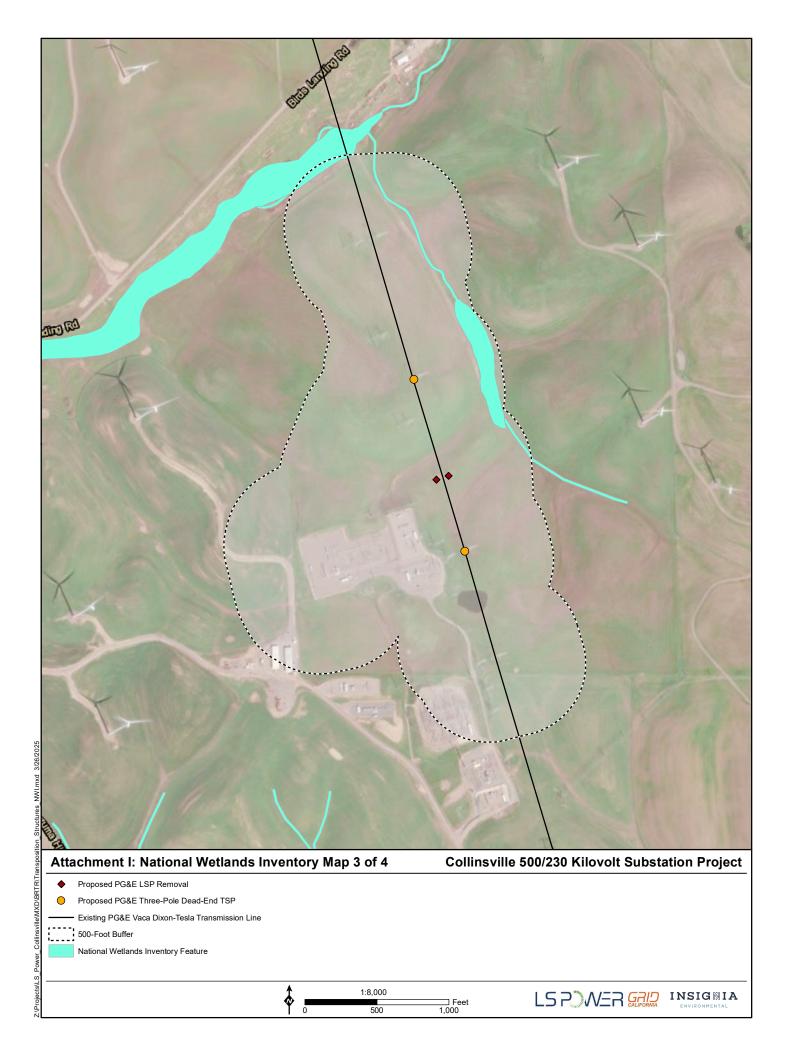
Notes: OHWM = ordinary high water mark; TOB = top of bank

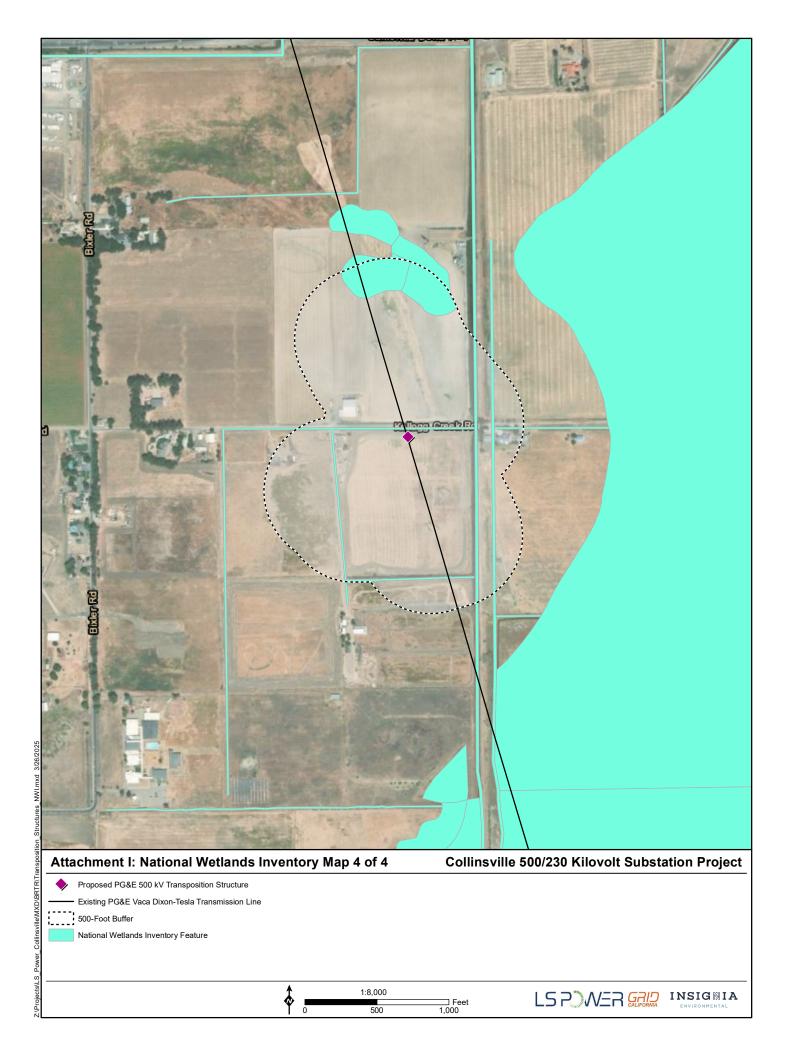
#### ATTACHMENT I: NATIONAL WETLANDS INVENTORY MAP



1:10,000 \_\_\_ Feet 1,000 LS PONT GALFORNIA INSIGNIA







ATTACHMENT B: COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT AQUATIC RESOURCES DELINEATION REPORT



# LS POWER GRID CALIFORNIA, LLC COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT

# **AQUATIC RESOURCES DELINEATION REPORT**

**JUNE 2025** 

PREPARED FOR:



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## **LIST OF ATTACHMENTS**

Attachment A: Aquatic Resources Delineation Map

Attachment B: Photograph Log

Attachment C: Wetland Determination Data Forms

## 1 – INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct wetland and waters surveys for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). As depicted in Figure 1: Proposed Project Overview Map, the Proposed Project involves the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that would interconnect Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line (Proposed Project Transmission Line) that would connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project has been designed to address overloads on the existing Contra Costa-Newark 230 kV corridor and provide an additional supply into the northern greater San Francisco Bay Area to increase reliability to the area and advance additional power generation.

This Aquatic Resources Delineation Report (Report) presents the results of a delineation of wetlands and waters to support the necessary permits and authorizations prior to Proposed Project construction. Potentially jurisdictional wetlands and waters within the survey area, as defined in Section 4.1 Delineation of Wetlands and Waters, were assessed for jurisdiction under the United States (U.S.) Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act (CWA), as well as the Regional Water Quality Control Board (RWQCB), pursuant to the Porter-Cologne Water Quality Control Act (California Water Code § 13000 et seq.) or Section 401 of the CWA. In addition, wetlands, waters, and associated riparian or hydrophytic vegetation were assessed for jurisdiction under the California Department of Fish and Wildlife (CDFW), pursuant to Section 1600 of the California Fish and Game Code. This report summarizes the regulatory framework, field methods, and results of the delineation of wetlands and waters.

## 2 – PROPOSED PROJECT DESCRIPTION

#### 2.0 PROPOSED PROJECT LOCATION

The proposed Collinsville Substation would be located near the unincorporated community of Collinsville, which is located in the southwestern portion of Solano County. As depicted in Figure 2: Hydrologic Region Map, the survey area is located north and south of the Sacramento-San Joaquin River Delta (Delta). The Proposed Project would create a connection to PG&E's existing Pittsburg Substation, which is located in the City of Pittsburg in the northern portion of Contra Costa County.

#### 2.1 PROPOSED PROJECT OVERVIEW

The following main components of the Proposed Project are depicted on Figure 1: Proposed Project Overview Map:

• A new approximately 11-acre 500/230 kV substation near the unincorporated community of Collinsville in Solano County (Proposed LSPGC Collinsville Substation);

- Two new approximately 1.5-mile-long single-circuit 500 kV, onshore transmission line segments (Proposed PG&E 500 kV Interconnection) that will interconnect PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation;<sup>1</sup>
- A new approximately 6-mile-long double-circuit 230 kV transmission line that will connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation and include the following components:
  - An approximately 1-mile-long overhead transmission line segment will connect between the proposed Collinsville Substation and the north shore of the Delta (Proposed LSPGC 230 kV Overhead Segment),
  - Approximately four 4.7-mile-long submarine cables installed below the bed of the Delta (Proposed LSPGC 230 kV Submarine Segment),
  - Four onshore underground utility vaults near PG&E's existing Pittsburg Substation that will transition the submarine cables to underground cables that will terminate at approximately two new riser poles adjacent to PG&E's existing Pittsburg Substation (Proposed LSPGC 230 kV Underground Segment); and
- Two new telecommunications paths to the proposed Collinsville Substation (a new microwave tower that will be constructed at the substation and a new fiber optic path that would be installed between existing fiber in the City of Pittsburg and the proposed Collinsville Substation (Proposed LSPGC Telecommunications Extension).

## 3 – REGULATORY FRAMEWORK

#### 3.0 UNITED STATES ARMY CORPS OF ENGINEERS

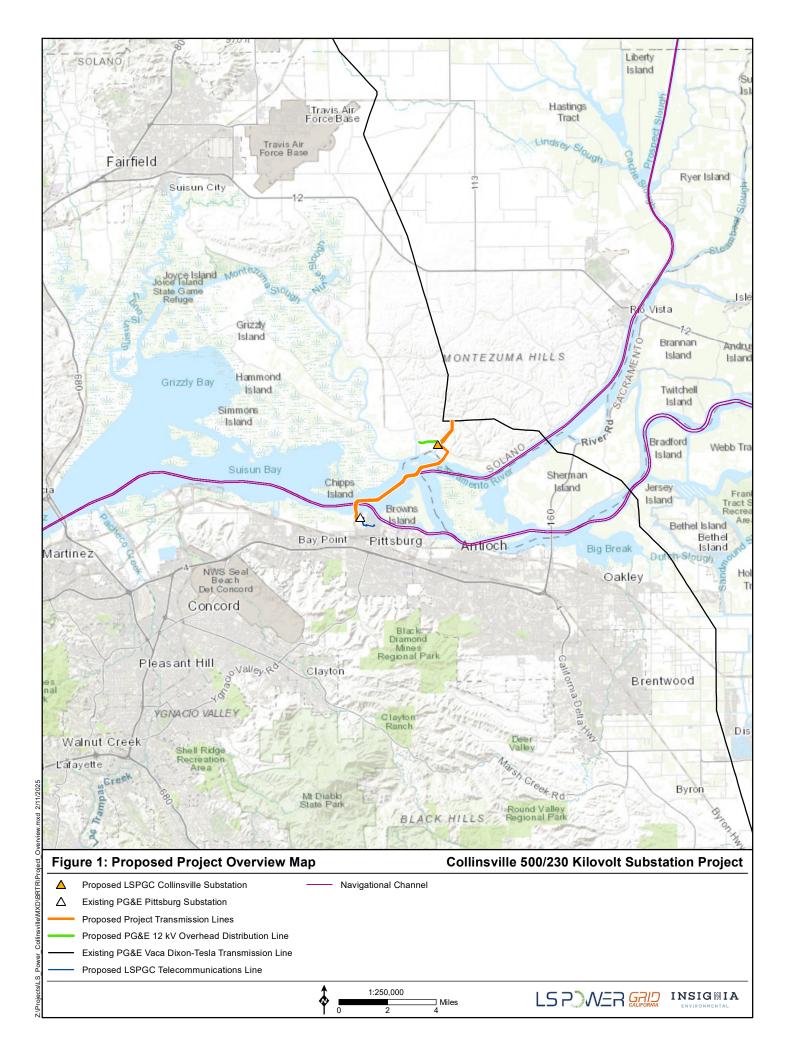
#### 3.0.0 Section 404 of the Clean Water Act

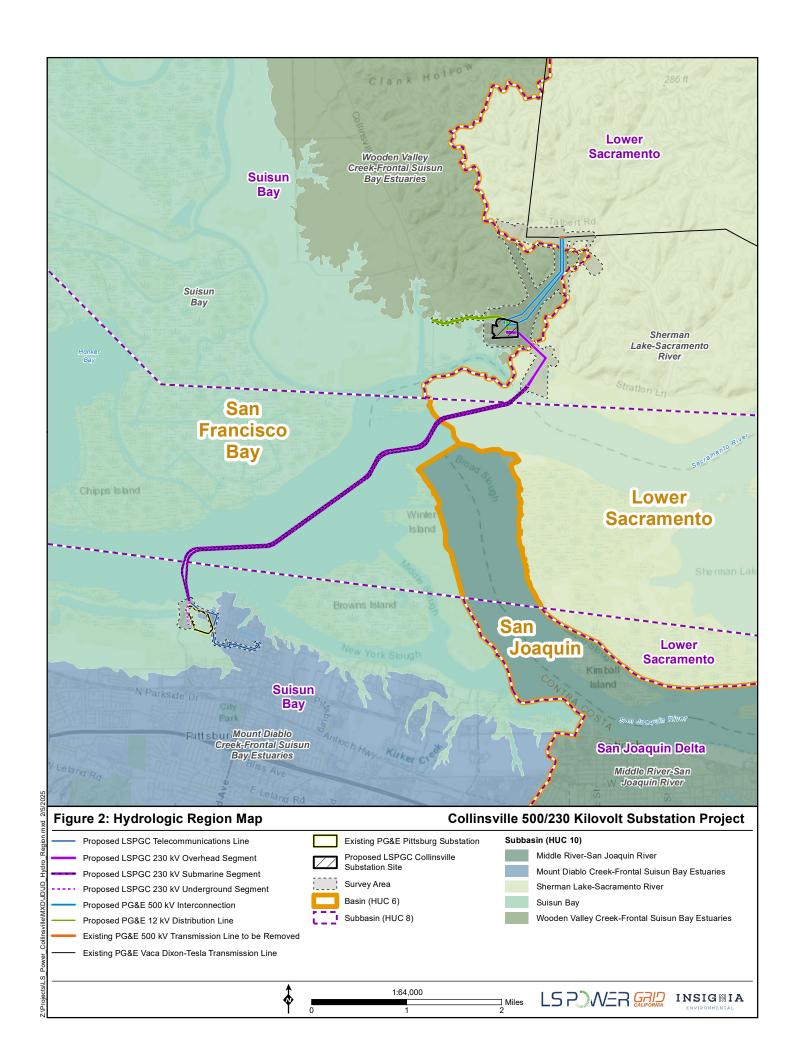
Under Section 404 of the CWA, the USACE has jurisdiction over waters of the U.S. (WOTUS). The purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." The USACE has regulatory authority to issue permits for the discharge of dredged or fill material in WOTUS, according to Title 33, Section 1344 of the U.S. Code. The USACE issues individual or general permits (i.e., Nationwide Permits) for such discharges. The Proposed Project is under the jurisdiction of the USACE's San Francisco District.

Two Supreme Court of the U.S. (Supreme Court) cases—Solid Waste Agency of Northern Cook County v. USACE (SWANCC) and Rapanos v. U.S. (Rapanos)—redefined the USACE

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<sup>&</sup>lt;sup>1</sup> PG&E would be responsible for the final configuration of the northern tie-in of the 500 kV loop-in between the proposed Collinsville Substation and the existing Vaca Dixon-Tesla 500 kV Transmission Line. LSPGC would be responsible for the installation of dead-end structures near the proposed Collinsville Substation to facilitate looping in the 500 kV lines.





jurisdiction within the parameters of the CWA. As a result of these court cases, the U.S. Environmental Protection Agency (EPA) and the USACE issued a joint memorandum addressing guidance on determining the jurisdiction of WOTUS (EPA and USACE 2008). Since that time, a final Revised Definition of "Waters of the United States" was published to the *Federal Register* on January 18, 2023, and it took effect on March 20, 2023 (EPA 2024).

However, a third Supreme Court case—*Sackett v. EPA* (Sackett)—further amended the definition of a WOTUS regarding jurisdiction over "adjacent wetlands" on May 25, 2023. The Supreme Court's new two-part test for "adjacent wetlands" is: (1) the body of water to which the wetland is connected is a "relatively permanent body of water" that is connected to traditional navigable waters; and (2) the wetland has a "continuous surface connection with that [connected] water, making it difficult to determine where the 'water' ends and the wetland begins" (Supreme Court 2023). This decision modifies the Supreme Court's existing ruling and eliminates the agencies' jurisdiction over wetlands "adjacent" to non-navigable tributaries when those wetlands had "a significant nexus to a traditional navigable water." On August 29, 2023, the EPA and USACE issued a final rule to amend the 2023 WOTUS rule to be consistent with the Supreme Court's decision, and it became effective in certain states, including California, on September 8, 2023.

Under the final rule following the decision in *Sackett v. EPA*, Title 40, Section 120.2(a) of the Code of Federal Regulations (CFR) defines WOTUS as follows:

- 1. Waters which are:
  - i. currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
  - ii. the territorial seas; or
  - iii. interstate waters;
- 2. Impoundments of waters otherwise defined as WOTUS under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
- 3. Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
- 4. Wetlands adjacent to the following waters:
  - i. waters identified in paragraph (a)(1) of this section; or
  - ii. relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
- 5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Title 40, Section 120.2(c) of the CFR defines wetlands as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that

under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Three parameters—hydrophytic vegetation, hydric soils, and wetland hydrology—must all be present to classify an area as a USACE-jurisdictional wetland under normal circumstances.

The limits of USACE jurisdiction are as follows:

- 1. Territorial Seas: The limit of jurisdiction in the territorial seas is measured from the baseline in a seaward direction for a distance of 3 nautical miles (33 CFR § 329.12).
- 2. Tidal WOTUS: The landward limits of jurisdiction in tidal waters extend to the following:
  - the high tide line, or
  - the limits as identified in non-tidal WOTUS when adjacent to non-tidal waters of the U.S.
- 3. Non-Tidal WOTUS: The limits of jurisdiction in non-tidal waters extend to the following:
  - the ordinary high water mark (OHWM) in the absence of adjacent wetlands,
  - beyond the OHWM to the limit of adjacent wetlands when such wetlands are present, and
  - the limit of the wetland when the WOTUS consist only of wetlands.

The application of EPA and USACE guidance results in a formalized oversight process involving both agencies in the adoption of approved jurisdictional determinations (AJDs). The intent of this formal process is to ensure consistency in how the agencies interpret the rulings and guidance at all levels. The USACE issued Regulatory Guidance Letter No. 08-02 on the subject of jurisdictional determinations (USACE 2008a) to institute the program by which jurisdictional determinations are made. This guidance creates a distinction between an applicant's request for a preliminary jurisdictional determination (PJD) and an AJD. If an applicant pursues a PJD, the determination would be inclusive of all features that have historically been regulated by the USACE under Section 404 of the CWA and Sections 9 and 10 of the Rivers and Harbors Appropriation Act of 1899 (i.e., prior to the SWANCC and Rapanos cases). A PJD excludes exempted jurisdictional waters, but not those excluded by court ruling interpretations. An AJD provides a more thorough evaluation of issues of isolation and adjacency as contemplated by the courts, and it excludes from USACE regulation any areas that fail to meet the necessary litmus tests of the Supreme Court decision and the agencies' implementation guidance.

# 3.0.1 Rivers and Harbors Appropriation Act Section 10

The USACE regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S. Code [USC] 403). Section 10 of the RHA requires USACE approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable WOTUS. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

## 3.1 REGIONAL WATER QUALITY CONTROL BOARD

#### 3.1.0 Section 401 of the Clean Water Act

The RWQCB regulates activities in waters of the State—including wetlands—through Section 401 of the CWA (RWQCB 2014). While the USACE administers permitting programs that authorize impacts to WOTUS, any USACE permit authorized for a proposed project would be invalid unless the RWQCB has issued a project-specific water quality certification (WQC) or waiver of water quality. A WQC requires a finding by the RWQCB that the activities permitted by the USACE would not violate state water quality standards individually or cumulatively over the term of the issued USACE permit.

# 3.1.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code § 13260) requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the RWQCB through an application for waste discharge (California Water Code § 13260[a][1]) (RWQCB 2014). The term "waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code § 13050[e]). Pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates "isolated wetlands," or those wetlands considered to be outside of the USACE's jurisdiction pursuant to court decisions. In 2019, the State Water Resources Control Board (SWRCB) further defined which wetlands are considered waters of the state in the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures). The Procedures became effective on May 28, 2020 (SWRCB 2021). According to the Procedures, an area is a wetland if it meets the following three criteria:

- The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both
- The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- The area's vegetation is dominated by hydrophytes, or the area lacks vegetation.

In April 2020, the SWRCB released the following implementation guidance that includes an updated definition of waters of the state (SWRCB 2020):

"California Code of Regulations, title 23, section 3831(w) states that '[a]ll waters of the United States are also 'waters of the state.' This regulation has remained in effect despite Supreme Court decisions such as Rapanos and SWANCC, which added limitations to what could be considered a water of the U.S. Therefore, the regulation reflects the Water Boards intent to include a broad interpretation of waters of the United States into the definition of waters of the state. Waters of the state includes features that have been determined by the U.S. EPA or the U.S. Army Corps of Engineers to be 'waters of the U.S.' in an approved jurisdictional determination; 'waters of the U.S.' identified in an aquatic resource report certified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of 'waters of the U.S.' or any current or historic federal regulation defining

'waters of the U.S.' Because the interpretation of waters of the U.S. in place at the time section 3831(w) was adopted was broader than any post-Rapanos or post-SWANCC regulatory definitions that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the Water Boards' intent to include both historic and current definitions of waters of the United States into the Water Boards' wetland jurisdictional framework."

The RWQCB generally considers filling in waters of the state to be pollution. Pollution is defined as an alteration of the quality of the waters of the state by waste that unreasonably affects its beneficial uses (California Water Code § 13050[1]). To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB's litmus test is if the action could result in any threat to water quality.

#### 3.2 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

## 3.2.0 California Fish and Game Code Section 1600

Sections 1601 through 1606 of the California Fish and Game Code require that a Notification of Lake or Streambed Alteration Agreement (LSAA) application must be submitted to the CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal that includes measures to protect affected fish and wildlife resources. A LSAA is the final proposal that is mutually agreed upon by the CDFW and the applicant.

Generally, the CDFW-jurisdictional boundaries are broader than the USACE-jurisdictional boundaries and include the following:

- rivers/streams;
- lakes;
- entire floodplains;
- wetlands associated with rivers, streams, lakes, or wildlife resources; and
- artificial drainage ditches (in some circumstances).

The CDFW's jurisdiction includes the following:

- areas with a definable bed, bank, or channel;
- areas that support periodic or intermittent flows, perennial flows, or subsurface flows; support fish or other aquatic life; or support riparian or hydrophytic vegetation in association with a streambed; and
- areas that simply have a hydrologic source and/or terminus.

## 4 - METHODS

#### 4.0 LITERATURE AND DATABASE REVIEW

Prior to conducting field work, Insignia biologists reviewed U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory maps (USFWS 2024), U.S. Geological Survey (USGS)

National Hydrography Dataset maps (USGS 2024a), and color aerial photographs (both recent and past) of the survey area and surrounding area. In addition, the biologists reviewed and referenced the Natural Resources Conservation Service (NRCS) Web Soil Survey, and USGS topographic maps. National Oceanic and Atmospheric Administration (NOAA) seasonal rainfall data were also reviewed (NOAA 2024a). The database review was used to determine if any aquatic resources had been previously mapped or otherwise documented in the Proposed Project area and to create a list of features to verify in the field.

#### 4.1 DELINEATION OF WETLANDS AND WATERS

Vegetation mapping and preliminary waters mapping were conducted for the Proposed Project by Insignia biologists during a habitat assessment conducted in May, June, July, September, and December 2023. At that time, potentially jurisdictional aquatic features were preliminarily mapped and identified for formal delineations. Insignia biologists conducted formal wetland and waters delineations from May 6, 2024, through July 10, 2024, for any feature that was identified during the vegetation and preliminary waters mapping. The survey area included a minimum buffer of 100 feet around the Proposed Project's Collinsville Substation and terrestrial linear components; however, the buffer varies from 100 feet to 500 feet in some locations to accommodate future design changes and to collect additional data in the field for certain areas. The survey area is depicted in Attachment A: Aquatic Resources Delineation Map. The approximately 578.8-acre survey area was also designed to include all potential terrestrial areas of temporary and permanent disturbance associated with the Proposed Project.

# 4.1.0 Drainage Mapping

Insignia biologists used guidance from A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual (USACE 2008b) to determine the location and size of drainages potentially under the jurisdiction of the USACE and RWQCB. Culverts, if found within the survey area, were also mapped to assist with determining downstream connectivity for potential jurisdictional features within the survey area. The overall landforms, slopes, and climatic and hydrologic conditions were also assessed. Photographs were taken for each drainage feature to record downstream and upstream conditions, as well as OHWM indicators; these photographs are included in Attachment B: Photograph Log. Evidence supporting the delineation of each potentially jurisdictional drainage feature was recorded using a mobile data collection platform that reflected the USACE Arid West Ephemeral and Intermittent Stream OHWM Data Sheet.

Top-of-bank (TOB) measurements were noted for each drainage to assess the areas that may be CDFW-jurisdictional under Section 1600 of the California Fish and Game Code.

## 4.1.1 Wetland Mapping

Insignia biologists surveyed for wetlands under the jurisdiction of the USACE, RWQCB, and/or CDFW within the survey area. Wetland delineations were conducted in accordance with the USACE's wetlands delineation manual (USACE 1987) in conjunction with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008c). For an area to be defined as a wetland under normal circumstances, the USACE's routine on-site determination methods call for determining the presence of

hydrophytic vegetation, hydric soils, and wetland hydrology. Insignia biologists determined the presence of hydric soils using the NRCS's Field Indicators of Hydric Soils in the United States (NRCS 2018). Each of these parameters is discussed in further detail in the subsections that follow.

## **Hydrophytic Vegetation**

Hydrophytic vegetation is defined as "the community of macrophytes that occurs in areas where inundation or soil saturation is either permanent, or of sufficient frequency and duration to exert a controlling influence on the plant species present" (USACE 2008c). Hydrophytic vegetation is determined to be present when the plant community is dominated by species that can tolerate prolonged inundations or soil saturation during the growing season. The National Wetland Plant List (USACE 2018) provides a wetland indicator status for plant species in the U.S. The wetland indicator status is a predictor of the likelihood that the plant would occur in wetlands, and is defined as follows:

- Obligate Plant (OBL): a plant that almost always occurs in wetlands.
- Facultative Wetland Plant (FACW): a plant that usually occurs in wetlands, but may occur in non-wetlands.
- Facultative Plant (FAC): a plant that usually occurs in wetlands and non-wetlands.
- Facultative Upland Plant (FACU): a plant that usually occurs in non-wetlands, but may occur in wetlands.
- Upland Plant: a plant that almost never occurs in wetlands.

Hydrophytic vegetation was determined to be present if any of the following indicator tests were satisfied:

- Dominance Test (Indicator 1): More than 50 percent of the dominant plant species across all strata are rated OBL, FACW, or FAC.
- Prevalence Test (Indicator 2): The prevalence index, which is a weighted-average wetland indicator status of all plant species in the sampling plot, is 3.0 or less.
- Morphological Adaptations (Indicator 3): This procedure is used when FACU plant species in wetlands exhibit morphological adaptations to wetland conditions; or it is used in areas of problematic vegetation where hydrophytic vegetation is absent, but indicators of hydric soil and wetland hydrology are present.
- Problematic Hydrophytic Vegetation (Indicator 4): This procedure is used in areas of problematic vegetation where indicators of hydric soil and wetland hydrology are present.

## **Hydric Soils**

A hydric soil is defined as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USACE 2008c). Characteristic field indicators of hydric soils, as described in the Field Indicators of Hydric Soils in the United States (NRCS 2018), include the following:

- presence of a histic epipedon,
- presence of sulfidic material,
- presence of an aquic or peraquic moisture regime,
- reducing soil conditions,
- soil color (including gleyed soils or soils with a low matrix chroma, with or without bright mottles),
- iron or manganese concretions, and
- soils listed as hydric by the NRCS.

Hydric soil data was collected using a drain spade shovel to extract soil samples at least 12 inches in depth and color matched using the Munsell Soil Color Book. Following the analysis, the soil sample was returned to its original location.

# Wetland Hydrology

Wetland hydrology is indicated by an area that is inundated or saturated for a period long enough to create anaerobic vegetation and soil conditions during the growing season (USACE 2008c). Primary field indicators of wetland hydrology are described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008c) and include surface water, high water table, soil saturation, water marks, sediment deposits, drift deposits, surface soil cracks, biotic crust, oxidized rhizospheres along living roots, presence of reduced iron, and water-stained leaves, among others. Secondary indicators include, but are not limited to, water marks, sediment deposits, drift deposits, and drainage patterns. These indicators were used in the field to make a determination on whether soil saturation or inundation exists for a long enough period of time during the growing season to create anaerobic conditions and thus conclude whether wetland hydrology was present.

# 4.1.2 Global Positioning System Data Collection

Drainage and wetland data were mapped using a Trimble DA2-BT Global Positioning System (GPS) unit with submeter accuracy. A data model within the GPS software ensured consistent data collection in the field and was developed in accordance with LSPGC schema. All spatial data was collected in the North American Datum 1983 State Plane California Zone 2 coordinate system.

#### 5 - RESULTS

#### 5.0 ENVIRONMENTAL SETTING

The survey area is located at the southern border of the Sacramento Valley Subregion and the northern border of the San Joaquin Valley Subregion of the California Floristic Province (Jepson eFlora 2024). Ground surface elevations throughout the survey area range from 3 feet to 250 feet above mean sea level. The highest points within the survey area exist along the northernmost components of the Proposed Project. Elevation gradually decreases to approximately 3 feet as the survey area intersects the Delta. The survey area receives an average of 23 inches of rainfall per year, with the majority of precipitation falling between November and March (NOAA 2024a). Average annual temperatures range from 48 to 73 degrees Fahrenheit (NOAA 2024b).

Many of the drainages within the survey area are ephemeral and only flow when it rains. However, several drainages within the survey area have been altered due to agriculture and development and differ from their historical locations and/or were channelized.

## 5.0.0 Hydrology

As depicted in Figure 2: Hydrologic Region Map, the survey area occurs within the San Francisco Bay basin and the Lower Sacramento basin (USGS 2024a). Subbasins crossed include the Suisun Bay subbasin, which encompasses three crossed watersheds, and the Lower Sacramento subbasin, which encompasses one crossed watershed. The portion of the survey area south of the Delta is highly developed, so stormwater runoff in this area mainly flows through storm drains. North of the Delta, unnamed and non-jurisdictional drainages run through the survey area and drain south into the Delta. Several wetland features identified were observed to have connectivity downstream. This portion of the survey area experiences a high amount of surface runoff as topography is very hilly and gradually decreases in elevation as it joins with the Delta. Findings from soil test pits, which are further detailed in Attachment C: Wetland Determination Data Forms, support this assessment of the hydrology with the presence of wetlands increasing in the southern portion of the survey area closer to the Delta.

# 5.0.1 Vegetation

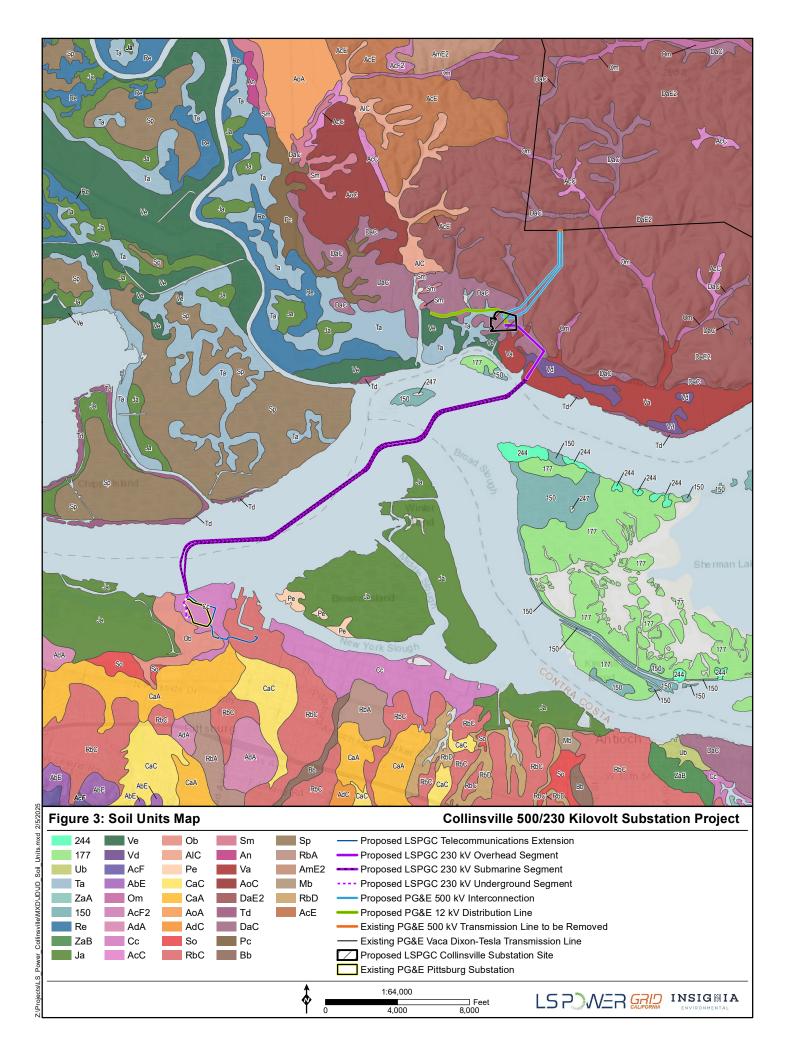
Twenty-two vegetation communities and land cover types were identified within the survey area (Insignia 2024). The vegetation classification system and the associated vegetation community descriptions that were used conform to *A Manual of California Vegetation, Second Edition* (CNPS 2024). Insignia biologists observed that no riparian vegetation was present within the channel or riparian zone surrounding the drainage within the survey area.

Ten hydrophytic vegetation communities were identified throughout the survey area, with at least one of these communities occurring within each of the mapped wetland features. The following communities and their dominant plant species are defined according to the National Wetland Plant List (USACE 2018):

- Distichlis spicata Herbaceous Alliance FAC,
- Frankenia salina Herbaceous Alliance FACW,
- Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance FACW,
- Lolium perenne Herbaceous Semi-natural Alliance FAC,
- Polygonum lapathifolium Xanthium strumarium Herbaceous Alliance UPL,
- Rosa californica Shrubland Alliance FAC,
- Sarcocornia pacifica (Salicornia depressa) Herbaceous Alliance OBL,
- Schoenoplectus (acutus, californicus) Herbaceous Alliance OBL,
- Schoenoplectus acutus/Rosa californica Association OBL, and
- Schoenoplectus americanus Herbaceous Alliance OBL.

## 5.0.2 Soils

Soils in the survey area that were mapped by the NRCS Web Soil Survey are shown in Figure 3: Soil Units Map and summarized in Table 1: Summary of NRCS Soil Descriptions.



**Table 1: Summary of NRCS Soil Descriptions** 

Map Unit Symbol	Soil Series	NRCS- Listed Hydric Soil (Yes/No)	Water Drainage	Material	Drainage and Permeability
Сс	Clear Lake clay, 0 to 15 percent slopes, MLRA 15	No	Poorly drained	Clayey alluvium derived from metamorphic and sedimentary rock	High runoff, slow to very slow permeability
DaC	Diablo-Ayar clays, 2 to 9 percent slopes	No	Well drained	Residuum weathered from weakly consolidated sediments	Very high runoff, slow permeability
DaE2	Diablo-Ayar clays, 9 to 30 percent slopes, eroded	No	Well drained	Residuum weathered from weakly consolidated sediments	Very high runoff, slow permeability
Ob	Omni silty clay	Yes	Poorly drained	Alluvium derived from sedimentary rock	Medium runoff, slow permeability
RbC	Rincon clay loam, 2 to 9 percent slopes, MLRA 14	No	Well drained	Clayey alluvium derived from sedimentary rock	High runoff
Та	Tamba mucky clay, MLRA 16	Yes	Very poorly drained	Organic material and/or clayey alluvium derived from igneous, metamorphic, and sedimentary rock	Low runoff, moderate permeability
Va	Valdez silt loam, drained, 0 to 2 percent slopes, MLRA 16	Yes	Poorly drained	Fine-silty alluvium derived from igneous, metamorphic, and sedimentary rock	Low runoff, moderately slow permeability
Vd	Valdez silty clay loam, strongly saline, 0 to 2 percent slopes, MLRA 16	Yes	Poorly drained	Alluvium derived from igneous, metamorphic, and sedimentary rock	High runoff, moderately slow permeability

As shown in Table 1: Summary of NRCS Soil Descriptions, the following eight soil map units were mapped within the survey area:

- Clear Lake clay, 0 to 15 percent slopes, Major Land Resource Area (MLRA) 15;
- Diablo-Ayar clays, 2 to 9 percent slopes;
- Diablo-Ayar clays, 9 to 30 percent slopes, eroded;
- Omni silty clay;
- Rincon clay loam, 2 to 9 percent slopes, MLRA 14;
- Tamba mucky clay, MLRA 16;
- Valdez silt loam, drained, 0 to 2 percent slopes, MLRA 16; and
- Valdez silty clay loam, strongly saline, 0 to 2 percent slopes, MLRA 16.

Table 1: Summary of NRCS Soil Descriptions provides a summary of the NRCS soil descriptions, as well as NRCS-listed hydric soils, within the survey area. Sampling investigations were conducted within all the vegetation alliances listed in Section 5.0.1 Vegetation due to the presence of hydrophytic vegetation. Identified hydric soil indicators (NRCS 2018), including their alphanumeric listing, include the following:

- Depleted below dark surface (A11),
- Thick dark surface (A12),
- Depleted matrix (F3),
- Loamy gleyed matrix (F2),

- Redox dark surface (F6),
- Redox depressions (F8), and
- Sandy redox (S5).

## 5.1 POTENTIALLY JURISDICTIONAL HYDROLOGICAL FEATURES

In total, 20 potentially jurisdictional features (one ephemeral drainage and 19 wetlands) were mapped within the survey area; these potentially jurisdictional features are depicted in Attachment A: Aquatic Resources Delineation Map. All features were identified north of the Delta and no potentially jurisdictional features were identified within the survey area south of the Delta (i.e., portion of survey area in the City of Pittsburg). Further, the survey area overlaps the Delta, a feature regulated by the USACE, RWQCB, and CDFW. No culverts were identified in the survey area. Attachment B: Photograph Log presents photographs of each jurisdictional feature observed and mapped within the survey area. Table 2: Metrics for D-1 and Table 3: Features within the Survey Area present the characteristics of the observed features, including a unique feature identification number (ID), hydrological regime or Cowardin classifications, and an assessment of agency jurisdiction. Features that were preliminarily mapped during initial reconnaissance-level surveys are included in Table 3: Features within the Survey Area and have a corresponding feature ID; however, as presented in the table, those features do not meet any of the established criteria for a wetland. They were included in the table to show that they were fully analyzed, but they are not mapped in Attachment A. The wetland determination data for the potentially jurisdictional wetlands is detailed in Attachment C: Wetland Determination Data Forms. Eight wetlands are potentially under the jurisdiction of the USACE and CDFW, and all wetlands are potentially under the jurisdiction of the RWQCB, according to Insignia's professional opinion. The ephemeral drainage (D-1) is potentially under the jurisdiction of the CDFW and RWQCB, but does not meet the criteria of WOTUS.

Although W-3, W-5, W-7, and W-9 do not currently have surface connections to navigable waters, it is suspected they are hydrologically connected to the Delta via groundwater due to the presence of salt-tolerant vegetation in the areas. A review of historical aerial imagery suggests these features were once tidally influenced by a surface connection, but due to heavy modification to the landscape (i.e., the addition of a berm), they no longer exhibit a surface connection to the Delta or other tidal waterbody. Aerial imagery does not indicate when this modification occurred. As a result, these features would be considered historic wetlands and likely under the jurisdiction of the USACE. W-1, W-4, and W-6 are tidally influenced by the Delta, making the adjacent wetlands—W-3, W-5, W-7, and W-9—CDFW-jurisdictional.

Four aquatic features evaluated within the survey area—W-19, W-24, W-27, and W-30—satisfied the USACE's vegetation criterion, but did not pass either the soils or hydrology test in accordance with USACE criteria. However, wetland delineator Christina Rodriguez observed that each feature had strong field indicators for the two respective tests they did pass and therefore initially concluded each of these features was a potential wetland. As a result, "Y [Yes]" was marked for the "Is the sampled area within a wetland?" section of the data forms while in the field. Subsequently, the datasheets were reviewed and further evaluation was given to each aquatic feature when determining which agencies have potential jurisdiction. Because the four aquatic features did not meet all three wetland parameters, the determination in the datasheet was changed to "N[No]" based exclusively on the three parameters documented in the field. Attachment C: Wetland Determination Data Forms details the findings and determinations of each of these features and notes any post-fieldwork modifications to the forms.

Table 4: Hydrological Feature Summary within the Survey Area summarizes the total assumed jurisdictional area, by agency, within the survey area.

Table 2: Metrics for D-1

Metric	Value
Feature ID	D-1
Hydrological Regime	Ephemeral
Page Number in Attachment A: Aquatic Resources Delineation Map	3
Approximate Length of Drainage in Survey Area (feet)	926.37
Average OHWM Depth (feet)	0.10
Average OHWM Width (feet)	3.00
Average Top of Bank (TOB Depth) (feet)	2.20
Average TOB Width (feet)	4.90
Approximate USACE-Jurisdictional Area (acres)	0.00
Approximate RWQCB-Jurisdictional Area (acres)	0.06
Approximate CDFW-Jurisdictional Area (acres)	0.10
Feature Description	Unnamed Tributary to the Delta

**Table 3: Features within the Survey Area** 

Feature ID	Cowardin Classification <sup>2</sup>	Attachment A Page Number	Approximate Size of Feature within Survey Area (acres)			Notes
			USACE	RWQCB	CDFW	
W-1	E2EM1	4	14.66	14.66	14.66	The feature meets USACE wetland determination criteria for the Arid West Region and has connectivity to a tidal WOTUS. As a result, the feature is also jurisdictional to the RWQCB and CDFW.
W-2	PEM1	4	0.00	0.56	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.
W-3	PEM2	4	0.03	0.03	0.03	The feature meets USACE wetland determination criteria for the Arid West Region. While currently separated by a man-made berm, the feature was historically connected to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction.
W-4	E2EM1	4	2.60	2.60	2.60	The feature meets USACE wetland determination criteria for the Arid West Region and has connectivity to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction. Steep terrain and rip rap separate W-4 from W-6, preventing substantial vegetation growth.

 <sup>&</sup>lt;sup>2</sup> PEM1 = Palustrine Emergent Wetland: persistent.
 PEM2 = Palustrine Emergent Wetland: non-persistent.
 E2EM1 = Estuarine Intertidal Emergent Wetland: persistent.

Feature ID	Cowardin Classification <sup>2</sup>	Attachment A Page Number	Approximate Size of Feature within Survey Area (acres)			Notes
			USACE	RWQCB	CDFW	
W-5	PEM2	4	0.07	0.07	0.07	The feature meets USACE wetland determination criteria for the Arid West Region. While currently separated by a man-made berm, the feature was historically connected to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction.
W-6	E2EM1	4	1.28	1.28	1.28	The feature meets USACE wetland determination criteria for the Arid West Region. While currently separated by a man-made berm, the feature was historically connected to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction. Steep terrain and rip rap separate W-6 from W-4, preventing substantial vegetation growth.
W-7	E2EM1	4	0.19	0.19	0.19	The feature meets USACE wetland determination criteria for the Arid West Region. While currently separated by a man-made berm, the feature was historically connected to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction.
W-8	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature is not an isolated wetland under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and is not under CDFW jurisdiction.

Feature ID			Approximate Size of Feature within Survey Area (acres)			Notes
		USACE	RWQCB	CDFW		
W-9	E2EM1	4	0.84	0.84	0.84	The feature meets USACE wetland determination criteria for the Arid West Region. While currently separated by a man-made berm, the feature was historically connected to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction.
W-10	-	•	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature is not an isolated wetland under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.
W-11	PEM1	2	0.00	0.99	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.
W-12	PEM1	2	0.85	0.85	0.85	The feature meets USACE wetland determination criteria for the Arid West Region. While currently separated by a man-made berm, the feature was historically connected to a tidal WOTUS. As a result, the feature would also be jurisdictional to the RWQCB. The feature is associated with the Delta and therefore under CDFW jurisdiction.
W-13	PEM1	2	0.00	0.46	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.

Feature ID	Cowardin Classification <sup>2</sup>	Attachment A Page Number	Approximate Size of Feature within Survey Area (acres)			Notes	
			USACE	RWQCB	CDFW		
W-14	PEM1	2	0.00	0.51	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-15	PEM1	2	0.00	0.02	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-16	PEM1	2	0.00	0.28	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream or lake and therefore is not under CDFW jurisdiction.	
W-17	PEM1	2	0.00	0.03	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-18	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature is not an isolated wetland under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	

Feature ID	Cowardin Classification <sup>2</sup>	Attachment A Page Number	Approximate Size of Feature within Survey Area (acres)			Notes	
			USACE	USACE RWQCB CDFW			
W-19 <sup>3</sup>	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature is not an isolated wetland under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-22	PEM1	2	0.00	0.95	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-23	PEM1	2	0.00	1.92	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The featur is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-24	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	

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<sup>&</sup>lt;sup>3</sup> Feature W-19 was initially thought to be three separate features (i.e., W-19, W-20, and W-21). Following additional evaluation, it was determined that one larger feature was present. As a result, the feature was named W-19, interrupting the sequential numbering of wetland features. This numbering scheme is reflected in Attachment A: Aquatic Resources Delineation Map and Attachment C: Wetland Determination Data Forms.

Feature ID	Cowardin Classification <sup>2</sup>	Attachment A Page Number	Approximate Size of Feature within Survey Area (acres)			Notes	
			USACE	RWQCB	CDFW		
W-25	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-26	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-27	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-28	PEM1	1	0.00	0.45	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	
W-29	PEM1	1	0.00	0.06	0.00	The feature meets USACE wetland determination criteria for the Arid West Region but does not have connectivity to a WOTUS. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.	

Feature ID	Cowardin Classification <sup>2</sup>	Attachment A Page Number	Approximate Size of Feature within Survey Area (acres)			Notes
			USACE	RWQCB	CDFW	
W-30	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.
W-31	-	-	-	-	-	The feature does not meet the USACE wetland determination criteria for the Arid West Region. The feature was determined to be an isolated wetland and is therefore a Water of the State under the jurisdiction of the RWQCB. The feature is not associated with a river, stream, or lake and therefore is not under CDFW jurisdiction.
Total			20.52	26.75	20.52	-

Table 4: Hydrological Feature Summary within the Survey Area

	Potential Jurisdiction									
Feature	US	ACE	RW	QCB	CDFW					
Туре	Area (Acres)	Length (Linear Feet)	Area (Acres)	Length (Linear Feet)	Area (Acres)	Length (Linear Feet)				
Wetlands	20.52	-	26.75	-	20.52	-				
Ephemeral Drainages	-	-	0.06	926.37	0.10	926.37				
Total	20.52	-	26.81	926.37	20.62	926.37				

#### 5.2 NON-JURISDICTIONAL FEATURES

Non-jurisdictional hydrological features, including swales and erosional features, were present throughout the survey area. These features were reviewed during the jurisdictional delineation survey and were determined to not fall under the jurisdiction of the USACE, RWQCB, or CDFW. Though these features can carry surface water, they are not included in this report because they are non-jurisdictional.

## 6 - CONCLUSION

In total, 20 potentially jurisdictional hydrological features were identified within the survey area, including one ephemeral drainage and 19 wetlands potentially under the jurisdiction of the USACE, RWQCB, and/or CDFW. If temporary or permanent impacts to jurisdictional features were to occur, a Section 404 authorization from the USACE, a Section 401 WQC and Waste Discharge Requirement permit from the RWQCB, and/or an LSAA from the CDFW would need to be obtained prior to construction.

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# ATTACHMENT A: AQUATIC RESOURCES DELINEATION MAP



Attachment A: Aquatic Resources Delineation Map 1 of 4

Collinsville 500/230 Kilovolt Substation Project

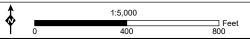
Sample Point

Proposed PG&E 12 kV Distribution Line

Potentially Jurisdictional Wetland

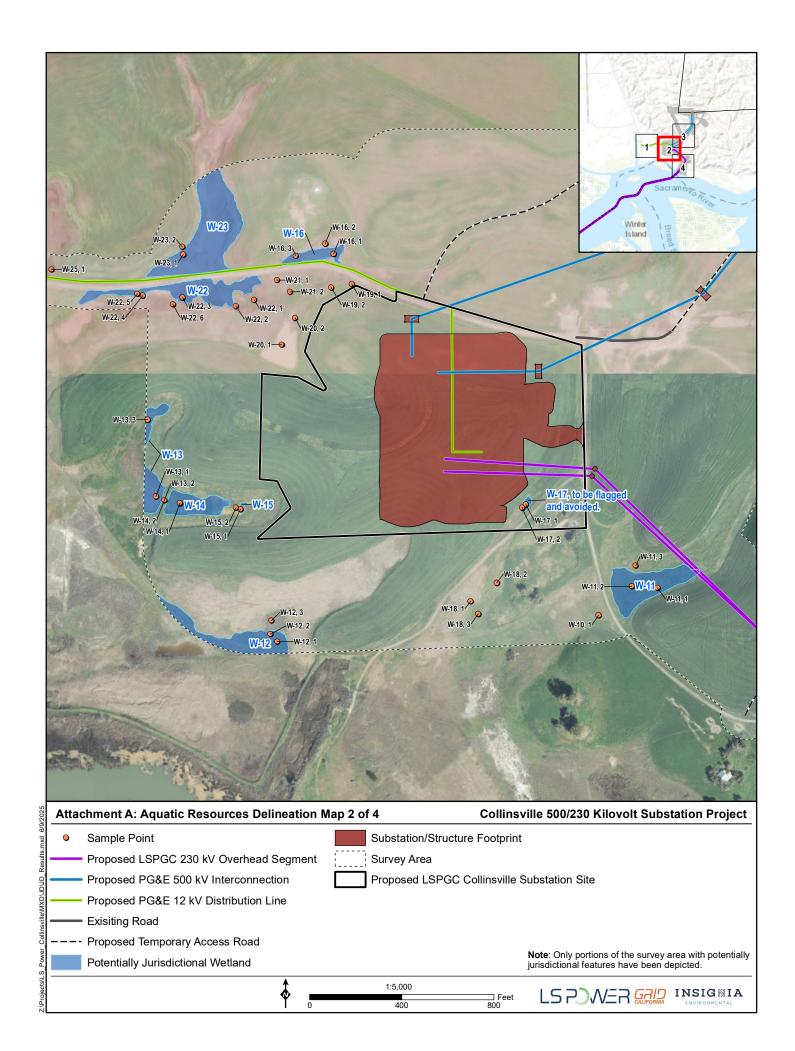
Survey Area

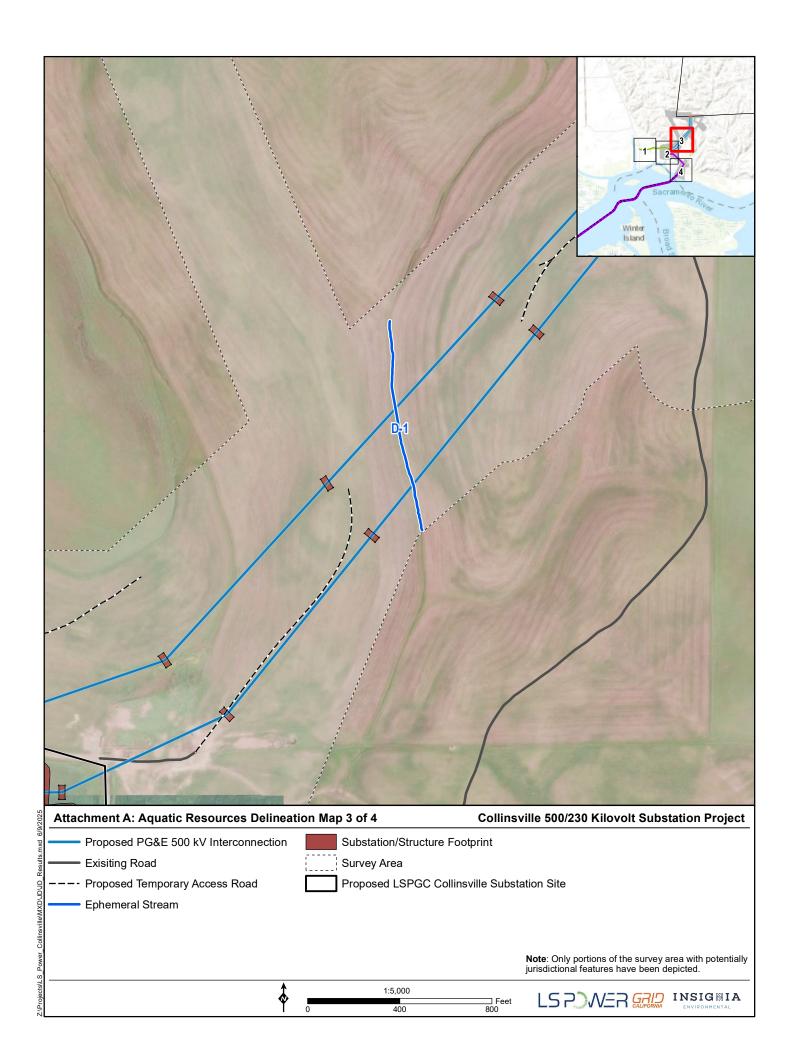
**Note**: Only portions of the survey area with potentially jurisdictional features have been depicted.

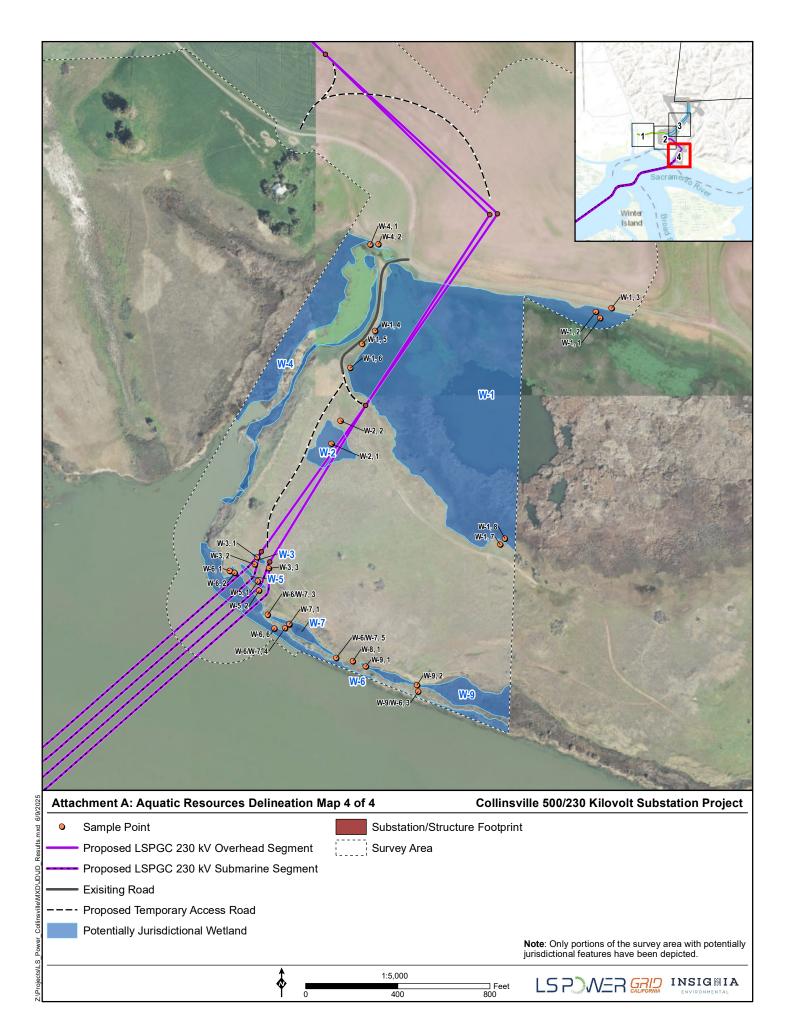












# ATTACHMENT B: PHOTOGRAPH LOG

# **ATTACHMENT B: PHOTOGRAPH LOG**



Photograph 1: Northwest-facing view of wetland sample point at W-1.



Photograph 2: East-facing view of W-1.



Photograph 3: South-facing view of wetland sample point at W-2.



Photograph 4: Northwest-facing view of wetland sample point at W-2.



Photograph 5: West-facing view of wetland sample point at W-3.



Photograph 6: Northwest-facing view of W-3.



Photograph 7: South-facing view of wetland sample point at W-4.



Photograph 8: South-facing view of W-4.



Photograph 9: Northwest-facing view of wetland sample point at W-5.



Photograph 10: North-facing view of W-5.



Photograph 11: East-facing view of wetland sample point at W-6.



Photograph 12: East-facing view of upland sample point at W-6.



Photograph 13: North-facing view of wetland sample point at W-7.



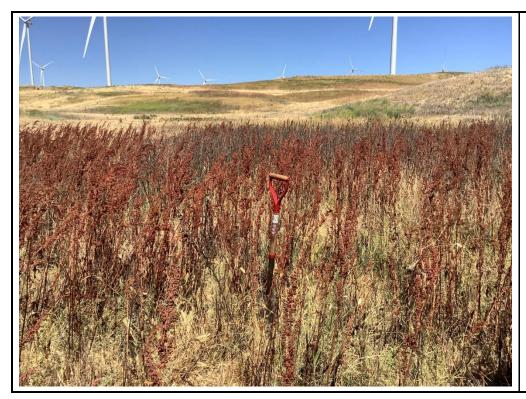
Photograph 14: South-facing view of W-7.



Photograph 15: North-facing view of wetland sample point at W-9.



Photograph 16: Southeast-facing view of W-9.



Photograph 17: East-facing view of wetland sample point at W-11.



Photograph 18: Southwest-facing view of W-11.



Photograph 19: Southwest-facing view of wetland sample point at W-12.



Photograph 20: West-facing view of W-12.



Photograph 21: North-facing view of wetland sample point at W-13.



Photograph 22: North-facing view of W-13.



Photograph 23: Northwest-facing view of wetland sample point at W-14.



Photograph 24: East-facing view of W-14.



Photograph 25: West-facing view of wetland sample point at W-15.



Photograph 26: East-facing view of W-15.



Photograph 27: West-facing view of wetland sample point at W-16.



Photograph 28: East-facing view of W-16.



Photograph 29: Northeast-facing view of wetland sample point at W-17.



Photograph 30: Northeast-facing view of W-17.



Photograph 31: Southwest-facing view of wetland sample point at W-22.



Photograph 32: North-facing view of W-22.



Photograph 33: Northeast-facing view of wetland sample point at W-23.



Photograph 34: Southwest-facing view of W-23.



Photograph 35: East-facing view of wetland sample point at W-28.



Photograph 36: South-facing view of W-28.



Photograph 37: Northeast-facing view of wetland sample point at W-29.



Photograph 38: Northwest-facing view of W-29.

# ATTACHMENT C: WETLAND DETERMINATION DATA FORMS

# W-1

### WETLAND DETERMINATION DATA FORM - Arid West Region

plicant/Owner: LS POWEr	W		State: CA Sampling Point: SP-
restigator(s): Karen Bach, Victoria Yefr	emen Kouasecti	on, Township, Rai	nge: 300 13N F3L
ndform (hillslope, terrace, etc.): + Destope	Loca	al relief (concave, o	convex, none): <u> </u>
bregion (LRR): LRRC	Lat: 38.0	19192	Long: -121.8269361 Datum: NAO 83
Map Unit Name: Valdez Sit 10am, dru	ind, 01021	· Slokes, W	LRA 16 NWI classification: EZE/*/ 11
e climatic / hydrologic conditions on the site typical fo	r this time of year? `	Yes No No	(If no, explain in Remarks.)
e Vegetation, Soil, or Hydrology	significantly distu	rbed? Are	"Normal Circumstances" present? Yes No
e Vegetation, Soil, or Hydrology	naturally problem	atic? (If ne	eeded, explain any answers in Remarks.)
JMMARY OF FINDINGS – Attach site m	ap showing sar	mpling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No	Is the Sampled	d Area
lydric Soil Present? Yes	No	within a Wetlan	\/
Vetland Hydrology Present? Yes	No		
emarks:			
EGETATION	Absolute Do	minant Indicator	Dominance Test worksheet:
ree Stratum (Use scientific names.)		ecies? Status	Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
			Species Across All Strata: (B)
			Percent of Dominant Species
Total C	over:O		That Are OBL, FACW, or FAC: (A/B
apling/Shrub Stratum (>\5)			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
			OBL species x 1 =
			FACW species 13 x 2 = 26
			FAC species 83 x 3 = 24 9
Total (	Cover:		FACU species O x 4 = O
erb Stratum (= 5		. 1	UPL species
Distichlis spiata	80	Y FAC	- Column Totals: 103 (A) 282 (B)
Typna lationia		N OBL	
Phragmiles awtralis		N FACW	Prevalence Index = B/A = 2.74
EDTEIN COCONOPIFOLICA	5	N OBL	Hydrophytic Vegetation Indicators:
Legidium laticatium	3 1	FAC	Dominance Test is >50%
AtriPlex prostruta		FACW	
Scholage Life acutes		N OBL	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Frankenia salina	10	N TACK	Problematic Hydrophytic Vegetation (Explain)
	Cover: 103		
loody Vine Stratum			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
			be present.
Tatal			Hydrophytic
Total C	Cover: O	$\sim$	Hydrophytic Vegetation
// 1	Cover of Biotic Crust		Present? Yes No
Bare Ground in Herb Stratum % (			
6 Bare Ground in Herb Stratum % ( Remarks:  Sample plot located within f			

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document to Depth Matrix Redox Feat	ures			
(inches) Color (moist) % Color (moist) %  2.5 \( \frac{3}{2} \) 60	Type <sup>1</sup>	_Loc <sup>2</sup>		Remarks
104 4/1 35			SiCL	Gley paye,
N 2,5/0 5.			sich	Gley pase
		=		7180
5-16 564 4/1 99 104R2/6 1	C	94/00	SICL	Gley Page
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup> Local		Links D		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise r	noted.)	e Lining, R		nnel, M=Matrix. s for Problematic Hydric Soils³:
Histosol (A1) Sandy Redox (S5)				Muck (A9) (LRR C)
Histic Epipedon (A2) Stripped Matrix (Stripped Matrix				Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mine	eral (F1)			ced Vertic (F18)
Hydrogen Sulfide (A4)Loamy Gleyed Ma				Parent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F 1 cm Muck (A9) (LRR D) Redox Dark Surface			Other	(Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (A11) Depleted Dark Sur				
Thick Dark Surface (A12) Redox Depression				
Sandy Mucky Mineral (S1) Vernal Pools (F9)	( /		3Indicators	s of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)				d hydrology must be present.
Restrictive Layer (if present):				
Tunes A 1000				
Type: _\/\damacaller				· · · · · · · · · · · · · · · · · · ·
Type: ADOL  Depth (inches):  Remarks:  TOP 5" Of SOIL is a mixture of severe	colored	4. A150		A11 Since surface
Type: ADU  Depth (inches):  Remarks:  TOP 5" Of Soil is a mixture of severe layer is prevombatly dark (i.e., 3/2)	colores	2. A130 20:1.		
Type: NOW  Depth (inches):  Remarks:  TOP 5" Of SOIL IS a Mixture of Several Layer is predominantly dark (i.e. 3/2)  YDROLOGY	colores	50:1.	CHOOM C	A11 Since surface
Type: ADU  Depth (inches):  Remarks:  TOP 5" Of Soil is a mixture of severe layer is prevombatly dark (i.e., 3/2)	colores	. A130 Soi1.	O meets	A11 Since surface
Type: ADC Depth (inches):	colores	2. A130 30:1.	Seco	A11 Since Surface  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Type: ADC Depth (inches):	colores	50:1.	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Type:	colores	Soi 1.	Seco	A11 Since Surface  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Type: ADD Depth (inches):	) ates (B13)	2. A130 30:1.	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Type:	) ates (B13) Odor (C1)	Soil.	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Type:	) ates (B13) Odor (C1) wheres along used Iron (C4)	Living Roo	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)
Type:	) ates (B13) Odor (C1) wheres along uced Iron (C4	Living Roo	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Type:	) ates (B13) Odor (C1) wheres along uced Iron (C4	Living Roo	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)
Type:	) ates (B13) Odor (C1) wheres along uced Iron (C4 action in Plow Remarks)	Living Roo	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	) ates (B13) Odor (C1) wheres along uced Iron (C4 action in Plow Remarks)	Living Roo	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	ates (B13) Odor (C1) cheres along uced Iron (C4 action in Plow Remarks)	Living Root)  ed Soils (0	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	ates (B13) Odor (C1) wheres along fuced Iron (C4 action in Plow Remarks)	Living Root)  ved Soils (0	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	ates (B13) Odor (C1) wheres along fuced Iron (C4 action in Plow Remarks)	Living Root)  ved Soils (0	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	ates (B13) Odor (C1) wheres along fuced Iron (C4 action in Plow Remarks)	Living Root)  ved Soils (0	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	ates (B13) Odor (C1) wheres along fuced Iron (C4 action in Plow Remarks)	Living Root)  ved Soils (0	Seco	A11 Since Sorrace  Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

roject/Site: COMMSIAND				Arid West Region  County Sampling Date: 5-6-24
policant/Owner: LS Pouler	Cit	ty/County: _	2010110	State: CA Sampling Point: SP-2
vestigator(s): Karen Buch, victoria yestra	tale c			State: Sampling Point: State
andform (hillslope, terrace, etc.): 1000 000	manyove Se	ection, I ow	nship, Rang	onvex, none): <u>FIGH</u> Slope (%): <u>45</u>
phregion (LRR): LRR(	L	ocal relief (	concave, co	Long:121.8269983 Datum: NAD 83
il Man Unit Name: \\0.0000000000000000000000000000000000	Lat: _38.0	TINNES A	ALVA I	NWI classification: _ E ZE / P
e climatic / hydrologic conditions on the site typical fo				
e Vegetation, Soil, or Hydrology				No
e Vegetation, Soil, or Hydrology JMMARY OF FINDINGS – Attach site m				eded, explain any answers in Remarks.) cations, transects, important features, etc.
As the Sale of the	No			
ydric Soil Present? Yes	_ No		Sampled .	V
/etland Hydrology Present? Yes	_ No	Within	ii a vveuaii	res No No
emarks: SP-Z is located on a slight	tly elevat	a) area	+200	north of SP-1. Adepression is
located just north of SP-2 on	South of	SP-3.		
GETATION				
ee Stratum (Use scientific names.) 2-30	Absolute			Dominance Test worksheet:
	% Cover			Number of Dominant Species
u .				That Are OBL, FACW, or FAC: (A)
W				Total Number of Dominant
				Species Across All Strata: (B)
	Cover:			Percent of Dominant Species That Are OBL, FACW, or FAC:(Q/Z(A/B)
	,			
	<del></del>		_	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
				OBL species
				FAC species x 3 = 5
Total C	Cover:			FACU species
b Stratum (2 = 5) Total C	110	1.0		UPL species \( \tau \) x 5 = \( \tau \)
Franken'a salina		4	FACW	Column Totals: (A) 132 (B
Salicania Pacifica			DBL	(A) _132 (B
Lapidian latifolium		N	FAC	Prevalence Index = B/A = 1,63
Disticulis spicate		N	FAL	Hydrophytic Vegetation Indicators:
Atriplax Prostrata			FACW	
Fistica pirennis		_N	FAC	Prevalence Index is ≤3.0¹
				Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Total C	Sover: 81		-	Problematic Hydrophytic Vegetation¹ (Explain)
ody Vine Stratum				
				Indicators of hydric soil and wetland hydrology mus
				be present.
	cover: 8			Hydrophytic
				Vegetation
	Cover of Biotic Cr	rust	0	Present? Yes X No

~		1	
1	W	-1	
1			_

Sampling Point: SP-Z

Depth Matrix	Redox	Features	s			
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>		Remarks
0-3.5 organic meterial		_		_	SICL	
5.5-5 2.5 × 3/2 100				=		
5-18 7.54 5/2 80	7.5 Y'R 4/6	20		M/PL	SICL	Tedax flowerent
Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present):	=Reduced Matrix.  LRRs, unless other  Sandy Redo  Stripped Mai  Loamy Muck  Loamy Gley  Depleted Mai  Redox Dark  Depleted Dai  Redox Depri	wise note x (S5) trix (S6) xy Minera ed Matrix atrix (F3) Surface ( rk Surface essions (I	(F1) (F2) (F6) (F6)	re Lining, R	Indicators 1 cm 2 cm Redu Red F Other	anel, M=Matrix.  Sofor Problematic Hydric Soils <sup>3</sup> :  Muck (A9) (LRR C)  Muck (A10) (LRR B)  Cod Vertic (F18)  Parent Material (TF2)  (Explain in Remarks)  Sof hydrophytic vegetation and dhydrology must be present.
Type:/ / A  Depth (inches):  Remarks:					Hydric Soi	I Present? Yes No
Depth (inches):			(			I Present? Yes No
	icient)		(		Seco	
Depth (inches):	icient)	(B11)	¢		Seco	endary Indicators (2 or more required)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is suff	Salt Crust (	t (B12)	<			andary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Depth (inches):	Salt Crust ( Biotic Crus Aquatic Inv	t (B12) ertebrate			<u>Seco</u>	indary Indicators (2 or more required)  Nater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Depth (inches):	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S	t (B12) ertebrate Sulfide Od	dor (C1)		Second	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Pepth (inches):  Primary Indicators (any one indicator is suff Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R	t (B12) ertebrate Sulfide Od hizosphe	dor (C1) res along		Second Se	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Depth (inches):	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c	t (B12) rertebrate Sulfide Od hizosphe of Reduce	dor (C1) res along ed Iron (C	4)	Seco	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)
Primary Indicators (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	t (B12) ertebrate Sulfide Od hizosphe of Reduce	dor (C1) res along ed Iron (Co on in Ploy	4)	Second Se	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Principles (Principles):	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	t (B12) ertebrate Sulfide Od hizosphe of Reduce	dor (C1) res along ed Iron (Co on in Ploy	4)	Second	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (inches):	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror	t (B12) ertebrate Sulfide Od hizosphe of Reduce	dor (C1) res along ed Iron (Co on in Ploy	4)	Second	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Depth (inches):  Clemarks:  Comparison of DROLOGY  Vetland Hydrology Indicators:  Inimary Indicators (any one indicator is suffer of the suffe	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) rertebrate Sulfide Od hizosphe of Reduce n Reducti lain in Re	dor (C1) res along ed Iron (Coon in Plovemarks)	4) wed Soils (0	Second	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Primary Indicators (any one indicator is sufficient of the property of the pro	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) ertebrate Sulfide Ochizosphe of Reduce n Reducti lain in Re	dor (C1) res along ed Iron (Co on in Plov emarks)	4) wed Soils (0	Second	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Prince Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B' Water-Stained Leaves (B9)  Field Observations:  Order Value (Present? Ves (None of the content of	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Other (Exp	t (B12) rertebrate Sulfide Or hizosphe of Reduce n Reducti lain in Re	dor (C1) res along ed Iron (Co on in Plov emarks)	4) wed Soils (0	Second Se	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Prince Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B' Water-Stained Leaves (B9)  Field Observations:  Depth (inches):  Primary Indicators  And Mydrology Indicators:  Primary Indicators (any one indicator is suffer one indicator	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Other (Exp	t (B12) ertebrate Sulfide Ochizosphe of Reduce n Reducti lain in Re	dor (C1) res along ed Iron (Coon in Plov emarks)	4) wed Soils (0	Second Se	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Print Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B' Water-Stained Leaves (B9) Field Observations:  OYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (any one indicator is suffound in a suffound in a suffound in a sufface of the sufface (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B' Water-Stained Leaves (B9) Field Observations: Surface Water Present?  Water Table Present?  Yes  Water Table Present?	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Other (Exp	t (B12) ertebrate Sulfide Ochizosphe of Reduce n Reducti lain in Re	dor (C1) res along ed Iron (Coon in Plov emarks)	4) wed Soils (0	Second Se	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Permarks:  Primary Indicators (any one indicator is suffermary Indicator (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  includes capillary fringe)  Describe Recorded Data (stream gauge, more	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Other (Exp	t (B12) ertebrate Sulfide Ochizosphe of Reduce n Reducti lain in Re ehes): ches): ches):	dor (C1) res along ed Iron (Coon in Plov emarks)	4) wed Soils (0	Second Se	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Prince Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B' Water-Stained Leaves (B9)  Field Observations:  Depth (inches):  Primary Indicators  And Mydrology Indicators:  Primary Indicators (any one indicator is suffer one indicator	Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Other (Exp	t (B12) ertebrate Sulfide Ochizosphe of Reduce n Reducti lain in Re ehes): ches): ches):	dor (C1) res along ed Iron (Coon in Plov emarks)	4) wed Soils (0	Second Se	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

[W-|]

Project/Site: COMMSMILE	City/County: Soland	Sampling Date: 5-6-24
Applicant/Owner: LS Power		State: CA Sampling Point: 27-2
Investigator(s): Kuren Buch, victory yeframaniore	Section, Township, Ra	ange: SØØ T3N RAE
Landform (hillslope, terrace, etc.): +065190	Local relief (concave,	convex, none): Flat Slope (%): 45
Subregion (LRR): LRRC Lat:	38.0750620	Long: -121.8269983 Datum: NAD83
Soil Map Unit Name: Vardez Sit loan, drand, Oto	LASIDECS, MLKA	NWI classification: EZEMIP
Are climatic / hydrologic conditions on the site typical for this time of	vear? Yes X No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significar		"Normal Circumstances" present? Yes No
		eeded, explain any answers in Remarks.)
Are Vegetation, Soil, or Hydrology naturally SUMMARY OF FINDINGS – Attach site map showi		
Hydrophytic Vegetation Present? YesX No		14
Hydric Soil Present? Yes No	within a Wetlan	Y
Wetland Hydrology Present? Yes No	_	
Remarks: SP-Z is located on a slightly exce located just north of SP-Z and South	atal area just of SP-3.	north of SP-1. Adepression is
VEGETATION		
Tree Stratum (Use scientific names.) 2-30 Absolu % Cov.	te Dominant Indicator ver Species? Status	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. •		
3.		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species
Total Cover:	<u>)</u>	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum R=15'		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
2		OBL species 25 x1= 35
3	7	FACW species x 2 = 82
5		FAC species
		FACU species x 4 =
Herb Stratum	_	UPL species
1. Frankenia salina 40	Y FACW	Column Totals:
2. Soliconia partica 35	- Y OBL	- " " " " " " " " " " " " " " " " " " "
3. Lipidium latifolium	N FAC	Prevalence Index = B/A = 1,63
4. Distichlis spicata 2	- N FAC	Hydrophytic Vegetation Indicators:
5. Atriplex Proctata	- N FACW	✓ Dominance Test is >50%
6. Fustuca purennis 2	NFAC	Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting)
7		data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum	_	
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
Total Cover:		Hydrophytic
	- ×	Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic	Crust	Present? Yes No
Remarks:		

Project/Site: Collinsville	City/County:	Soland County Sampling Date: 5-6-27
Applicant/Owner: LS POLICE		State: CA Sampling Point: 50-3
Investigator(s): Karen Bach, Victoria teframenhava	Section Town	nshin Range: SØØ T3N R1E
investigator(s). The stress of	Local relief (c	concave, convex, none): Stope Slope (%): 45
Landform (Inilisiope, terrace, etc.): 100510/20	12 G75108	O Long: -121, 82 67615 Datum: NAD 83
Soil Map Unit Name: Valde 2 5:12 10am drained, od		
Are climatic / hydrologic conditions on the site typical for this time of		No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	antly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	y problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No ★	le the	Sampled Area
Hydric Soil Present? Yes No		a Wetland? Yes No
Wetland Hydrology Present? Yes No	_   widiiii	
Remarks: Sp-3 is located suxt downslope of a	20 00 1	was another fill inches ablated
sp-3 is located sixt downslope of a	014 1000.1	William Committee of the committee of th
WITHIN SOIL PIT but bil texture is consistent in	with other so	is sampled in this liketion (SP-1 and SP-2)
VEGETATION		
Abso	olute Dominant I	Status
	Over Species?	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1		
2		Total Number of Dominant
3		Species Across All Strata: (B)
4Total Cover:	<del></del>	Percent of Dominant Species That Are OBL, FACW, or FAC: 50 %. (A/B)
Sapling/Shrub Stratum (=\S		That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 = 0
4		FACW species x 2 =&
5		FAC species x 3 =
	5_	FACU species x 4 = 244
Herb Stratum (=5	<b>6</b>	UPL species   x5 = 5
1. 110.		FACU Column Totals: 120 (A) 4120 (B)
2. 10000		FAC
3. Distichlis spicater 17		Prevalence Index = B/A =
4. Franklina salina 3		Hydrophytic Vegetation Indicators:
5. Brasica nigra		UPL Dominance Test is >50%
6. Mullella Jeprosa		Prevalence Index is ≤3.0¹
7		Morphological Adaptations¹ (Provide supporting
8		data in Remarks or on a separate sheet)
Total Cover: 12	0	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (=15)		1. n
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
2		
_	0	Hydrophytic
% Bare Ground in Herb Stratum % Cover of Bio	otic Crust O	Vegetation
Remarks:		
Tronging,		

	cription: (Describe t	to the dep				or confirm	n the absence of ir	ndicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature	Type	Loc2	Texture	Remarks		
2 -										Nemars
0-8	2.543/2	99	10412 3/6	41	6	Μ	SICL			
19	10712 9/1	90	7.5 YR 3/4	20		_M_	<u> </u>			
	oncentration, D=Deple Indicators: (Applica					Lining, I		M=Matrix. Problematic Hydric Soils <sup>3</sup> :		
Stratified 1 cm Mu Depleted Thick Da	n Sulfide (A4) I Layers (A5) (LRR C ick (A9) (LRR D) I Below Dark Surface irk Surface (A12)		Loamy Muc Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr	ed Matrix atrix (F3) Surface ( ark Surface ressions (	(F2) (F6) ce (F7)		Other (Exp	t Material (TF2) Ilain in Remarks)		
_ Sandy G estrictive L	lucky Mineral (S1) sleyed Matrix (S4) Layer (if present):		Vernal Pool	s (F9)				ydrophytic vegetation and rology must be present.		
Sandy G estrictive L Type: Depth (inc	leyed Matrix (S4)			s (F9)			wetland hyd			
Sandy G Restrictive L Type: Depth (inclemarks:	cleyed Matrix (S4) Layer (if present): Ches):			s (F9)			wetland hyd	rology must be present.		
Sandy G Restrictive L Type: Depth (incleanarks:  POROLOG Vetland Hyd rimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo	GY  Irology Indicators; ators (any one indicators (A1) ter Table (A2)	tor is suffic ne) riverine) ne)	cient)  Salt Crust ( Biotic Crus ( Aquatic Inv Hydrogen ( Oxidized R Presence ( Recent Iror	(B11) t (B12) ertebrate Sulfide Or hizosphe of Reduce	dor (C1) res along l ed Iron (C4 on in Plow	)	Secondar  Secondar  Wate Sedir Drift I Dry-Sots (C3) Thin Crayl (C6) Satur Shall	rology must be present.		



Project/Site: CONTOSUNTE		City/County	: <u>Sola</u>	no County Sampling Date: 5-6-24
Applicant/Owner: LS Power				State: CA Sampling Point: SP - 9
Investigator(s): Karen Bach, Victoria Yesrem	MONU	Section, To	wnship, Ra	ange: SOD T3N R1E
Landform (hillslope, terrace, etc.):footslope		Local relief	(concave.	convex none): \$1000 Slope (%): 45
Subregion (LRR): LRR C	Lat: _38	.0748	484	Long: -121.8303343 Datum: NAD 83
Soil Map Unit Name: Valdez Sity clay lown,	Strongly	Saline,	000で%	STOPES NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for the	nis time of ye	ar? Yes _	X No	(If no, explain in Remarks.)
				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally pro	blematic?	(If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point	locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  Yes	No No No	Is th	e Sample in a Wetla	d Area
Remarks:	NO			
/EGETATION  Tree Stratum (Use scientific names.) (= 301	Absolute	Dominant		Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
Sapling/Shrub Stratum (= 15)	er: 0			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species
4				FACW species 83 x2= 166
5	er: 0			FAC species x 3 = S
Herb Stratum CS				UPL species x 5 = 5
1. Frankinia salina	80		FACW	Column Totals: 87 (A) 79 (B)
2. Hardeum murinum		_N	FACU	
3. <u>Festuca perronis</u> 4. <u>Cardous Pycholephalus</u>		- N	JAC U	Prevalence Index = B/A = 2,05  Hydrophytic Vegetation Indicators:
5. Silybum marianon		7	UPL	Dominance Test is >50%
6. Atopiex prostation	3	$\overline{\Lambda}$	FACW	X Prevalence Index is ≤3.0¹
7				Morphological Adaptations <sup>1</sup> (Provide supporting
8				data in Remarks or on a separate sheet)
Woody Vine Stratum (= 15) Total Cove	r: <u>87</u>			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
Z		_		
Total Cove  We Bare Ground in Herb Stratum % Cove	r: er of Biotic Cr	ust	)	Hydrophytic Vegetation Present?  Yes No
Remarks:				,

Sampling Point: SP-4

Depth	Matrix		Redo	x Feature	s			
(inches) 0-2.5	Color (moist)	%	Color (moist)				Texture	Remarks
0 0.5	Mortel							
0-3	104R 2/2	99	10/12 3/4	_1		Μ	SICL	
3-12-5	2.54 4/2	<u> 75</u>	10412 4/6	25	<u>_</u>		SILL	
Histosol Histosol Histic Ep Black Hi Hydroge Stratified 1 cm Mu Depleted Thick Da Sandy M Sandy G	oipedon (A2)	able to all L		ox (S5) atrix (S6) sky Minera yed Matrix atrix (F3) c Surface ark Surfac ressions (	(F1) (F2) (F6) (F6)	e Lining,	Indicato  1 cm 2 cm Red Othe	annel, M=Matrix.  rs for Problematic Hydric Soils³:  n Muck (A9) (LRR C)  n Muck (A10) (LRR B)  uced Vertic (F18)  Parent Material (TF2)  er (Explain in Remarks)  rs of hydrophytic vegetation and  nd hydrology must be present.
Type: Depth (inc	ches):		_				Hydric So	oil Present? Yes No
Type: Depth (inc Remarks:	ches):							oil Present? Yes No
Type: Depth (inc Remarks:  YDROLO Wetland Hyo	GY		cient)				Sec	condary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type: Depth (inc Remarks:  YDROLO Wetland Hyn Primary Indic Surface	GY drology Indicators: cators (any one indic		cient)				Sec	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type: Depth (inc Remarks:  YDROLO Wetland Hyc Primary Indic Surface High Wa	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2)		cient)	st (B12)	es (B13)		Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Type: Depth (ind Remarks:  YDROLO Wetland Hyd Primary India Surface High Wa Saturatio Water M	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver	ator is suffici	cient) Salt Crust Biotic Cru Aquatic In Hydrogen	st (B12) vertebrate Sulfide O	dor (C1)		Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type:	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No	ator is sufficience)	cient) Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I	st (B12) evertebrate Sulfide O Rhizosphe	dor (C1) res along		Sec 	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Type: Depth (inc Remarks:  YDROLO Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (Nonrive	ator is sufficience)	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I	st (B12) overtebrate Sulfide O Rhizosphe of Reduce	dor (C1) res along ed Iron (C	4)	Sec 	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Type:	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6)	ator is sufficience) ine) nriverine) rine)	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti	dor (C1) res along ed Iron (Co on in Ploy	4)	Sec 	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Type:	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial	ator is sufficience) ine) nriverine) rine)	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti	dor (C1) res along ed Iron (Co on in Ploy	4)	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS)
Type:	GY  drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial I	ator is sufficience) ine) nriverine) rine)	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti	dor (C1) res along ed Iron (Co on in Ploy	4)	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type:	GY  drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial I stained Leaves (B9) vations: er Present?	ine) nriverine) rine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re	dor (C1) eres along ed Iron (Co on in Plov emarks)	4) ved Soils	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Type: Depth (incomplete incomplete inc	GY drology Indicators: cators (any one indicators (any one indicators) ater Table (A2) on (A3) larks (B1) (Nonriver on the Deposits (B2) (Nonriver osits (B3) (Nonriver osits (B3) (Nonriver osits (B3) (Nonriver osits (B4) on Visible on Aerial Installation Leaves (B9) vations: er Present?  Present?  Y	ine) nriverine) rine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re aches):	dor (C1) eres along ed Iron (Co on in Plov emarks)	4) wed Soils	Sec 	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	GY drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial I stained Leaves (B9) vations: er Present? Y	ine) nriverine) rine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re eches): ches): ches):	dor (C1) eres along ed Iron (C- eon in Plov emarks)	4) ved Soils  Wet	Secondary Second	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	GY  drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial I stained Leaves (B9) vations: er Present?  Present?  Y resent?  Y resent?  Y	ine) nriverine) rine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re eches): ches): ches):	dor (C1) eres along ed Iron (C- eon in Plov emarks)	4) ved Soils  Wet	Secondary Second	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	GY  drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial I stained Leaves (B9) vations: er Present?  Present?  Y resent?  Y resent?  Y	ine) nriverine) rine) magery (B7	cient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) evertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re eches): ches): ches):	dor (C1) eres along ed Iron (C- eon in Plov emarks)	4) ved Soils  Wet	Secondary Second	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)



pplicant/Owner: LS Po Wer						Sampling Point: SP - S
vestigator(s): Karen Buch, Vict						
andform (hillslope, terrace, etc.):						
ubregion (LRR): LRR C						
oil Map Unit Name: Vandez Sin	y clay loam, sto	ondy so	line, 01	02% N	NLRA 16 NWI classific	cation: NA
e climatic / hydrologic conditions on t	he site typical for this ti	me of yea	r? Yes	K No_	(If no, explain in F	Remarks.)
re Vegetation, Soil, or						present? Yes X No
re Vegetation, Soil, or					eded, explain any answe	
UMMARY OF FINDINGS - A				g point l	ocations, transects	s, important features, et
Hydrophytic Vegetation Present?	Yes X No		ls th	e Sampled	Area	
Hydric Soil Present?	Yes No		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		nd? Yes	No X
Wetland Hydrology Present?	Yes No	X				
EGETATION		Absolute	Dominant	Indicator	Dominance Test wor	ksheet:
Tree Stratum (Use scientific names.			Species?		Number of Dominant S	
					That Are OBL, FACW,	or FAC: (A)
					Total Number of Domi	
					Species Across All Str	ata: (B)
1	Total Cover:	0			Percent of Dominant S That Are OBL, FACW,	or FAC: 75% (A/I
Sapling/Shrub Stratum			. /		That Are OBL, FACVV,	OFFAC(AII
. Public crymenic	ins.	25	<u> </u>	FAC	Prevalence Index wo	
Losa California	La	10	X	FAC		Multiply by:
						x 1 =
					The state of the s	x 2 = x 3 =
		C/F				x 4 =
Lade Christian	Total Cover: _	75	,	.01		x 5 =
lerb Stratum Cardus Pycnouphall	25	2	$\sim$	UPL		(A) (E
Casi Na matetrale	a train	15		FACW	W 7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
Markubjan Volge	use.	10	1	FACU		x = B/A =
			_/_		Hydrophytic Vegetat	
					∑ Dominance Test i	
					Prevalence Index	IS S3.0
					Morphological Addata in Remar	aptations <sup>1</sup> (Provide supporting ks or on a separate sheet)
						ophytic Vegetation <sup>1</sup> (Explain)
	Total Cover:	4				
Voody Vine Stratum						oil and wetland hydrology must
					be present.	
	Total Cover:	0		3	Hydrophytic Vegetation	. /
2			4	)		es No
2	5 % Cover o	f Biotic Cr	ust		Present? Y	es_A_ No
2 % Bare Ground in Herb Stratum Remarks:	_	f Biotic Cr	ust		Present?	es

[W-1

#### SOIL

ampling Point: SP-5

Profile Description: (	Matrix	the dept		x Features				
	(moist)	%	Color (moist)			Loc <sup>2</sup>	Texture	Remarks
0-12 1041	2/1	95	5/R 4/6	5		PL	SICL	Relox Homest
10/0	4/3	98	7.5 YR 4/	2	<u></u>	<u>M</u>	SILL	
Type: C=Concentration  Indicators  Histosol (A1)  Histic Epipedon (A  Black Histic (A3)  Hydrogen Sulfide (Content of the content of the cont	2) A4) 5) (LRR C) RR D) ark Surface	ble to all L	Reduced Matrix.  RRs, unless other  Sandy Redo Stripped Ma Loamy Muc Loamy Gley Depleted Ma Redox Dark Redox Depress	ox (S5) htrix (S6) ky Minera ed Matrix atrix (F3) Surface ( ark Surface	(F1) (F2) (F6) e (F7)	e Lining, F	1 cm M 2 cm M Reduct Red P	nel, M=Matrix. for Problematic Hydric Soils³: Muck (A9) (LRR C) Muck (A10) (LRR B) sed Vertic (F18) arent Material (TF2) (Explain in Remarks)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)		Vernal Pool		•			of hydrophytic vegetation and hydrology must be present.	
	resent):							
testrictive Layer (if p	A						Hydric Soil	Present? Yes No
Type:/ Pepth (inches): Depth (inches): Demarks:	A							
rype:	dicators: one indicat A2) Nonriverin (B2) (Nonriverin (Nonriverin s (B6) on Aerial Im	e) riverine)	Salt Crust Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	t (B12) vertebrate Sulfide Od hizospher of Reduce n Reduction	dor (C1) res along d Iron (C4 on in Plow	)	Secol V S	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C3)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	dicators: one indicat A2)  Nonriverin (B2) (Nonr (Nonriverir s (B6) on Aerial Im ves (B9)  Yes Yes	e) riverine) ne) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	t (B12) rertebrate Sulfide Ochizosphei of Reduce n Reduction in Re	dor (C1) res along d Iron (C4 on in Plow marks)	ed Soils (	Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C3) Shallow Aquitard (D3)
rype:	dicators: one indicat A2)  Nonriverin (B2) (Nonr (Nonriverir s (B6) on Aerial Im ves (B9)  Yes Yes	e) riverine) ne) s N s N	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	t (B12) rertebrate Sulfide Ochizosphei of Reduce n Reduction in Re	dor (C1) res along d Iron (C4 on in Plow marks)	ed Soils (	Secon	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Gediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C3)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

[w-1]

Applicant/Owner: LS Power				State: CA Sampling Point: SP-6
vestigator(s): Karan Bach Victoria Yedin	ania	Section, To	wnship, Ra	inge: SØØ T3N RIE
andform (hillslope, terrace, etc.):				
ubregion (LRR): LIZIZ				
oil Map Unit Name: Valdez Sut loan, drained				
e climatic / hydrologic conditions on the site typical for this			,	
re Vegetation, Soil, or Hydrology sign				
e Vegetation, Soil, or Hydrology na				eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site map s				
Hydrophytic Vegetation Present? Yes X		Is th	ne Sampleo	
Hydric Soil Present?  Yes   No  Netland Hydrology Present?  Yes   No		with	in a Wetla	nd? Yes No
Remarks:				
EGETATION			la disabas	Deminance Test workshoot
	% Cover	Dominant Species?	Status	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
				Species Across All Strata: (B)
T.110				Percent of Dominant Species
apling/Shrub Stratum <= 15				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
				OBL species x1=
				FACW species
				FACU species
Total Cover:				UPL species  x5 = 0
Salicornia Pacifica	70	¥	OBL	Column Totals: 92 (A) 139 (B)
Frankenia salina	10	IV	FACW	David Control of the
Atripuex prostrata	2	_W_	FACW	Prevalence Index = B/A = 1.46
Distichiis spicata	5	N	FAC	Hydrophytic Vegetation Indicators:
Lepidium lationium	_3_	N	FAC	∑ Dominance Test is >50%
Festuca personis		<u>\(\lambda\)</u>	FAC	Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting
Hordeum marinum			FAC	data in Remarks or on a separate sheet)
) Total Cover:	92			Problematic Hydrophytic Vegetation¹ (Explain)
pody Vine Stratum (= 15				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
T-t-I Course				Hydrophytic
Total Cover:		~		Vegetation
Bare Ground in Herb Stratum % Cover o	of Biotic Cr	ustC		Present? Yes X No No
emarks:				

(inches) Color (mois	t) %	Color (moist)	Features Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4 10 40	41 99	7.5 / R 3/4	1 (		SICLL	
10/1	7				32002	
4-15 54 4/1	90	7.5 / 12 3/4	10 (	M	SICK	
			-N			•
Type: C=Concentration, D=	Depletion, RM=	Reduced Matrix. 2	Location: PL=Por	e Lining, F	RC=Root Chan	nel, M=Matrix.
lydric Soil Indicators: (Ap	plicable to all I	RRs, unless otherw	ise noted.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)		Sandy Redox				Muck (A9) (LRR C)
Histic Epipedon (A2)		Stripped Matr				fluck (A10) (LRR B) ed Vertic (F18)
_ Black Histic (A3)		Loamy Mucky Loamy Gleye				arent Material (TF2)
_ Hydrogen Sulfide (A4)	DD C\	X Depleted Mat				(Explain in Remarks)
_ Stratified Layers (A5) (L		Redox Dark S				
1 cm Muck (A9) (LRR D X Depleted Below Dark St			k Surface (F7)			
Thick Dark Surface (A12		Redox Depre				
Sandy Mucky Mineral (S		Vernal Pools	(F9)			of hydrophytic vegetation and
Sandy Gleyed Matrix (S					wetland	hydrology must be present.
estrictive Layer (if preser	nt):					
Type:		_			Undrin Soil	Present? Yes X No No
Depth (inches):		_		•	Hydric 30ii	Presenti 105 tto
Remarks.						
YDROLOGY Vetland Hydrology Indicat	ors: indicator is suffic	cient)	244)		v	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
YDROLOGY  Vetland Hydrology Indicate  Primary Indicators (any one  Surface Water (A1)	ors: indicator is suffic	X Sait Crust (t			v _ s _ p	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
YDROLOGY Vetland Hydrology Indicat rimary Indicators (any one	ors: indicator is suffic	Biotic Crust	(B12)		v s c	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) brainage Patterns (B10)
YDROLOGY  Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3)	indicator is suffic	Biotic Crust Aquatic Inve	(B12) ertebrates (B13)		v s c c	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Noni	indicator is suffic	Sait Crust (E Biotic Crust Aquatic Inve	(B12) ertebrates (B13) ulfide Odor (C1)	Living Ro	V S D D ots (C3) T	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) hin Muck Surface (C2)
YDROLOGY  Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2)	indicator is suffic riverine) (Nonriverine)	Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along	Living Ro	V S C	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) thin Muck Surface (C2) prayfish Burrows (C8)
YDROLOGY  Vetland Hydrology Indicate  Primary Indicators (any one  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None  Sediment Deposits (B2) Drift Deposits (B3) (None	indicator is suffic riverine) (Nonriverine) riverine)	Salt Crust (to Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh	(B12) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C4	4)	V S D	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rrayfish Burrows (C8) eaturation Visible on Aerial Imagery (C9)
YDROLOGY  Vetland Hydrology Indicate  Primary Indicators (any one  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (None  Sediment Deposits (B2)  Drift Deposits (B3) (None  Surface Soil Cracks (B6)	indicator is suffic riverine) (Nonriverine) riverine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	(B12) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C4) Reduction in Plow	4)	V S D D D D D D D C C(C3) T C(C6) S	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rhallow Aquitard (D3)
YDROLOGY  Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae	riverine) (Nonriverine) riverine) riverine) riverine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	(B12) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C4	4)	V S D D D D D D D C C(C3) T C(C6) S	Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rrayfish Burrows (C8) eaturation Visible on Aerial Imagery (C9)
YDROLOGY  Vetland Hydrology Indicate Primary Indicators (any one  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (None  Sediment Deposits (B2)  Drift Deposits (B3) (None  Surface Soil Cracks (B6)  Inundation Visible on Ae  Water-Stained Leaves (I	riverine) (Nonriverine) riverine) riverine) riverine)	Salt Crust (E Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	(B12) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C4) Reduction in Plow	4)	V S D D D D D D D C C(C3) T C(C6) S	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rhallow Aquitard (D3)
YDROLOGY  Vetland Hydrology Indicate rimary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (Iiii)	riverine) (Nonriverine) riverine) ) rial Imagery (B7	Biotic Crust Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C <sup>2</sup> Reduction in Plow ain in Remarks)	t) ved Soils (	V S D D D D D D D C C(C3) T C(C6) S	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C8) rhallow Aquitard (D3)
VEROLOGY  Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (Bield Observations:	riverine) (Nonriverine) riverine) riverine) ) rial Imagery (B7	Biotic Crust Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plow ain in Remarks)	4) wed Soils (	V S C C C C C C(C3) T C C(C6) S S	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
VDROLOGY  Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (B6) Water-Stained Leaves (B6) Gurface Water Present?	riverine) (Nonriverine) riverine) ) rial Imagery (B7	Biotic Crust Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C4 Reduction in Plow ain in Remarks)	4) ved Soils (	V S C C C C C C(C3) T C C(C6) S S	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
Vetland Hydrology Indicaterimary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (It idld Observations: Surface Water Present?	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9) rhallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Noni Sediment Deposits (B2) Drift Deposits (B3) (Noni Surface Soil Cracks (B6) Inundation Visible on Ae	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
YDROLOGY  Netland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (B5) Water Water Present?  Nater Table Present?	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
YDROLOGY  Netland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (B5) Water Water Present?  Nater Table Present?	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (Billel Observations: Surface Water Present? Vater Table Present? Vater Table Present? Includes capillary fringe) Vescribe Recorded Data (street	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
Vetland Hydrology Indicate Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (B6) Water-Stained Leav	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)
Primary Indicators (any one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (None Sediment Deposits (B2) Drift Deposits (B3) (None Surface Soil Cracks (B6) Inundation Visible on Ae Water-Stained Leaves (Incided Communication Present? Vater Table Present? Staturation Present?	riverine) (Nonriverine) riverine) ) rial Imagery (B7 39)  Yes N	Biotic Crust  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrates (B13) ulfide Odor (C1) aizospheres along Reduced Iron (C4 Reduction in Plowain in Remarks)  mes):  mes):	4) ved Soils (	V S C C C C C C C C C S S F	Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrianage Patterns (B10) rry-Season Water Table (C2) hin Muck Surface (C2) rayfish Burrows (C8) raturation Visible on Aerial Imagery (C9 shallow Aquitard (D3) rAC-Neutral Test (D5)

[W-1]

Project/Site: Collinuille						
Applicant/Owner: LS Power						Sampling Point: Sp-7
nvestigator(s): Karen Back, Vic						
andform (hillslope, terrace, etc.): 100						
ubregion (LRR): LRC						
oil Map Unit Name: Valdez Silt 10			,			
are climatic / hydrologic conditions on the are Vegetation, Soil, or H						
re Vegetation, Soil, or H						
SUMMARY OF FINDINGS – Att	tach site map s	howing	sampling	g point lo	cations, transect	s, important features, etc.
Hydrophytic Vegetation Present?	Yes X No		Is the	e Sampled	Area	
Hydric Soil Present?	Yes X No		101.70	in a Wetlan		No X
Wetland Hydrology Present?	Yes No	X_				
Remarks:						
EGETATION						
ree Stratum (Use scientific names.)	r-201		Dominant Species?		Dominance Test wo	
			/	Otatus	Number of Dominant That Are OBL, FACV	
					Total Number of Dor Species Across All S	-/
					Percent of Dominant	Species
C.C.	Total Cover:	_ 0			That Are OBL, FAC	
Sapling/Shrub Stratum (=15)					Prevalence Index w	vorksheet
•					Total % Cover of	
					OBL species	^
						3 x2= 6
					FAC species	(00 x3= 300
- 1	Total Cover:	0			FACU species	$9 \times 4 = 36$
erb Stratum (= 5		9.6	1	CAC	UPL species	
Distichis Spicata		10	7	FAC	Column Totals:	112 (A) 342 (B)
Festuca perrenis		50	-/	FAC	Prevalence In	dex = B/A = 3.05
Lotus corniculates		2	1	FACU	Hydrophytic Vege	
Frankeria salina		3	N	FACW	Dominance Te	
2/120/2012		2	N	FACU	Prevalence Inc	
HOUSERN MOLLING		15	N	FAC	Morphological	Adaptations <sup>1</sup> (Provide supporting
Hadram marinam		5	N	FACU	data in Ren	narks or on a separate sheet)
	Total Cover:			7,700	Problematic H	ydrophytic Vegetation <sup>1</sup> (Explain)
oody Vine Stratum (= 15)	, 5.5.					Control of the Contro
					<sup>1</sup> Indicators of hydri be present.	c soil and wetland hydrology must
	Total Cover:	0			Hydrophytic Vegetation	
Bare Ground in Herb Stratum	) % Cover	of Biotic C	rustC	2	Present?	Yes No
emarks:						
Fillains.						
andres.						

0	_	٠	
	"		

Depth Matrix (inches) Color (moist) %	Color (moist)	ox Features	Loc <sup>2</sup>	Texture	Remarks
0.5" organic matter					Tomano
0-7 2.57 4/1 98	7.5484/6	2 C	M/PL	SICI	redox fromhent
7-15 10/12 4/3 99	7,5424/6	<u> </u>	<u></u>	Sicl	
¹Type: C=Concentration, D=Depletion, Programme    Hydric Soil Indicators: (Applicable to    Histosol (A1)    Histic Epipedon (A2)    Black Histic (A3)    Hydrogen Sulfide (A4)	all LRRs, unless other  Sandy Redo  Stripped Ma  Loamy Muck	ox (S5)	re Lining, R	1 cm 2 cm Reduc	nnel, M=Matrix. s for Problematic Hydric Soils³: Muck (A9) (LRR C) Muck (A10) (LRR B) ced Vertic (F18) Parent Material (TF2)
Stratified Layers (A5) (LRR C)  1 cm Muck (A9) (LRR D)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)	Depleted Ma Redox Dark	atrix (F3) Surface (F6) rk Surface (F7) essions (F8)		Other	(Explain in Remarks) s of hydrophytic vegetation and hydrology must be present.
					7
Restrictive Layer (if present):					
Restrictive Layer (if present):  Type:					¥
Restrictive Layer (if present):		-7		Hydric Soil	I Present? Yes No
Restrictive Layer (if present):  Type: Depth (inches): Remarks:					I Present? Yes No
Restrictive Layer (if present):  Type:  Depth (inches):		5)		Secon	
Restrictive Layer (if present):  Type: Depth (inches): Remarks:  POROLOGY  Vetland Hydrology Indicators:  Imary Indicators (any one indicator is suffer the company of the comp	ficient) Salt Crust (B Biotic Crust ( Aquatic Inve	(B12) rtebrates (B13)		Secor — W — S — D — D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10)
Restrictive Layer (if present):  Type: Depth (inches):  Remarks:  POROLOGY  Tetland Hydrology Indicators: Imary Indicators (any one indicator is sufficient of the surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inverting Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F	B12) rtebrates (B13) Iffide Odor (C1) zospheres along L Reduced Iron (C4) Reduction in Plowe		Secor V S D D D D D C S (C3) T C5) S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Shin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C
Restrictive Layer (if present):  Type: Depth (inches):  Remarks:  POROLOGY  Tetland Hydrology Indicators: Imary Indicators (any one indicator is sufficient of the	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inverting Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F	(B12) rtebrates (B13) ulfide Odor (C1) zospheres along L Reduced Iron (C4)		Secor  V S D D D D D C S (C3) T C S) S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8)
Restrictive Layer (if present):  Type: Depth (inches):  Remarks:  POROLOGY  Tetland Hydrology Indicators: Imary Indicators (any one indicator is sufficient of the	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inverience of I Oxidized Rhi: Presence of I Recent Iron F Other (Explain	(B12) Intebrates (B13) Infide Odor (C1) Infide Odor (C1) Infide Odor (C1) Infide Odor (C1) Infide Odor (C4)	d Soils (C6	Secor  V S D D D D D C S (C3) T C S) S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Orayfish Burrows (C8) Crayfish Market (C3)
Restrictive Layer (if present):  Type: Depth (inches): Remarks:  POROLOGY  Tetland Hydrology Indicators: Imary Indicators (any one indicator is sufficient of the surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B) Water-Stained Leaves (B9)  Ind Observations:  Tace Water Present? Yes Notes the surface of the	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inverting Hydrogen Suther County of I Presence of I Recent Iron F Other (Explaints)  Depth (inches)	(B12) rtebrates (B13) rifide Odor (C1) zospheres along L Reduced Iron (C4) Reduction in Plowe n in Remarks) s):	d Soils (C6	Secor  V S D D D D D C S (C3) T C S) S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Orayfish Burrows (C8) Crayfish Market (C3)
Restrictive Layer (if present):  Type:	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of B Recent Iron F Other (Explain  No Depth (inche Depth (inch	(B12) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interpretation (C1) Interpretation (C4) Interpretation	d Soils (Ce	Secor — W — S — D — D — C — C — S — F — F — F — F — F — C — F — F — C — F — C — F — C — F — F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Orayfish Burrows (C8) Crayfish Market (C3)
Restrictive Layer (if present):  Type:	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of B Recent Iron F Other (Explain  No Depth (inche Depth (inch	(B12) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interpretation (C1) Interpretation (C4) Interpretation	d Soils (Ce	Secor — W — S — D — D — C — C — S — F — F — F — F — F — C — F — F — C — F — C — F — C — F — F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Crayfish Burrows (C8) Caturation Visible on Aerial Imagery (Caturation Visible on Aerial Imagery (Caturation Visible Original Imagery (Cat
Restrictive Layer (if present):  Type:	ficient)  Salt Crust (B Biotic Crust ( Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of B Recent Iron F Other (Explain  No Depth (inche Depth (inch	(B12) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interpretation (C1) Interpretation (C4) Interpretation	d Soils (Ce	Secor — W — S — D — D — C — C — S — F — F — F — F — F — C — F — F — C — F — C — F — C — F — F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Crayfish Burrows (C8) Caturation Visible on Aerial Imagery (Caturation Visible on Aerial Imagery (Caturation Visible Original Imagery (Cat

Project/Site: Collins Ville	City/County	Salono	Country	Sampling Date: 5-7-24
Applicant/Owner: LS Passer			State:	Sampling Point: Sp -8
nvestigator(s): Much Bach, Victoria Yehranner	Section, To	wnship, Ran	ge: SØØ T3N	RIE
andform (hillslope, terrace, etc.): 1001000	Local relief	(concave, c	convex, none): flat	Slope (%):
Subregion (LRR): LRRC Lat:	38.0723	654	Long:121.8283	719 Datum:
soil Map Unit Name: Valdez Silty clay loam, strongly				
re climatic / hydrologic conditions on the site typical for this time of	f year? Yes	K_ No_	(If no, explain in R	emarks.)
re Vegetation, Soil, or Hydrology significa	ntly disturbed?	Are "I	Normal Circumstances" p	present? Yes No
re Vegetation, Soil, or Hydrology naturally			eded, explain any answe	
SUMMARY OF FINDINGS – Attach site map show	ing samplin	g point lo	ocations, transects	, important features, etc
Hydrophytic Vegetation Present? Yes _X No	lo th	ne Sampled	A	
Hydric Soil Present? Yes No	— with	ie Sampied iin a Wetlan	d? Vac	× No
Wetland Hydrology Present? Yes No		iii a wedan	u: les/	
Remarks:				
/EGETATION				
Trop Stratum (Hop priorities names) (C. 7.0		Indicator	Dominance Test work	sheet:
	over Species?		Number of Dominant S	
1			That Are OBL, FACW,	or FAC: (A)
3			Total Number of Domir	
4			Species Across All Stra	ata: (B)
, Total Cover:	)		Percent of Dominant S That Are OBL, FACW,	
Sapling/Shrub Stratum V = 15			mat Are OBL, FACVV,	OFFAC (A/B)
1			Prevalence Index wor	
2			Total % Cover of:	
3			OBL species	$x_1 = 5$ $x_2 = 10$
4			FAC species 9	$\frac{2}{2}$ $\times 2 = \frac{10}{2}$
Total Cover:	)		FACU species	
Herb Stratum			UPL species	0 x5= 0
1. Distrantic spillion 9	0 4	FAL	Column Totals: \0	
2. Frankenia Calina	_ N	FACW		
3. Poly Porgon monspelies's z		FACW		x = B/A =
4. princy (1) frs 2		Fuc	Hydrophytic Vegetati	
5. Schoenoffective acutus 2	N	ORV	★ Dominance Test is     ★ Prevalence Index	
6. Att. Whet Prostroto 7. Salicania Pacifica 3		FACIN		is ≤3,0° aptations¹ (Provide supporting
8.		OBL	data in Remark	aptations (Provide supporting ks or on a separate sheet)
Total Cover: \ 0	5		Problematic Hydro	ophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum Y = 15				
1,				oil and wetland hydrology must
2			be present.	
Total Cover:	_		Hydrophytic	9
% Bare Ground in Herb Stratum % Cover of Biol	tic Crust	0	Vegetation Present? Ye	es No
Remarks:				

	cription: (Describe	to the depti	needed to docume	ent the indicato	r or confirm	the absence o	Sampling Point: SP-8
Depth	Matrix			Features			
(inches)	Color (moist)	%	Color (moist)	% Type	Loc <sup>2</sup>	Texture	Remarks
0-2	101/2 2/2	100				SILLLE	
2-16	54 4/1	45	7.5412 3/4	5 0	MIRY	RC SICL	
		_					(b)
			Reduced Matrix. 2		Pore Lining,		
		able to all L	RRs, unless other				for Problematic Hydric Soils <sup>3</sup> :
Black Hi Hydroge Stratified 1 cm Mu Depleted Thick Da Sandy M	(A1) pipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) (LRR 0) d Below Dark Surface ark Surface (A12) ducky Mineral (S1) fileyed Matrix (S4)		<ul><li>Loamy Gleye</li><li>Depleted Ma</li><li>Redox Dark</li></ul>	rix (S6) y Mineral (F1) ed Matrix (F2) trix (F3) Surface (F6) rk Surface (F7) essions (F8)		2 cm M Reduc Red P Other	Muck (A9) (LRR C) Muck (A10) (LRR B) Sed Vertic (F18) Farent Material (TF2) (Explain in Remarks)  s of hydrophytic vegetation and d hydrology must be present.
	ayer (if present):					wettane	d hydrology must be present.
Type:	/ *						
Depth (inc	ches):					Hydric Soi	il Present? Yes X No
					*		
	Irology Indicators:			2.01		Sec	ondary Indicators (2 or more required)
/etland Hydrimary Indice  Surface \( \) High Wa \( \) Saturatio Water Ma Sedimen Drift Dep Surface \( \) Inundation	Arology Indicators: ators (any one indicators) Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver t Deposits (B2) (Noncists (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I	ator is suffici ine) nriverine) rine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro		c1) ong Living F n (C4) Plowed Soi	Roots (C3)	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

Remarks:

W-2

Project/Site: Ollinsville	c			Sampling Date: 5-7-24
Applicant/Owner: LS Power	14:			State: CA Sampling Point: SP-1
Investigator(s): Karen Bach, Victoria Yetremon				
Landform (hillslope, terrace, etc.): bot tom (m)				
Subregion (LRR): LLC				
Soil Map Unit Name: Valdez SIH LOUM, draind,			/	
Are climatic / hydrologic conditions on the site typical for this t				
Are Vegetation, Soil, or Hydrology sig				Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology nat	turally prob	olematic?	(If nee	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sl	howing	sampling	g point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No		1	2000	Van tu
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sampled	~
		withi	n a Wetlan	d? Yes/\ No
Remarks:				
FORTATION				
EGETATION	A 1 1- 1-	Daminant	Indicator	Dominance Test worksheet:
		Dominant Species?		North and Descious Consise
				That Are OBL, FACW, or FAC:(A)
				Total Number of Dominant
				Species Across All Strata: (B)
				Percent of Dominant Species
Total Cover:	0			That Are OBL, FACW, or FAC: (A/B)
apling/Shrub Stratum = 15				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
4				OBL species x1 =
				FACW species $\frac{26}{2}$ x 2 = $\frac{62}{2}$
- V				FAC species x3 = 3
Total Cours	0			FACU species O x4 = O
rb Stratum (=5) Total Cover:_				UPL species
Salicomia pacifica	10	Y	OBL	Column Totals: 44 (A) 72 (E
Frankenia salina	15	4	FACW	
COTULA COCONDEDIDIA	5	N	OBL	Prevalence Index = B/A =
Speravia marina	2	N	OBL	Hydrophytic Vegetation Indicators:
Atriplex prostruta	1	N	FACIN	∠ Dominance Test is >50%
Hordeum marinum	1	N	FAC	X Prevalence Index is ≤3.0¹
polypoion monspeliensis	10	Y	FACW	Morphological Adaptations <sup>1</sup> (Provide supporting
Forgraph Indispellerois		-	1110	data in Remarks or on a separate sheet)
	114			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
ody Vine Stratum (=15) Total Cover: _	77			
ody vine Stratum				<sup>1</sup> Indicators of hydric soil and wetland hydrology mus
				be present.
T.11.0	(2)			Hydrophytic
Total Cover: _				Vegetation
/ ^		PD	7	Present? Yes No No
are Ground in Herb Stratum 60 % Cover of	Biotic Cr	ust	/	Flesenti les / 10

Sampling Point: SP-1

Color (moist)	Secondary Indicators:   Seco	Depth	Matrix		Redo	x Feature	s			
Secondary Indicators   Secondary Indicators	Secondary Indicators   Secondary Indicators   Secondary Indicators (2 or more required)   Paper   Pa	(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>		Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix. *Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Indicators for Problematic Hydric Soils*: hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosci (A1)	Type: C=Concentration, D=Depletion, RM=Reduced Matrix. *Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Plydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	0-8	1048 412	80	511-1/6	20	C	WIPL	5.61	Salt laus gressyt
Type: C=Concentration, D=Depletion, RM=Reduced Matrix. *Location: PL=Pore Lining, RC=Root Channel, M=Matrix. *Indicators: (Applicable to all LRRs, unless otherwise noted.)	Type: C=Concentration, D=Depletion, RM=Reduced Matrix.  *Location: PL=Pore Lining, RC=Root Channel, M=Matrix.  *Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)  Sandy Redox (S5)  Histosol (A2)  Striped Matrix (S6)  Black Histic (A3)  Loamy Mucky Mineral (F1)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F3)  Depleted Matrix (F3)  Depleted Below Dark Surface (A12)  Thick Dark Surface (A12)  Thick Dark Surface (A12)  Sandy Gleyed Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Vernal Pools (F9)  *Indicators of hydrophytic vegetation and wetland hydrology must be present. Interactive the varyer (fit present):  Type:  **Type:**  **Proced Matrix (F3)  **Depth (Inches):**  **Usurdan Sulface (A2)  **Depth (Inches):**  **Depth (Inches):**  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Depth (Inches):**  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Depth (Inches):**  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan Sulface (A2)  **Usurdan	8-14	2.544/1	75	7,5484/6	25	C	MIPL	5:01	Saltlayers present
Histosol (A1)	Histosol (A1)	14-16	104R 3/1	85	10/R 3/4	15	С	MIPL	Sill	Sail-layer present
Vertland Hydrology Indicators:   Secondary Indicators (2 or more required)	Vetland Hydrology Indicators:  Verliand Hydrology Indicators:  Verliand Hydrology Indicators:  Surface Water (A1)  Surface Water (A1)  Sufface Water (A2)  Saturation (A3)  Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Dry-Season Water Table (C2)  Sediment Deposits (B2) (Nonriverine)  Presence of Reduced Iron (C4)  Water Soil Cracks (B6)  Recent Iron Reduction in Plowed Soils (C6)  Saturation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Water Present?  Yes  No  Depth (inches):  Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Hydric Soil II Histosol ( Histic Epi Black His Hydroger Stratified 1 cm Muc Depleted Thick Dat Sandy Mi Sandy Gi	ndicators: (Application) (A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) (LRR 0) ck (A9) (LRR D) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) ayer (if present):	able to all	LRRs, unless other Sandy Redo Stripped Ma Loamy Muc Loamy Gley Depleted M. Redox Dark Depleted Dark Redox Depleted Dark	wise not ox (S5) atrix (S6) ky Minera red Matrix atrix (F3) c Surface ark Surface ressions (	ed.) al (F1) a (F2) (F6) be (F7)	re Lining, R	Indicator 1 cm 2 cm Redu Red l Other	rs for Problematic Hydric Soils <sup>3</sup> :  Muck (A9) (LRR C)  Muck (A10) (LRR B)  Idea Vertic (F18)  Parent Material (TF2)  r (Explain in Remarks)
Surface Water (A1)	Surface Water (A1)	Depth (incl			_				Hydric So	il Present? Yes No No
High Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Drainage Patterns (B10)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Dry-Season Water Table (C2) Thin Muck Surface (C7) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Water-Stained Leaves (B9) FAC-Neutral Test (D5)  Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	High Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Drainage Patterns (B10) Dry-Season Water Table (C2) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B2) (Nonriverine) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Drift Deposits (B3) (Nonriverine) Dry-Season Water Table (C2) Thin Muck Surface (C7) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Water-Stained Leaves (B9) FAC-Neutral Test (D5)  Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	Depth (incl Remarks:	hes):							
Aquatic Invertebrates (B13) Drainage Patterns (B10) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Thin Muck Surface (C7) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Saturation Visible on Aerial Imagery (C	Aquatic Invertebrates (B13)	Depth (incl Remarks: YDROLOG Vetland Hyd	hes):	ator is suff	icient)				Seco	ondary Indicators (2 or more required)
Water Marks (B1) (Nonriverine)	Water Marks (B1) (Nonriverine)	Depth (inci- Remarks:  YDROLOG Vetland Hyd	hes):  Y rology Indicators: ators (any one indicators)	ator is suff	_★ Salt Crust				Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Sediment Deposits (B2) (Nonriverine)	Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Thin Muck Surface (C7) Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Saturation Visible on Aerial Imagery (C3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3) Water-Stained Leaves (B9) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Vater Table Present? Yes No Depth (inches): Vestar Table Present? Yes No	Depth (inci- Remarks:  YDROLOG  Vetland Hydi  Primary Indica  Surface V	hes):  rology Indicators: ators (any one indicators) Vater (A1)	ator is suff	_★ Salt Crust				Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Drift Deposits (B3) (Nonriverine)	Drift Deposits (B3) (Nonriverine)	Depth (inci- Remarks:  YDROLOG  Vetland Hyd  Primary Indica  Surface V  High Wate	hes):  rology Indicators: ators (any one indicators (A1) er Table (A2)	ator is suff	_★ Salt Crust Biotic Crus	st (B12)	es (B13)		Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Saturation Visible on Aerial Imagery (C Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Surface Water Present? Yes No Depth (inches):	Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Saturation Visible on Aerial Imagery (Co Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Stello Observations:  Surface Water Present? Yes No Depth (inches):	Depth (incident of the control of th	hes):  rology Indicators: ators (any one indicators (A1) er Table (A2) n (A3)		Salt Crust Biotic Crus Aquatic In	st (B12) vertebrate			<u>Sec</u>	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3) Water-Stained Leaves (B9) FAC-Neutral Test (D5) Factorial Test (D5)	Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3) Water-Stained Leaves (B9) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Stained Observations: Surface Water Present? Yes No Depth (inches): Stained Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Stained Hydrology Present? Yes No	Depth (incident of the control of th	hes):	ne)	_★ Salt Crust Biotic Crus Aquatic In Hydrogen	st (B12) vertebrate Sulfide O	dor (C1)	g Living Roc	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
		Depth (incident of the content of th	rology Indicators: ators (any one indicators) Vater (A1) er Table (A2) in (A3) arks (B1) (Nonriveriations) Expensits (B2) (Nonriveriations)	ne) nriverine)	_★ Salt Crust Biotic Crus Aquatic In Hydrogen Oxidized F	st (B12) vertebrate Sulfide O Rhizosphe	dor (C1) eres along		Secondary	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Field Observations:  Surface Water Present? Yes No Depth (inches):  Nater Table Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  Second Present? Yes No Depth (inches):  Second Present? Yes No Depth (inches):  Second Present? Yes No No Depth (inches):  Second Present? Yes No _	Signaturations:  Water Table Present? Yes NoX Depth (inches):  Saturation Present? Yes NoX Depth (inches):  Saturation Present? Yes NoX Depth (inches):  Social results of the first of t	Depth (inci- Remarks:  YDROLOG  Vetland Hyd  Primary Indica  Surface V  High Wate  Saturation  Water Ma  Sediment  Drift Depo	rology Indicators: ators (any one indicators (any one indicators) vater (A1) er Table (A2) in (A3) arks (B1) (Nonriveriation (B2) (Noriveriation (B3) (Nonriveriation (B3) (Nonri	ne) nriverine) ine)	_≾ Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro	st (B12) vertebrate Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C	24)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8)
Surface Water Present? Yes No _½_ Depth (inches):  Nater Table Present? Yes No _½_ Depth (inches):  Saturation Present? Yes No _½_ Depth (inches):  includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present? Yes No _½_ Depth (inches):  Vater Table Present? Yes No _½_ Depth (inches):  Saturation Present? Yes No _½_ Depth (inches):  Saturation Present? Yes No _½_ Depth (inches):  Socious Capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (incident of the control of th	rology Indicators: ators (any one indicators (any one indicators) ators (an	ne) nriverine) ine)	_≾ Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro	st (B12) vertebrate Sulfide O Rhizosphe of Reduct	dor (C1) eres along ed Iron (C ion in Plo	24)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
Vater Table Present? Yes No Depth (inches): Baturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Vater Table Present? Yes No Depth (inches): Baturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): Wetland Hydrology Present? Yes No	Depth (inci- Remarks:  YDROLOG  Vetland Hyd  Primary Indica  Surface V  High Water  Saturation  Water Ma  Sediment  Drift Depo  Surface S  Inundation  Water-Sta	rology Indicators: ators (any one indicators (any one indicators (any one indicators (A1) er Table (A2) in (A3) arks (B1) (Nonriveria (B2) (Noriveria (B3) (Nonriveria (B3) (Non	ne) nriverine) ine)	_≾ Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro	st (B12) vertebrate Sulfide O Rhizosphe of Reduct	dor (C1) eres along ed Iron (C ion in Plo	24)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
Saturation Present? Yes NoX Depth (inches): Wetland Hydrology Present? Yes No Includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present? Yes NoX Depth (inches): Wetland Hydrology Present? YesX No ncludes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inci- Remarks:  YDROLOG  Vetland Hyd  Primary Indica  Surface V  High Wate  Saturation  Water Ma  Sediment  Drift Depo	rology Indicators: ators (any one indicators) Vater (A1) er Table (A2) in (A3) irks (B1) (Nonriveri is Deposits (B2) (Noriveri soil Cracks (B6) in Visible on Aerial In ained Leaves (B9) ations:	ine) nriverine) rine) magery (B	Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reduct blain in Re	dor (C1) eres along ed Iron (C ion in Plo emarks)	04) wed Soils (	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	ncludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (inci- Remarks:  YDROLOG  Vetland Hyd  Primary Indica  Surface V  High Water  Saturation  Water Ma  Sediment  Drift Depo  Surface S  Inundation  Water-State  Surface Water  Surface Water	rology Indicators: ators (any one indicators) ators (any one indicators) ators (any one indicators) atter (A1) er Table (A2) in (A3) arks (B1) (Nonriveriators) is Deposits (B2) (Norriveriators) is Deposits (B3) (Nonriveriators) is Deposits (B4)	ne) nriverine) rine) magery (B	X Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro 7) Other (Exp	st (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reduct blain in Re	dor (C1) eres along ed Iron (C ion in Plo emarks)	C4) owed Soils (	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3)
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		Depth (inci- Remarks:  YDROLOG  Vetland Hydi  Primary Indica  Surface V  High Water  Saturation  Water-Sta  Field Observet  Surface Water  Vater Table Formulation Presidence Saturation  Saturation Presidence Sapirates Saturation Presidence Sa	rology Indicators: ators (any one indicators (any one indicators) ater (A1) er Table (A2) in (A3) arks (B1) (Nonriveriations) is Deposits (B2) (Norriveriations) is Deposits (B3) (Nonriveriations) is Deposits (B6) in Visible on Aerial Indianed Leaves (B9) ations: ar Present? Present?  Present?  Illary fringe)	ne) nriverine) rine) magery (B es es es	Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Other (Exp  No Depth (int No Depth (int) No Depth (int)	st (B12) vertebrate Sulfide O Rhizosphe of Reduct n Reduct olain in Re ches): ches): ches):	dor (C1) eres along ed Iron (C ion in Plo emarks)	(24) wed Soils (	Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)
		Depth (inci- Remarks:  YDROLOG  Vetland Hyd  Primary Indica  Surface V  High Water  Saturation  Water-Sta  Gurface Water  Vater Table For Saturation Presenctudes capi  Describe Reco	rology Indicators: ators (any one indicators (any one indicators) ater (A1) er Table (A2) in (A3) arks (B1) (Nonriveriations) is Deposits (B2) (Norriveriations) is Deposits (B3) (Nonriveriations) is Deposits (B6) in Visible on Aerial Indianed Leaves (B9) ations: ar Present? Present?  Present?  Illary fringe)	ne) nriverine) rine) magery (B es es es	Salt Crust Biotic Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Other (Exp  No Depth (int No Depth (int) No Depth (int)	st (B12) vertebrate Sulfide O Rhizosphe of Reduct n Reduct olain in Re ches): ches): ches):	dor (C1) eres along ed Iron (C ion in Plo emarks)	(24) wed Soils (	Second Se	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8) Shallow Aquitard (D3) FAC-Neutral Test (D5)

roject/Site: Collin S 1/1		City/County: 50	Jano (arty Sampling Date:
pplicant/Owner: Douce			State: Sampling Point: SP = 6
			hip, Range: <u>SØ</u> Ø 丁3ル 紀モ
			ncave, convex, none): Slope (%):
ubregion (LRR): LLRC	Lat: <u>38</u>	.073773	Long:121.830852 Datum: NAD 8
oil Map Unit Name: Vaidez Sit loom, orce	ind o to:	2% Slopes,	MLRA 16 NWI classification: N/A
re climatic / hydrologic conditions on the site typical fo			
re Vegetation, Soil, or Hydrology			Are "Normal Circumstances" present? Yes No
re Vegetation, Soil, or Hydrology			(If needed, explain any answers in Remarks.)
			oint locations, transects, important features, et
Hydrophytic Vegetation Present? Yes	No	Is the Sa	ampled Area
Hydric Soil Present? Yes	No X		Wetland? Yes No _X
Netland Hydrology Present? Yes	No X		
Remarks:			
EGETATION		1	
Con Stratum (Use exignities - 101	Absolute		
ree Stratum (Use scientific names.) (=30		Species? St	Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
			Species Across All Strata: (B)
Total Co	over:		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 species3 x 2 =6
			FAC species 93 x3 = 279
erb Stratum (75.5) Total Co	over:		FACU species\6 x 4 =60
Festuca perrenis	80	Y	UPL species x5 = Column Totals: (A) 345 (B)
Hordeum Marinum	10	N FF	— Column rotals. (A)
Frankinia Salina	3		Prevalence Index = B/A =3.11
Horaeun murinum	15		Hydrophytic Vegetation Indicators:
Distichis spicata	3		AC Dominance Test is >50%
			Prevalence Index is ≤3.0¹
			Morphological Adaptations <sup>1</sup> (Provide supporting
			data in Remarks or on a separate sheet)
Total Co	ver:		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
oody Vine Stratum C= 15			10 COSTO COSTO COSTO CONTRACTO
			Indicators of hydric soil and wetland hydrology must be present.
	ver:		Hydrophytic Vegetation
Total Co			
	ver of Biotic Cru	ıst O	Present? Yes No No
	ver of Biotic Cru	ıst <u>O</u>	Present? Yes No No
Bare Ground in Herb Stratum % Co	ver of Biotic Cru	ust <u>O</u>	Present? Yes No No

_	-	

Sampling Point: S1-2

Depth Matrix		Redox	Feature	s			
(inches) Color (moist)	%	Color (moist)	%	Type'	_Loc <sup>2</sup>		Remarks
0-1,5 10112 41	100		-	_		SICLLO	
1.6-11 10412 3/	98	10 1/2 3/4	2	(-	M	SILL	
1-15 10412 7/	85	7.54R3/3	15	C	M	SICL	
Type: C=Concentration, D=D	epletion, RM	=Reduced Matrix.	2 Location	n: PL=Por	e Lining,	RC=Root Cha	nnel, M=Matrix.
Hydric Soil Indicators: (App	licable to all	LRRs, unless other	wise not	ted.)			rs for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Redo				1 cm	Muck (A9) (LRR C)
Histic Epipedon (A2)		Stripped Ma					Muck (A10) (LRR B)
Black Histic (A3) Hydrogen Sulfide (A4)		Loamy Muc	•				uced Vertic (F18)
Stratified Layers (A5) (LR	R C)	Loamy Gley					Parent Material (TF2)
1 cm Muck (A9) (LRR D)		Depleted M Redox Dark				Othe	er (Explain in Remarks)
Depleted Below Dark Sur	ace (A11)	Depleted Da					
Thick Dark Surface (A12)	,,	Redox Depi					
Sandy Mucky Mineral (S1	)	Vernal Pool				3Indicato	rs of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)						wetla	nd hydrology must be present.
Restrictive Layer (if present	:						
Tomas							
Type:							V
Depth (inches): Remarks:						Hydric S	oil Present? Yes No
Depth (inches):						Hydric S	oil Present? Yes No
Depth (inches):Remarks:							
Depth (inches):Remarks:  YDROLOGY Wetland Hydrology Indicato	rs:						condary Indicators (2 or more required)
Depth (inches):	rs:	fficient)	(B11)			Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine)
Depth (inches):  Remarks:  YDROLOGY  Wetland Hydrology Indicato  Primary Indicators (any one in  Surface Water (A1)	rs:	fficient) Salt Crust				Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (inches): Remarks:  YDROLOGY Wetland Hydrology Indicato Primary Indicators (any one in Surface Water (A1) High Water Table (A2)	rs:	fficient) Salt Crust Biotic Cru	st (B12)	tes (B13)		Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Depth (inches): Remarks:  YDROLOGY  Wetland Hydrology Indicato Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3)	rs: dicator is sut	fficient) Salt Crust Biotic Cru Aquatic In	st (B12) vertebrat			Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Depth (inches):  Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonring Remarks (B1) (Nonring Remarks): Saturation (A3) Water Marks (B1) (Nonring Remarks): Saturation (A3)	rs: dicator is suf verine)	fficient) Salt Crust Biotic Cru Aquatic In Hydrogen	st (B12) vertebrat Sulfide (	Odor (C1)	a Living R	<u>Se</u>	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches):	rs: dicator is suf verine) Nonriverine	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen ) Oxidized I	st (B12) vertebrat Sulfide ( Rhizosph	Odor (C1) eres along		<u>Se</u>	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Depth (inches):	rs: dicator is suf verine) Nonriverine	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I	st (B12) vertebrat Sulfide ( Rhizosph of Reduc	Odor (C1) eres along ced Iron (C	24)	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Depth (inches):	rs: dicator is suf verine) Nonriverine iverine)	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) vertebrate Sulfide ( Rhizosph of Reduction Reduction	Odor (C1) heres along ced Iron (C ction in Plo	24)	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonri Sediment Deposits (B2) (Drift Deposits (B3) (Nonri Surface Soil Cracks (B6) Inundation Visible on Aer	rs: dicator is suf verine) Nonriverine iverine)	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) vertebrate Sulfide ( Rhizosph of Reduction Reduction	Odor (C1) heres along ced Iron (C ction in Plo	24)	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):	rs: dicator is suf verine) Nonriverine iverine)	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) vertebrate Sulfide ( Rhizosph of Reduction Reduction	Odor (C1) heres along ced Iron (C ction in Plo	24)	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonring Surface Soil Cracks (B6) Inundation Visible on Aer Water-Stained Leaves (B	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (I	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen ) Oxidized I Presence Recent Irc B7) Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduce on Reduce plain in F	Odor (C1) teres along ced Iron (Cotion in Plo Remarks)	c4) wed Soils	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):	rs: dicator is suf verine) Nonriverine iverine) ial Imagery (I	Salt Crust  Salt Crust  Biotic Cru  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Irc  B7)  Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) leres along ced Iron (C ction in Plo Remarks)	(24) wed Soils	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inches):  Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonri Sediment Deposits (B2) (Drift Deposits (B3) (Nonri Surface Soil Cracks (B6) Inundation Visible on Aer Water-Stained Leaves (BField Observations: Surface Water Present? Water Table Present?	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (i	Fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) eres along ced Iron (C ction in Plo Remarks)	(24) owed Soils	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Proposition (A3)  Water Marks (B1) (Nonribus (B3)	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (19) Yes Yes Yes	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) peres along ced Iron (C ction in Plo Remarks)	(24) www.d Soils	Se Soots (C3)	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Proposition (A3)  Water Marks (B1) (Nonrimance Sourface Water (A2)  Saturation (A3)  Water Marks (B1) (Nonrimance Sourface Sourface (B6)  Inundation Visible on Aerundation Water Stained Leaves (B7)  Water Marks (B6)  Inundation Visible on Aerundation Visible Observations:  Surface Water Present?  Water Table Present?	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (19) Yes Yes Yes	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) peres along ced Iron (C ction in Plo Remarks)	(24) www.d Soils	Se Soots (C3)	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Proposition (A3)  Water Marks (B1) (Nonribus (B3)	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (19) Yes Yes Yes	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) peres along ced Iron (C ction in Plo Remarks)	(24) www.d Soils	Se Soots (C3)	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Remarks:  YDROLOGY  Wetland Hydrology Indicator Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonring Sediment Deposits (B2) (Nonring Surface Soil Cracks (B6) Inundation Visible on Aere Water-Stained Leaves (Brield Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stress	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (19) Yes Yes Yes	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) peres along ced Iron (C ction in Plo Remarks)	(24) www.d Soils	Se Soots (C3)	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):  Remarks:  YDROLOGY  Wetland Hydrology Indicator Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonring Sediment Deposits (B2) (Nonring Surface Soil Cracks (B6) Inundation Visible on Aere Water-Stained Leaves (Brield Observations: Surface Water Present? Water Table Present? Saturation Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stress	rs: dicator is suf verine) Nonriverine; iverine) ial Imagery (19) Yes Yes Yes	fficient)  Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrat Sulfide ( Rhizosph of Reduc on Reduc plain in F	Odor (C1) peres along ced Iron (C ction in Plo Remarks)	(24) www.d Soils	Se Soots (C3)	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

# W-3)

Investigator(s): Karen Bach, Stray Wells Secondary Colored Long Colored Long Colored Long Colored Long Colored Long Colored Lat: 38.0 Soil Map Unit Name: Na	cal relief (concave, concave), relief (concave, concave), relief (concave), relief (	State: CA Sampling Point: Specific Superior State: Sampling Point: Specific Superior State: S
Are Vegetation, Soil, or Hydrology significantly distance Yes, and Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydr	retion, Township, Rang cal relief (concave, con 721470  Yes	Dominance Test worksheet:  Nurex, none):
Subregion (LRR): Lat: 38.0  Soil Map Unit Name: Name: Name: Name: Name: Note of the street typical for this time of year?  Are Climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation, Soil, or Hydrology significantly distance Vegetation, Soil, or Hydrology naturally proble  SUMMARY OF FINDINGS — Attach site map showing sate of the site of t	Yes X No	Long:
re climatic / hydrologic conditions on the site typical for this time of year?  Tree Vegetation, Soil, or Hydrology significantly distance Vegetation, Soil, or Hydrology naturally proble summary Vegetation, Soil, or Hydrology naturally proble summary Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No  Wetland Hydrology Present?  Yes No  Wetland Hydrology Present?  Toolated depression adjacent to manner the south. No inject of other to the following sample of the south. No inject of other to manner the south.  Tree Stratum (Use scientific names.)  Tree Stratum (Use scientific names.)  Absolute [1]  2	Yes No	NWI classification:
re climatic / hydrologic conditions on the site typical for this time of year?  re Vegetation, Soil, or Hydrology significantly districted to the Vegetation, Soil, or Hydrology naturally problem.  PUMMARY OF FINDINGS - Attach site map showing satisfies the Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No  Hydrophytic Vegetation Present?  Yes No  Wetland Hydrology Present?  Yes No  Fremarks:  I SOINTA DEPOSITION adjuunt to Manne the South, No inset of other the South.  Free Stratum (Use scientific names.)  Free Stratum (Use scientific names.)  Absolute [ % Cover ]	turbed? Are "No turbed? Are "No turbed? Are "No termatic? (If nee ampling point lo  Is the Sampled within a Wetlan  Dominant Indicator Species? Status	Common
re climatic / hydrologic conditions on the site typical for this time of year?  re Vegetation, Soil, or Hydrology significantly districted to the Vegetation, Soil, or Hydrology naturally problem.  PUMMARY OF FINDINGS - Attach site map showing satisfies the Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No  Hydrophytic Vegetation Present?  Yes No  Wetland Hydrology Present?  Yes No  Fremarks:  I SOINTA DEPOSITION adjuunt to Manne the South, No inset of other the South.  Free Stratum (Use scientific names.)  Free Stratum (Use scientific names.)  Absolute [ % Cover ]	turbed? Are "No turbed? Are "No turbed? Are "No termatic? (If nee ampling point lo  Is the Sampled within a Wetlan  Dominant Indicator Species? Status	Common
Tree Stratum (Use scientific names.)  PUMMARY OF FINDINGS — Attach site map showing satisfies the street of the st	Is the Sampled within a Wetlan  Dominant Indicator Species? Status	Area d?  Yes No  Dominance Test worksheet:  Number of Dominant Species
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present?  Yes X No Yes X No	Is the Sampled within a Wetlan  Dominant Indicator Species? Status	Area d? Yes No  Crating into from constant to  Dominance Test worksheet:  Number of Dominant Species
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X No	Is the Sampled within a Wetlan  Le been See  Dominant Indicator Species? Status	Area d? Yes No  wating into from constance to  Dominance Test worksheet:  Number of Dominant Species
Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  I Soint a depression adjuunt to manne the south, No injust outlet.  FEGETATION  Tree Stratum (Use scientific names.) = 301 Absolute 6 % Cover 9 1.  2.  3.  4.	within a Wetlan  Le blem see  Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species
Isolated depression adjust to manner the south, No inject outlet.  /EGETATION  Tree Stratum (Use scientific names.) = 30' Absolute 6 % Cover 5 1.  2.  3.  4.	Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species
Tree Stratum (Use scientific names.) (30' Absolute 6% Cover 91.	Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species
Tree Stratum (Use scientific names.) (30) Absolute (% Cover 5)  1	Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species
Tree Stratum (Use scientific names.) (30) Absolute (% Cover stratum) (2	Species? Status	Number of Dominant Species
Tree Stratum (Use scientific names.) (30) Absolute (% Cover stratum)  1	Species? Status	Number of Dominant Species
Tree Stratum (Use scientific names.)	Species? Status	Number of Dominant Species
2		That Are OBL, FACW, or FAC: (A)
3		
/ 2		Total Number of Dominant
/ 2		Species Across All Strata: (B)
Total Cover:		Percent of Dominant Species That Are OBL, FACW, or FAC:\OO'/ (A/B'
Sapling/Shrub Stratum Y=\S		That Are OBL, FACW, or FAC:(OC/(A/B
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 = 25 x 2 = 10
4		FAC species 75 x 3 =
5 Total Cover:		FAC species x 3 = FACU species x 4 =
Herb Stratum (=5)	,	UPL species x 5 =
1. Salicornia Pacifica 25	Y OBL	- Çolumn Totals: 105 (A) 225 (B
2. Distichilis spirata 75	TAC	
3. Frankenia Salina S	N FACW	Prevalence Index = B/A = 2.14
4		Hydrophytic Vegetation Indicators:
5		Dominance Test is >50%
5		Prevalence Index is ≤3.0¹
7		<ul> <li>Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
3		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (= 15 Total Cover:		The second secon
1		<ul> <li>Indicators of hydric soil and wetland hydrology must be present.</li> </ul>
Total Cover:	4	Hydrophytic
% Bare Ground in Herb Stratum % Cover of Biotic C		Vegetation Present?  Yes No
Remarks:		

SOIL

Sampling Point: SP-1

Depth Matrix	Redox Feature	es			
(inches) Color (moist) %	Color (moist) %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-2 104R 2/1 100				Siclo	Muckey Peat. Greasy/stail
					fixed usen rubbed
2-16 GRY109411 80 5	5 NO 2/11 20		M	5:C	()
2-16 612910 911 00 2	113/9 00		7.1	210	Gley page
					Redox promnent
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re			e Lining,		
Hydric Soil Indicators: (Applicable to all LR		tea.)			for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)				Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)				Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Miner				ed Vertic (F18)
— Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C)	Loamy Gleyed Matri				arent Material (TF2) (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Depleted Matrix (F3) Redox Dark Surface			Other	(Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Dark Surfa			*	
Thick Dark Surface (A12)	Redox Depressions				
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	(/		3Indicators	of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)					hydrology must be present.
Destrictive Lawrentife and author					
Restrictive Layer (if present):					
	_				\/
Type: _ N/A  Depth (inches):	or organic matter	t and a	a mock	Hydric Soil	
Type: N/A  Depth (inches):  Remarks:  Top layer of Soil is Mix is then turns powdery and stains f	or organic matter singed when rubbed,	rond a	nick en	7.00	
Type: _ N/A  Depth (inches):	or organic matter singed when rubbed,	rond a	nick en	7.00	
Type: N/A  Depth (inches):  Remarks:  Top layer of Soil is Mix is then turns powdery and stains f	or organic metter singed when rubbed.	rand a	nick en	ky loamy/	
Type: N/A  Depth (inches):  Remarks:  Top layer of soil is mix then turns powdery and stains for a sta		rand a	a much	ey loamy loany lo ma	lmuchy print. Becomes greasy cet flimicator.
Type: N/A  Depth (inches):  Remarks:  TOP layer of SOIL IS MIX I  then turns powdery and Stains f  HYDROLOGY  Wetland Hydrology Indicators:		rond a	nick en	ey loamy/ hough to ma	mucky pent. Becomes greasy eat f I indicator.  Inday Indicators (2 or more required) Vater Marks (B1) (Riverine)
Type: N/A  Depth (inches):	ent)	rond a	nick en	ey loamy/ hough to ma	mucky pent. Becomes greasy  mater Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)
Type: _N/A Depth (inches):	ent) Salt Crust (B11)		i much	Second Se	mucky peat. Becomes greasy eat Flindicator.  Indicators (2 or more required) Vater Marks (B1) (Riverine)
Type: _N/A Depth (inches):	ent) Salt Crust (B11) Biotic Crust (B12)	es (B13)	nick en	Second Se	Inverse Prot. Becomes greasy  adary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rrainage Patterns (B10)
Type: _N/A Depth (inches):	ent) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat	es (B13) Odor (C1)		Second Se	Inverse Prot. Becomes greasy  set F I invicator.  Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)
Type: _N/A Depth (inches):	ent)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide (	es (B13) Odor (C1) eres along	Living Ro	Secon W S D D ots (C3) T	Invekty Prot. Becomes greasy  adary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  rry-Season Water Table (C2)
Type: _N/A Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide ( Oxidized Rhizosph	es (B13) Odor (C1) eres along ced Iron (C4	Living Ro	Second Se	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  orift Deposits (B3) (Riverine)  originage Patterns (B10)  ory-Season Water Table (C2)  hin Muck Surface (C7)  orayfish Burrows (C8)
Type: _N/A Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide C Oxidized Rhizosph Presence of Reduc	es (B13) Odor (C1) eres along ced Iron (C4	Living Ro	Secon  Se	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  orift Deposits (B3) (Riverine)  originage Patterns (B10)  ory-Season Water Table (C2)  hin Muck Surface (C7)  orayfish Burrows (C8)
Type: _N/A Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrat Hydrogen Sulfide ( Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Other (Explain in Reduct)	es (B13) Odor (C1) eres along ced Iron (C4	Living Ro	Secon  Se	Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ray-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  raturation Visible on Aerial Imagery (C9)  challow Aquitard (D3)
Type: _N/A Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide ( Oxidized Rhizosph Presence of Reduct Recent Iron Reduct Other (Explain in Reduct)  Depth (inches):	es (B13) Odor (C1) eres along ced Iron (C4	Living Ro	Secon  Se	Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ray-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  raturation Visible on Aerial Imagery (C9)  challow Aquitard (D3)
Type: _N/A Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Other (Explain in Reduct)  Depth (inches):	es (B13) Odor (C1) eres along sed Iron (C4 tion in Plov demarks)	Living Ro	Secon  Se	Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rrainage Patterns (B10)  rry-Season Water Table (C2)  hin Muck Surface (C7)  rrayfish Burrows (C8)  raturation Visible on Aerial Imagery (C9)  rhallow Aquitard (D3)
Type: _N/A Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Other (Explain in Reduct)  Depth (inches):  Depth (inches):	es (B13) Odor (C1) eres along sed Iron (C4 tion in Plov demarks)	Living Ro 4) ved Soils	Second Sec	Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ray-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  challow Aquitard (D3)  AC-Neutral Test (D5)
Type: _N/A Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Other (Explain in Reduct)  Depth (inches):  Depth (inches):	es (B13) Odor (C1) eres along sed Iron (C4 tion in Plov demarks)	Living Ro 4) ved Soils	Second Sec	Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  rry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  challow Aquitard (D3)  AC-Neutral Test (D5)
Type: _N/A Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Other (Explain in Reduct)  Depth (inches):  Depth (inches):	es (B13) Odor (C1) eres along sed Iron (C4 tion in Plov demarks)	Living Ro 4) ved Soils	Second Sec	Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  rry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  challow Aquitard (D3)  AC-Neutral Test (D5)
Type: _N/A Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrat  Hydrogen Sulfide C  Oxidized Rhizosph  Presence of Reduct  Recent Iron Reduct  Other (Explain in Reduct)  Depth (inches):  Depth (inches):  Depth (inches):	es (B13) Odor (C1) eres along ted Iron (C4 tion in Plow temarks)	Living Ro 4) wed Soils  Wet	Second Ho Managh	mucky Prot. Becomes greasy  adary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  rry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  raturation Visible on Aerial Imagery (C9)  rhallow Aquitard (D3)  AC-Neutral Test (D5)

W-3

Project/Site: CONINSVILL	c	ity/County:	Solumo	County	Sampling Date: 5-8-24
Applicant/Owner: LS Power				State: CA	Sampling Point: SP-2
nvestigator(s): Karen Bach, Sidney Wells		ection Tow	nshin Ranc	18: SOO T3N	RIE.
andform (hillslope, terrace, etc.): רברה בל אונים ביות בל אונים ביות בל ביות בל אונים ביות בל ביות בל אונים ביות בל ב	200	codon, row	nonp, rang	CO. 1	0 × 01 (0/2)
Subregion (I PP): 1 0 0	79	DZ206	concave, co	nivex, none): CONO	Slope (%):
Subregion (LRR): LRRC Soil Map Unit Name: Valdez 5:17 long Janul, 0-					
Are climatic / hydrologic conditions on the site typical for this			/		
					( )
Are Vegetation, Soil, or Hydrology sig					present? YesX No
Are Vegetation, Soil, or Hydrology na				ded, explain any answ	
SUMMARY OF FINDINGS – Attach site map s	howing	sampling	point lo	cations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No		le the	Compled		. /
Hydric Soil Present? Yes No	X	1 5 6	Sampled		X
Wetland Hydrology Present? Yes No		Withi	n a Wetland	r Yes	No
Remarks:					
Low terrace above SP-1 victions	Plot,	ust be	100 Mc	nmile berm.	
VEGETATION					
	Absolute	Dominant		Dominance Test wo	rksheet:
		Species?		Number of Dominant	Species
1				That Are OBL, FACW	/, or FAC: (A)
2				Total Number of Dom	
3				Species Across All St	trata: 2 (B)
4	0			Percent of Dominant	
Sapling/Shrub Stratum Y=S' Total Cover:				That Are OBL, FACV	
1				Prevalence Index w	orksheet:
2.				Total % Cover of	70070777710
3					x1=
4.					x 2 =
5					x 3 =
Total Cover	_ 0				x 4 =
Herb Stratum (=5)	00	^/			x 5 =
1. Festuca perrenis	20		FAC		(A) (B)
2. Hordeum murinum	20	- <del>\lambda</del>	FACU	_	
3. Horsey marinum	50		FAC		dex = B/A =
4. Distichiis spirata	30		FAC	Hydrophytic Veget	
5. Lactuca Serriola	3	- 2	FACU	∠ Dominance Tes	
6. FORNIWIUM JUIGARE			UPL	Prevalence Inde	
7. Frankeria Salina	10		FACW	Morphological A	Adaptations <sup>1</sup> (Provide supporting arks or on a separate sheet)
8	124				drophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum Y= 15 <sup>1</sup> Total Cover	157	-			(
1				<sup>1</sup> Indicators of hydric	soil and wetland hydrology must
2				be present.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Total Cover	. 0			Hydrophytic	
		_	$\circ$	Vegetation	Y
// Oove	r of Biotic (	Crust	<u> </u>	Present?	Yes No
Remarks:					

_	_		
		.,	

Sampling Point: SP-2

Profile Description: (Describe to Depth Matrix	Red	dox Feature				X
(inches) Color (moist)	% Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-1.5 7.5 YR 2.5/1	100_				ORG. +Si	<u> </u>
15-14 2.54 4/3	95 IOYR 4/6	5	cc	M	Sic	
			_	_		
Type: C=Concentration, D=Depleti	on, RM=Reduced Matrix.			e Lining,		annel, M=Matrix. rs for Problematic Hydric Soils³:
lydric Soil Indicators: (Applicable			ea.)			
_ Histosol (A1)	Sandy Re					n Muck (A9) (LRR C) n Muck (A10) (LRR B)
Histic Epipedon (A2)		Matrix (S6) ucky Minera	J /E1)			uced Vertic (F18)
Black Histic (A3) Hydrogen Sulfide (A4)		leyed Matrix				Parent Material (TF2)
Hydrogen Suinde (A4) Stratified Layers (A5) (LRR C)		Matrix (F3)				er (Explain in Remarks)
Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D)		ark Surface			_ 0.00	
Depleted Below Dark Surface (A		Dark Surface	-			
Thick Dark Surface (A12)		epressions (				
Sandy Mucky Mineral (S1)	Vernal Po		,		3Indicato	rs of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	voillair o	(. 0)				nd hydrology must be present.
lestrictive Laver (if present):						
1.						\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Restrictive Layer (if present):  Type:					Hydric Sc	oil Present? Yes No
Type:					Hydric Sc	oil Present? Yes No
Type: Depth (inches): Remarks:						
Type: NA						ondary Indicators (2 or more required)
Type:	r is sufficient)					
Type:	r is sufficient) Salt Crue	st (B11)				ondary Indicators (2 or more required)
Type:	Salt Crus	st (B11) rust (B12)				ondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type:	Salt Crus		es (B13)			condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type:	Salt Crue Biotic Cr Aquatic	rust (B12) Invertebrate				ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Type:	Salt Crus Biotic Cr Aquatic l Hydroge	rust (B12) Invertebrate en Sulfide O	dor (C1)	Living Ro	Sec	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type:	Salt Crus Biotic Cr Aquatic   Hydroge verine) Oxidized	rust (B12) Invertebrate In Sulfide O I Rhizosphe	dor (C1) eres along		Sec	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Type:	Salt Crus Biotic Cr Aquatic   Hydroge verine) Oxidized Presence	rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce	dor (C1) eres along ed Iron (C4	4)	Sec	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Type:	Salt Crus Biotic Cr Aquatic   Hydroge Oxidized Presence Recent I	rust (B12) Invertebrate In Sulfide Or I Rhizosphe I Reduce I Reduce	dor (C1) eres along ed Iron (C4 ion in Ploy	4)	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Type:	Salt Crus Biotic Cr Aquatic   Hydroge Oxidized Presence Recent I	rust (B12) Invertebrate en Sulfide O d Rhizosphe e of Reduce	dor (C1) eres along ed Iron (C4 ion in Ploy	4)	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Type:	Salt Crus Biotic Cr Aquatic   Hydroge Oxidized Presence Recent I	rust (B12) Invertebrate In Sulfide Or I Rhizosphe I Reduce I Reduce	dor (C1) eres along ed Iron (C4 ion in Ploy	4)	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Salt Crus Biotic Cr Aquatic   Hydroge Oxidized Presence Recent I	rust (B12) Invertebrate en Sulfide Or d Rhizosphe e of Reduce ron Reducti xplain in Re	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	4) ved Soils	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Salt Crus Biotic Cr Aquatic I Hydroge verine) Oxidized Presence Recent I gery (B7) Other (E	rust (B12) Invertebrate en Sulfide Or d Rhizosphe e of Reduce ron Reducti xplain in Re	dor (C1) eres along ed Iron (C- ion in Plov ernarks)	4) ved Soils	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Salt Crus	rust (B12) Invertebrate en Sulfide Or Reduce ron Reducti explain in Re inches): inches):	dor (C1) eres along ed Iron (C- ion in Plov emarks)	yed Soils  Wet	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Salt Crus	rust (B12) Invertebrate en Sulfide Or Reduce ron Reducti explain in Re inches): inches):	dor (C1) eres along ed Iron (C- ion in Plov emarks)	yed Soils  Wet	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	Salt Crus	rust (B12) Invertebrate en Sulfide Or Reduce ron Reducti explain in Re inches): inches):	dor (C1) eres along ed Iron (C- ion in Plov emarks)	yed Soils  Wet	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	Salt Crus	rust (B12) Invertebrate en Sulfide Or Reduce ron Reducti explain in Re inches): inches):	dor (C1) eres along ed Iron (C- ion in Plov emarks)	yed Soils  Wet	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

	Ci	ty/County:	Sdano	Country	Sampling Date: 05-0	8-24
				State:	Sampling Point: SP-	3
, sidney me	Ils s	ection, Town	nship, Rang	e: 500 T3A	1 816	
						Jn.
						es, etc.
		Is the	Sampled /	Area	~	
	. /				No	1
Yes No		,				
ng circa slitht	IN UPS	lope an	of to the	e east of se	21. NO obvios	
3	2					
C-30'			COLUMN TO THE OWNER OF THE OWNER O	Dominance Test w	orksheet:	
						(A)
					770 771 771 777	_ (''
					/	(B)
						(-/
Total Cover:	0				nt Species CW. or FAC:	(A/B)
		1				
		-	-			
-						
Total Cover:	0					
Total Gover.						
	70	Υ				
	40	Y	FAC			
	2		FAC			<del></del>
	_2	<u> </u>	FACW			
		-	-	Morphologica	al Adaptations` (Provide s emarks or on a separate s	upporting heet)
Total Cover	: 199	-				
				<sup>1</sup> Indicators of hyd	dric soil and wetland hydro	ology must
				be present.		
				Hydrophytic		
^				Vegetation	v. X	
% Cover	of Biotic	Crust		Present?	res_/_ No	
	Total Cover	Lat: 38.  Lat: 38.  Loam, Janiel, 0-2's site typical for this time of year ordrology significantly divide logy naturally probach site map showing:  Yes No Yes Yes No Yes	Local relief (company) Company	Local relief (concave, co Lat: 38. 07 2 0192  Local relief (concave, co Lat: 38. 07 2 0192  Local relief (concave, co Lat: 38. 07 2 0192  Local relief (concave, co Lat: 38. 07 2 0192  Local relief (concave, co Lat: 38. 07 2 0192  Local relief (concave, co Lat: 38. 07 2 0192  Absolute or significantly disturbed? Are "N  Absolute or site sampled within a Wetland  Absolute or species? Status  Total Cover:  T	State:    State:   Section, Township, Range: SØ T3A	Absolute Dominant Indicator Wes No Species? Status  Total Cover:  Total

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5	u	ı	L	

Depth Matrix		x Feature				
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup> _	Texture	1101110
0-2 104R2/1					SICL	<u> </u>
	- CHA 2/-					
2-18 2.54 4/1 75	7.54R 3/3	25			Sic	
		-				
		_				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=		<sup>2</sup> Location	: PL=Por	e Lining, R		nnel, M=Matrix.
Hydric Soil Indicators: (Applicable to all L			ed.)			rs for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redo					Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Ma					Muck (A10) (LRR B)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Muc					iced Vertic (F18) Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Loamy Gley XDepleted M		(F2)			
1 cm Muck (A9) (LRR D)			FC)		Othe	r (Explain in Remarks)
Depleted Below Dark Surface (A11)	Redox Dark					
Thick Dark Surface (A12)	Depleted Da					
Sandy Mucky Mineral (S1)	Redox Depr		-8)		3,	6 b d b - dia d
Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)	Vernal Pool	s (F9)				s of hydrophytic vegetation and
estrictive Layer (if present):					wetian	d hydrology must be present.
Type: N/A						
Depth (inches):						I Present? Yes X No
Depth (mones).						Present/ Yes /\ No
emarks:					Hydric Soi	NTICSCHILI TOS <u>//</u> NO
					Hydric Sol	103 <u>/</u> 10
DROLOGY						ndary Indicators (2 or more required)
DROLOGY etland Hydrology Indicators:	ent)				Seco	
DROLOGY etland Hydrology Indicators:	ent) Salt Crust (	B11)			Seco	ndary Indicators (2 or more required) Water Marks (B1) (Riverine)
DROLOGY etland Hydrology Indicators: imary Indicators (any one indicator is sufficie	Salt Crust (				<u>Seco</u>	indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
DROLOGY  etland Hydrology Indicators:  imary Indicators (any one indicator is sufficiently surface Water (A1)  High Water Table (A2)	Salt Crust (	(B12)	(B13)		Seco \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
TDROLOGY etland Hydrology Indicators: imary Indicators (any one indicator is sufficiently surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust ( Biotic Crust Aquatic Inv	(B12) ertebrates			Seco 	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
TDROLOGY  etland Hydrology Indicators:  imary Indicators (any one indicator is sufficie  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	Salt Crust ( Biotic Crust Aquatic Invo	(B12) ertebrates Sulfide Ode	or (C1)	iving Poot	Seco 	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Salt Crust ( Biotic Crust Aquatic Inv Hydrogen S Oxidized RI	t (B12) ertebrates Sulfide Ode nizosphere	or (C1) es along L		Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence or	t (B12) ertebrates Sulfide Odd nizosphere f Reduced	or (C1) es along L I Iron (C4)	)	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficiently surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Salt Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized RI Presence of Recent Iron	t (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction	or (C1) es along L I Iron (C4) n in Plowe	)	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized RI Presence or	t (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction	or (C1) es along L I Iron (C4) n in Plowe	)	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized RI Presence of Recent Iron	t (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction	or (C1) es along L I Iron (C4) n in Plowe	)	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
retland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Expl	ertebrates Sulfide Ode nizosphere f Reduced Reduction ain in Ren	or (C1) es along L I Iron (C4) n in Plowe narks)	) ed Soils (C	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
retland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Ind Observations:  Trace Water Present?  Yes No	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Explain	ertebrates Gulfide Ode nizosphere f Reduced Reduction ain in Ren	or (C1) es along L I Iron (C4) n in Plowe narks)	) ed Soils (C	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficie Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes No	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Explain	ertebrates Gulfide Ode nizosphere f Reduced Reduction ain in Ren	or (C1) es along L I Iron (C4) n in Plowe narks)	) ed Soils (C	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
retland Hydrology Indicators: imary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Indicator Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Indicator Visible Observations: Indicator Visible Observations Indicators (A1) Indicators (A1) Indicators (A1) Indicator Indicator Is sufficient Indicator Is s	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Expla	t (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction ain in Ren nes): nes):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
/ PROLOGY / Vetland Hydrology Indicators:	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Expla	t (B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction ain in Ren nes): nes):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Seco	Indary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Bid Observations:  rface Water Present? Yes No ater Table Present? Yes No turation Present? Yes No cludes capillary fringe) scribe Recorded Data (stream gauge, monitor)	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Explain Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	ertebrates Sulfide Odd nizosphere f Reduced Reduction ain in Ren nes): nes): nes): zes): zeso, prev	or (C1) es along L I Iron (C4) n in Plowe narks)	ections), if	Seco	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
etland Hydrology Indicators: imary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations: face Water Present?  face Water Present	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Explain Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	ertebrates Sulfide Odd nizosphere f Reduced Reduction ain in Ren nes): nes): nes): zes): zeso, prev	or (C1) es along L I Iron (C4) n in Plowe narks)	ections), if	Seco	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
etland Hydrology Indicators: mary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Ind Observations: face Water Present?  Yes Noter Table Present?	Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Other (Explain Depth (inch Depth (inch Depth (inch Dring well, aerial phonoring well, aerial phon	(B12) ertebrates Sulfide Odd nizosphere f Reduced Reduction ain in Ren nes): nes): nes): otos, prev	or (C1) es along L I Iron (C4) n in Plowe narks)  2 2 vious insp	Wetlanections), if	Seco	Indary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

[W-4]

pplicant/Owner: LS POWEY					mpling Date: $05 - 09 - 14$
ovestigator(s): Karen Bach, Sidney We	NS Sec	tion. Tov	nship. Ran	de.	ripining Forme
andform (hillslope, terrace, etc.):					
ubregion (LRR):					
oil Map Unit Name:					n:
e climatic / hydrologic conditions on the site typical for this t		Vac )	/		
					~ /
re Vegetation, Soil, or Hydrology sig				Normal Circumstances" pres	/
re Vegetation, Soil, or Hydrology nat				eded, explain any answers in	
UMMARY OF FINDINGS – Attach site map s	howing sa	mpling	point lo	ocations, transects, in	nportant features, etc
Hydrophytic Vegetation Present? Yes No		1- 41-			
		1393/2	e Sampled n a Wetlan	Area	No
Wetland Hydrology Present? Yes X No		with	n a vvetian	ar res_/	NO
Remarks:					
EGETATION					
	Absolute D	ominant	Indicator	Dominance Test worksho	oet.
F w1 -	% Cover S			Number of Dominant Spec	100 m 1 m 2 m 2 m 1 m 1 m 1 m 1 m 1 m 1 m 1
1				That Are OBL, FACW, or F	
2				Total Number of Dominant	2
3				Species Across All Strata:	
4		_		Percent of Dominant Spec	cies
Sapling/Shrub Stratum 5/4+=1 Total Cover:				That Are OBL, FACW, or I	
1. <u>Pubus armeniacus</u>	5	¥		Prevalence Index works	heet:
2.		-		Total % Cover of:	
3.				OBL species	
4.				FACW species	
5.				FAC species	
Herb Stratum 5ft=V Total Cover:	5			FACU species	x 4 =
Herb Stratum Str-V	10	ΛΙ	00/	UPL species	x 5 =
. Schoenopeetus amencanus	10 _	/V	OBL	Column Totals:	(A) (B
2. Tupna latifolia 3. Persicaria amphibia	20	10	OBL	Drovolones Index -	D/A -
5choenoprectus acuts occidentalis	1 -	<del>                                      </del>	OBL	Hydrophytic Vegetation	: B/A =
Denanthe Sarmentosa	10	1	OBL	Dominance Test is >	
s. Ludwaia zerdoides	25	7	OBL	Prevalence Index is :	
Juncus balticus	25	7	FACW		ations <sup>1</sup> (Provide supporting
3. Juneus xiphioides	15		OBL	data in Remarks	or on a separate sheet)
	117		OVE	Problematic Hydroph	nytic Vegetation <sup>1</sup> (Explain)
Noody Vine Stratum 5 F7=V Total Cover:	117				
					and wetland hydrology must
2.				be present.	
Total Cover:	_0_			Hydrophytic	
% Bare Ground in Herb Stratum\O % Cover	of Biotic Crus	st		Vegetation Present? Yes	X No
				0.100,011011	
	annic 1	n MM	don't	many maderan	m community
netland boundary, and topogra	aphic i	DONNI	MULL.		

epth	ription: (Describe	to the dep	oth needed to docur			or confir	m the absence of	indicators.)
-	Matrix	%	Color (moist)	x Feature %	S Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
nches)	Color (moist)		Color (moist)	70	Туре	LUC	<u>= 1000000</u>	Nemarks
-10	7.54K2.5/	100					2110	
.5-6	104R 3/2	100		_			Sillo	
D- \1	Gley 1 N 4/0	90	7.54P4/6	10	C	M	SiClo	
1-14	Gley NA/C	97	7.54R 5/8	3	C	M	SiClo	
4-16	Caletal N4/	95	G18411046	1 5	D	M	SaCLA-	
vpe: C=C	oncentration, D=De	pletion. RN		<sup>2</sup> Locatio	n: PL=Po	re Lining.	RC=Root Channe	I, M=Matrix.
			I LRRs, unless other	erwise no	ted.)		Indicators fo	or Problematic Hydric Soils <sup>3</sup> :
_ Histoso	I (A1)		Sandy Red	dox (S5)				ck (A9) (LRR C)
_ Histic E	pipedon (A2)		Stripped M				2 cm Mu	ck (A10) (LRR B)
	istic (A3)		Loamy Mu					Vertic (F18)
	en Sulfide (A4)		X Loamy Gle				The second secon	ent Material (TF2)
	d Layers (A5) (LRR	(C)	Depleted N				Other (E	xplain in Remarks)
	uck (A9) (LRR D) ed Below Dark Surfa	re (A11)	Redox Da Depleted I					
	Park Surface (A12)	00 (/111)	Redox De					
	Mucky Mineral (S1)		Vernal Po		()		3Indicators of	hydrophytic vegetation and
	Gleyed Matrix (S4)		-					ydrology must be present.
Restrictive	Layer (if present):							
Type:	NIA							\ <u></u>
Depth (i	nches):						Hydric Soil P	resent? Yes No No
Remarks:								
YDROL	OGY							
		's:					Second	lary Indicators (2 or more required)
Wetland H	OGY lydrology Indicator dicators (any one inc		ufficient)					lary Indicators (2 or more required)
Wetland H	lydrology Indicator			est (B11)			Wa	ater Marks (B1) (Riverine)
Wetland H Primary Ind Surface High V	lydrology Indicator dicators (any one index we Water (A1) Water Table (A2)		Salt Cru	st (B11) rust (B12)			Wa	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Wetland H Primary Ind Surface High V	lydrology Indicator dicators (any one index we Water (A1) Water Table (A2)		Salt Cru	rust (B12)			Wa Se Dri	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
Wetland H Primary Ind Surface High V	lydrology Indicator dicators (any one index we Water (A1) Water Table (A2)	dicator is s	Salt Cru Biotic CAquatic	rust (B12)	ates (B13)		Wa Se Dri Dr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10)
Wetland H Primary Ind Surface High V Satura Water	lydrology Indicator dicators (any one indicators (any one indicators) we Water (A1) Water Table (A2) ation (A3)	dicator is so	Salt Cru Biotic CAquatic Hydroge	rust (B12) Invertebra en Sulfide	ates (B13) Odor (C1	)	Wa Se Dri Dri	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine)
Wetland H Primary Ind Surface High V Satura Water Sedim	lydrology Indicator dicators (any one indicators (any one indicators) water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriv	dicator is si verine) Nonriverin	Salt Cru Biotic C Aquatic Hydroge Oxidize	rust (B12) Invertebra en Sulfide	ates (B13) Odor (C1 heres alo	) ng Living F	Wa Se Dri Dr Dr Roots (C3) Th	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
Wetland H Primary Ind Surface High V Satura Water X Sedim Drift D Surface	ydrology Indicator dicators (any one indicators (any one indicators) water (A1) Vater Table (A2) ation (A3) Marks (B1) (Nonriv ment Deposits (B2) (I deposits (B3) (Nonri ce Soil Cracks (B6)	verine) Nonriverine (verine)	Salt Cru Biotic C Aquatic Hydroge ie) Oxidizer Presenc Recent	rust (B12) Invertebra en Sulfide d Rhizosp	otes (B13) Odor (C1 heres alo niced Iron	) ng Living F (C4)	Wa Se Dri Dri Dri Roots (C3) Th Cr	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8)
Wetland H Primary Ind Surface High V Satura Water X Sedim X Surface Surface Inund	lydrology Indicator dicators (any one indicators (any one indicators) we Water (A1) Water Table (A2) ation (A3) Marks (B1) (Nonriv ment Deposits (B2) (I Deposits (B3) (Nonri ce Soil Cracks (B6) ation Visible on Aeri	verine) Nonriverin iverine)	Salt Cru Biotic C Aquatic Hydroge ie) Oxidizer Presenc Recent	rust (B12) Invertebra en Sulfide d Rhizosp ce of Redu	otes (B13) Odor (C1) heres alouded Iron ction in P	) ng Living F (C4) lowed Soil	Wa Se Dri Dri Dri Dri Dri Cr Cr Ss (C6) Sa	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8)
Primary Ind Surface High V Satura Water X Sedim Drift D Surface Inund Water	lydrology Indicator dicators (any one indicators (any one indicators) water (A1) Vater Table (A2) ation (A3) Marks (B1) (Nonrivalent Deposits (B2) (I Deposits (B3) (Nonrivalent Deposits (B6) ation Visible on Aerira-Stained Leaves (B8)	verine) Nonriverin iverine)	Salt Cru Biotic C Aquatic Hydroge ie) Oxidizer Presenc Recent	rust (B12) Invertebra en Sulfide d Rhizosp ce of Redu Iron Redu	otes (B13) Odor (C1) heres alouded Iron ction in P	) ng Living F (C4) lowed Soil	Wa Se Dri Dri Dri Dri Dri Cr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) sturation Visible on Aerial Imagery (C
Wetland H Primary Ind Surface High V Satura Water X Sedim Drift D Surface Inund Water Field Obs	lydrology Indicator dicators (any one indicators (any one indicators) water (A1) Vater Table (A2) ation (A3) Marks (B1) (Nonrivater Deposits (B2) (I Deposits (B3) (Nonrivater Soil Cracks (B6) ation Visible on Aeri r-Stained Leaves (Barvations:	verine) Nonriverine) ial Imagery 9)	Salt Cru Biotic C Aquatic Hydroge Oxidize Presenc Recent (B7) Salt Cru Rotic Prosecut Company Salt Cru Aquatic Prosecut Company Salt Cru Accuse Aquatic Aquatic Presence Company Advanced Advanc	rust (B12) Invertebra en Sulfide d Rhizosp ce of Redu Iron Redu Explain in	otes (B13) Odor (C1) heres alouded Iron ction in P	) ng Living F (C4) lowed Soil	Wa Se Dri Dri Dri Dri Dri Cr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (Callow Aquitard (D3)
Wetland H Primary Ind Surface High V Satura Water X Sedim Drift D Surface Vater Field Obs	lydrology Indicator dicators (any one indicators (any one indicators (any one indicators (any one indicators (A2) ation (A3) Marks (B1) (Nonrivers) Marks (B1) (Nonrivers) Marks (B3) (Nonrivers) Deposits (B3) (Nonrivers) Deposits (B6) ation Visible on Aerita-Stained Leaves (B4) Mater Present?	verine) Nonriverin iverine)	Salt Cru Biotic C Aquatic Hydroge Oxidizer Presence Recent Recent (B7) Other (B	rust (B12) Invertebra en Sulfide d Rhizosp ce of Redu Iron Redu Explain in (inches):	ates (B13) Odor (C1 heres alo iced Iron ction in P Remarks)	) ng Living F (C4) lowed Soil	Wa Se Dri Dri Dri Dri Dri Cr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (Callow Aquitard (D3)
Wetland H Primary Ind Surface High V Satura Water Sedim Surface Inund Water Field Obs Surface W Water Tal	dicators (any one included (A2) Water Table (A2) Ation (A3) Marks (B1) (Nonrivert Deposits (B2) (Nonrivert Deposits (B3) (Nonrivert Deposits (B6) (Nonrivert Deposits (B6)) Ation Visible on Aeric-Stained Leaves (B6) Atter Present?	verine) Nonriverine) ial Imagery 9)  Yes Yes	Salt Cru Biotic C Aquatic Hydroge Oxidizer Presenc Recent (B7) Other (B	rust (B12) Invertebra en Sulfide d Rhizosp ce of Redu Iron Redu Explain in (inches): (inches):	ates (B13) Odor (C1 heres alo need Iron ction in P Remarks)	) ng Living F (C4) lowed Soil	Wa Se Dri Dri Dri Dri Cr Cr Si Si FA	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)
Wetland H Primary Ind Surface High V Satura Water Sedim Surface Inund Water Field Obs Surface V Water Tal Saturation	lydrology Indicator dicators (any one indicators (any one indicators (any one indicators (any one indicators (A2) ation (A3) Marks (B1) (Nonrivers) Marks (B1) (Nonrivers) Marks (B3) (Nonrivers) Deposits (B3) (Nonrivers) Deposits (B6) ation Visible on Aerita-Stained Leaves (B4) Mater Present?	verine) Nonriverine iverine) ial Imagery 9) Yes	Salt Cru Biotic C Aquatic Hydroge Oxidizer Presenc Recent (B7) Other (B	rust (B12) Invertebra en Sulfide d Rhizosp ce of Redu Iron Redu Explain in (inches):	ates (B13) Odor (C1 heres alo need Iron ction in P Remarks)	) ng Living F (C4) lowed Soil	Wa Se Dri Dri Dri Dri Dri Cr Cr Sa Sh	ater Marks (B1) (Riverine) diment Deposits (B2) (Riverine) ft Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) atturation Visible on Aerial Imagery (Callow Aquitard (D3) AC-Neutral Test (D5)

W-4

Project/Site: COMMSWILE	City/County:	Sampling Date: 9-9-29
Applicant/Owner: LS Power		State: CA Sampling Point: SP-Z
Investigator(s): Karen Bach, Sidney Wells		
Landform (hillslope, terrace, etc.):		
Subregion (LRR): La		
		NWI classification:
Soil Map Unit Name:	of year? Ves X No	
병사는 요즘 얼마를 보내면 하면 가는 것이 없는 사람들이 아니라면 살아 없는 것이 없는 것이 없는 것이 없는 것이다.		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology signific		2/
Are Vegetation, Soil, or Hydrology natura	lly problematic? (If n	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No	Is the Sample	_
Wetland Hydrology Present? Yes No		
Remarks:		
	<i>•</i>	
/EGETATION `		
Abs	olute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) $\subseteq 10$	Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant Species Across All Strata: (B)
4		Species Across All Strata: (B)
Total Cover:	0	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum		THAT ARE OBL, FACW, OF FAC (AB)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5.	<u> </u>	FAC species x 3 = FACU species x 4 =
Herb Stratum (55) Total Cover:		UPL species x 5 =
1. Marrubium Julgare . 3	5 Y TACO	- Column Totals: (A) (B)
2. Festuca perrennis 2	20 X FAC	(4)
	10 Y UPL	Prevalence Index = B/A =
4. medicago polymorphu	5 N FACU	Hydrophytic Vegetation Indicators:
5. Hordeom murinum	7 N FACU	
	3 N UPL	Prevalence Index is ≤3.0¹
7. Silybum marianum	3 N UPL	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
3. Frankosia salina	5 N FACM	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Noody Vine Stratum (2)	5_	Troblematic Hydrophytic regetation (
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2.		be present.
Total Cover:	<del></del>	Hydrophytic
	6	Vegetation
% Bare Ground in Herb Stratum % Cover of Bi	otic Crust	Present? Yes No No
Remarks:	1	100 vecotosta como milio al
D'ADRALIANS AC VEULICHED PLOTS PENOL	cu to avoid das	Elin description. Commended colo
Remarks: Dimensions of Veyeration plots reduce toposicaphical boundaries.	co to overe cons	string respectively. Commenting core

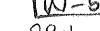
Sampling	Point:	

Depth Matrix	Redox Features	Toront Lond		
(inches) Color (moist) %	Color (moist) %	Type¹ Loc²		1.011101110
0-7 104R3/1 99	7.54R-3/3 4	<u> </u>	51CL	.0
7-14 2.54 9/3 100			-	
7-14 2.59 9/3 100			_ Clo	
			_	
			_	
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix. <sup>2</sup> Location:	PL=Pore Lining	g. RC=Root Cl	hannel, M=Matrix.
lydric Soil Indicators: (Applicable to all I		d.)	Indicat	ors for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redox (S5)		1 0	m Muck (A9) (LRR C)
_ Histic Epipedon (A2)	Stripped Matrix (S6)		20	m Muck (A10) (LRR B)
_ Black Histic (A3)	Loamy Mucky Mineral (	• •		duced Vertic (F18)
_ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (I	F2)		d Parent Material (TF2)
_ Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)		Oth	ner (Explain in Remarks)
_ 1 cm Muck (A9) (LRR D)	Redox Dark Surface (F			
_ Depleted Below Dark Surface (A11)	Depleted Dark Surface			
_ Thick Dark Surface (A12)	Redox Depressions (F8	3)	3	
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)			ors of hydrophytic vegetation and
estrictive Layer (if present):			weti	and hydrology must be present.
MIA				
турс	<del></del>		Unidata C	Call Descent 2 Voc No X
Depth (inches):	Fricult to dig.		Hydric S	Soil Present? Yes No
Depth (inches):  Temarks:  Soil Very hard/compact. Di	Fricult to dig,		Hydric S	Soil Present? Yes No
Depth (inches): emarks: Soil Very hard/compact. Di	Fricult to dig,			Soil Present? Yes No
Depth (inches):				
Depth (inches):				econdary Indicators (2 or more required) Water Marks (B1) (Riverine)
Depth (inches):emarks:  Soil Very hard/compact. Dir  DROLOGY  Vetland Hydrology Indicators: rimary Indicators (any one indicator is suffice  Surface Water (A1)	cient) Salt Crust (B11)			econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (inches):  emarks:  Coil Wery hard/compact. Di  DROLOGY  Vetland Hydrology Indicators:  rimary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)	cient) Salt Crust (B11) Biotic Crust (B12)	(B13)		condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Depth (inches):emarks:  Coil Win hard/compact. Discompact.	cient)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates			condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Depth (inches):emarks:  Soil Win hard/compact. Did  /DROLOGY /etland Hydrology Indicators: rimary Indicators (any one indicator is suffice _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) (Nonriverine)	cient)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates  Hydrogen Sulfide Odo	or (C1)	<u>Se</u>	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches):	cient)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates  Hydrogen Sulfide Odo  Oxidized Rhizosphere	or (C1) s along Living F	Se	econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Depth (inches):	cient)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced	or (C1) es along Living F Iron (C4)	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Depth (inches):	cient)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	or (C1) is along Living F Iron (C4) in in Plowed Soil	Se S	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8)
Depth (inches):	cient)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	or (C1) is along Living F Iron (C4) in in Plowed Soil	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Depth (inches):	cient)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	or (C1) is along Living F Iron (C4) in in Plowed Soil	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Depth (inches):	cient)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction	or (C1) Is along Living F Iron (C4) In in Plowed Soil Ironks)	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Depth (inches):emarks:  Coil Very hard/compact. Dependent of the proof of th	cient)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction () Other (Explain in Rem	or (C1) s along Living F Iron (C4) n in Plowed Soil earks)	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Depth (inches):	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates  Hydrogen Sulfide Odo  Oxidized Rhizosphere  Presence of Reduced  Recent Iron Reduction  Other (Explain in Rem	or (C1) s along Living F Iron (C4) n in Plowed Soil larks)	Se	Condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Other (Explain in Rem	or (C1) as along Living F Iron (C4) a in Plowed Soil aarks)  W	Roots (C3)s (C6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Other (Explain in Rem	or (C1) as along Living F Iron (C4) a in Plowed Soil aarks)  W	Roots (C3)s (C6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Other (Explain in Rem	or (C1) as along Living F Iron (C4) a in Plowed Soil aarks)  W	Roots (C3)s (C6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates Hydrogen Sulfide Odo Oxidized Rhizosphere Presence of Reduced Recent Iron Reduction Other (Explain in Rem	or (C1) as along Living F Iron (C4) a in Plowed Soil aarks)  W	Roots (C3)s (C6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (CS) Shallow Aquitard (D3) FAC-Neutral Test (D5)

[W-5]

Project/Site: Collins/III/e	City/Co	ounty: <u>Solal</u>	Nb Ctrivatry Sampling Date: O	15-09-2
Applicant/Owner: <u>VS_P0W6Y</u>			State: A Sampling Point: S	SP-1
Investigator(s): <u>Vaven Bach, Sidwey Wells</u>	Section	ı, Township, Raı	nge:	
Landform (hillslope, terrace, etc.):	Local :	relief (concave, o	convex, none); Slope	(%):
Subregion (LRR): Lat:			Long: Datum:	•
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical for this time of				
Are Vegetation, Soil, or Hydrology significan		•	Normal Circumstances" present? Yes	No
Are Vegetation, Soil, or Hydrology naturally			eded, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing				tures, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No		Is the Sampled within a Wetlar	Area	
Remarks:  VEGETATION				
Absolu	ıte Domi	nant Indicator	Dominance Test worksheet:	1
	ver Spec	ies? Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
3			Total Number of Dominant Species Across All Strata:	(B)
4Total Cover: Sapling/Shrub Stratum			Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
1			Prevalence Index worksheet:	
2			Total % Cover of: Multiply k	oy:
3			OBL species x 1 =	
4			FACW species x 2 =	
5			FAC species x 3 =	
Total Cover: Herb Stratum	<u> </u>		FACU species x 4 =	
1. Distictlis spicata (OK	<u>,                                     </u>	FAC	UPL species x 5 = Column Totals: (A)	
2. Salicovnia padfica 40	N	OBL	Goldini Fotals (A)	(D)
3. Juneus balticus 20	<u>'                                    </u>	<u> FACW</u>	Prevalence Index = B/A =	
4. Son semplectus acutus occidentalis 5		UBL OBL	Hydrophytic Vegetation Indicators:	
5			Dominance Test is >50%	
6			Prevalence Index is ≤3.01	
7			Morphological Adaptations <sup>1</sup> (Provide su data in Remarks or on a separate sh	ipporiing neet)
8   Total Cover: <u>  ?</u> ) (	<del></del>		Problematic Hydrophytic Vegetation¹ (E	Explain)
Woody Vine Stratum	<u></u>			
1.       2.			<sup>1</sup> Indicators of hydric soil and wetland hydrol be present.	ogy must
Total Cover:  % Bare Ground in Herb Stratum % Cover of Biotic  Remarks:	•	0	Hydrophytic Vegetation Present? Yes No	

S	O	ı	÷
u	v	E	



Sampling Point: SP-1

Depth			tii iloodod to doodi		maioatoi	OI COMMINI	the absence of	indicators.
	Matrix	~		x Feature	s T	1 : .2	Trial Security	Remarks
(inches)	Color (moist)	%	Color (moist)	%	_ rype -	Loc <sup>2</sup>	<u>Texture</u>	Remarks
<u>~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ </u>	21 1 25/		F		-		<u>~:</u>	
0-1	Gley 1 N 2.5/0	100				***************************************	<u> </u>	
	·							
1-6	2.543/	<i>1</i> 00					SiCLO	
6-8	5V 4/1	93	2.54 44	7			Losa	
Q -12	51 51	90	54R 4/A	10	$\overline{}$	M/PL		
		<u>~10</u>	<u> </u>	1		WILL		•
					•			
					· •			
	Concentration, D=Dep					re Lining, R	C=Root Channel,	
I -	Indicators: (Applica	able to all			ed.)			Problematic Hydric Soils <sup>3</sup> :
Histoso	, ,		Sandy Red					k (A9) (LRR C)
	pipedon (A2)		Stripped Ma		1754)			k (A10) (LRR B)
	listic (A3) en Sulfide (A4)		Loamy Wide	-				√ertic (F18) nt Material (TF2)
	d Layers (A5) (LRR 0	:)	Depleted M		. (1 2)			olain in Remarks)
	uck (A9) (LRR D)	7	Redox Dark		(F6)		00. (EX	
	d Below Dark Surface	(A11)	Depleted D					
1	ark Surface (A12)		Redox Dep	ressions (	F8)			
1	Mucky Mineral (S1)		Vernal Poo	ls (F9)				ydrophytic vegetation and
·	Gleyed Matrix (S4)						wetland hyd	drology must be present.
Restrictive	Layer (if present):							
1								$\vee$
Depth (in	iches):		<del></del>				Hydric Soil Pre	esent? Yes /\ No
Remarks:					:			
				•				
HYDROLC	ogy							
HYDROLC Wetland Hy							Seconda	v Indicators (2 or more required)
Wetland Hy	drology Indicators:	ator is suff	ficient)					y Indicators (2 or more required)
Wetland Hy	drology Indicators: leators (any one indic	ator is suff		/D44\			Wate	r Marks (B1) (Riverine)
Wetland Hy Primary Indi	rdrology Indicators: icators (any one indic e Water (A1)	ator is suff	Salt Crust				Wate	r Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
Wetland Hy Primary Indi Surface High W	vdrology Indicators: icators (any one indicators) Water (A1) ater Table (A2)	ator is suff	Salt Crust Biotic Cru	st (B12)	ne (R13)		Wate Sedii Drift	r Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Wetland Hy Primary Indi Surface High W Saturat	vdrology Indicators: icators (any one indicators) water (A1) ater Table (A2) ion (A3)		Salt Crust Biotic Cru Aquatic In	st (B12) vertebrate			Wate Sedii Drift Drair	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10)
Wetland Hy Primary Indi Surface High W Saturat Water N	vdrology Indicators: icators (any one indicators) Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriveri	ne)	Salt Crust Biotic Cru Aquatic In Hydrogen	st (B12) vertebrate Sulfide O	dor (C1)	Living Roo	Wate Sedii Drift Drair Dry-S	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) hage Patterns (B10) Geason Water Table (C2)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime	vdrology Indicators: icators (any one indicators) water (A1) later Table (A2) ion (A3) Marks (B1) (Nonriver) ant Deposits (B2) (No	ne) ıriverine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I	st (B12) vertebrate Sulfide O Rhizosphe	dor (C1) eres along	Living Roo	Wate Sedii Drift Drair Dry-\$	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7)
Wetland Hy Primary Indi Surface High W Saturat Water M Sedime Drift De	vdrology Indicators: icators (any one indicators) water (A1) later Table (A2) ion (A3) Marks (B1) (Nonriveri ent Deposits (B2) (Nonriveri	ne) ıriverine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I	st (B12) vertebrate Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C	4)	Wate Sedii Drift Dry-3 ots (C3) Thin Cray	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8)
Wetland Hy Primary Indi Surface High W Saturat Water M Sedime Drift De Surface	vdrology Indicators: icators (any one indicators) Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) int Deposits (B2) (Nonriver) int Sposits (B3) (Nonriver) int Sposits (B3) (Nonriver)	ne) nriverine) ine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct	dor (C1) ires along ed Iron (C ion in Plo		Wate Sedii Drift Drair Dry-s ots (C3) Thin Cray C6) Satu	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat	vdrology Indicators: icators (any one indicators) Water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriverient Deposits (B2) (Nonriveries) es Soil Cracks (B6) ion Visible on Aerial I	ne) nriverine) ine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct	dor (C1) ires along ed Iron (C ion in Plo	4)	Wate Sedii Drift Drair Dry-S sts (C3) Thin Cray C6) Satui Shall	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3)
Wetland Hy Primary Indi Surface High W Saturat Water M Sedime Drift De Surface Inundat Water-S	vdrology Indicators: icators (any one indicators) vater (A1) later Table (A2) ion (A3) Marks (B1) (Nonriver) iont Deposits (B2) (Nonriver) e Soil Cracks (B6) lion Visible on Aerial I Stained Leaves (B9)	ne) nriverine) ine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Iro	st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct	dor (C1) ires along ed Iron (C ion in Plo	4)	Wate Sedii Drift Drair Dry-S sts (C3) Thin Cray C6) Satui Shall	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9)
Wetland Hy Primary Indi X Surface High W Saturat Water N Sedime Drift De X Surface Inundat Water-S Field Obser	vdrology Indicators: icators (any one indicators (any one indicators) value (A1) idental (A2) idental (A3) Marks (B1) (Nonriversity (B2) (Nonriversity (B3) (Nonriversity (B3)) very control (B6) idental (B9)	ne) nriverine) iine) magery (E	Salt Crust Biotic Cru Aquatic In X Hydrogen Oxidized I Presence Recent Irc Other (Ex	st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct plain in Re	dor (C1) ires along ed Iron (C ion in Plo	4)	Wate Sedii Drift Drair Dry-S sts (C3) Thin Cray C6) Satui Shall	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse	vidrology Indicators: icators (any one indicators (any one indicators) water (A1) idea (A2) ion (A3) Marks (B1) (Nonrivers) ion Deposits (B2) (Nonrivers) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present?	ne) nriverine) rine) magery (B	Salt Crust Biotic Cru Aquatic In Y Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reduct plain in Re	dor (C1) ires along ed Iron (C ion in Plo	4)	Wate Sedii Drift Drair Dry-S sts (C3) Thin Cray C6) Satui Shall	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table	vidrology Indicators: icators (any one indicators) water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ant Deposits (B2) (Nonriver) a Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present?  Present?	ne) nriverine) rine) magery (E es es	Salt Crust Biotic Cru Aquatic In X Hydrogen Oxidized I Presence Recent Irc Other (Ex	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (0	Wate Sedii Drift Dry-s ots (C3) Thin Cray C6) Satu Shall FAC-	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F	vidrology Indicators: icators (any one indicators (any one indicators) video Water (A1) later Table (A2) later Deposits (B1) (Nonriver) later Deposits (B3) (Nonriver) later Soil Cracks (B6) later Visible on Aerial Instance Leaves (B9) later Present? later Present? later Present? later Present? later Present? later Present? later Yesent? later Yesent? later Yesent? later Yesent?	ne) nriverine) rine) magery (E es es	Salt Crust Biotic Cru Aquatic In Y Hydrogen Oxidized I Presence Recent Iro Other (Ex	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (0	Wate Sedii Drift Drair Dry-S sts (C3) Thin Cray C6) Satui Shall	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca	vidrology Indicators: icators (any one indicators) water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ant Deposits (B2) (Nonriver) a Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present?  Present?	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca	vdrology Indicators: icators (any one indicators) water (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ion Deposits (B2) (Nonriver) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present?  Present?  Validatory (A1) Present?  Validatory (A1)  Validatory (A2)  Validatory (A3)  Validat	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca	vdrology Indicators: icators (any one indicators) vater (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ion Deposits (B2) (Nonriver) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present? vipillary fringe)	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	vdrology Indicators: icators (any one indicators) vater (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ion Deposits (B2) (Nonriver) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present? vipillary fringe)	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	vdrology Indicators: icators (any one indicators) vater (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ion Deposits (B2) (Nonriver) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present? vipillary fringe)	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	vdrology Indicators: icators (any one indicators) vater (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ion Deposits (B2) (Nonriver) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present? vipillary fringe)	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)
Wetland Hy Primary Indi Surface High W Saturat Water N Sedime Drift De Surface Inundat Water-S Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	vdrology Indicators: icators (any one indicators) vater (A1) ater Table (A2) ion (A3) Marks (B1) (Nonriver) ion Deposits (B2) (Nonriver) ion Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present? Present? vipillary fringe)	ne) nriverine) rine) magery (E	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized I Presence Recent Irc Other (Ex  No Depth (in No Depth (in	st (B12) vertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re uches): uches): uches):	dor (C1) bres along ed Iron (C ion in Plot emarks)  10  Ur-fa(C	4) wed Soils (0	Wate  Wate  Sedin  Drift  Dry-Sels (C3)  Thin  Cray  C6)  Satu  FAC-  and Hydrology P	or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Geason Water Table (C2) Muck Surface (C7) fish Burrows (C8) ration Visible on Aerial Imagery (C9) ow Aquitard (D3) Neutral Test (D5)

[W-9]

Project/Site: Collinsville	City/County:	Sampling Date: $\frac{5-\hat{\gamma}-2\hat{\gamma}}{5-\hat{\gamma}-2\hat{\gamma}}$
Applicant/Owner:		State: Sampling Point:
Investigator(s): KurenDach, Sidney Men	Section, Township, Rar	nge:
Landform (hillslope, terrace, etc.):		
Subregion (LRR): Lat:		
Soil Map Unit Name:		
Are climatic / hydrologic conditions on the site typical for this time of ye		
Are Vegetation, Soil, or Hydrology significantly		Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr		eded, explain any answers in Remarks.)
	·	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point lo	ocations, transects, important features, etc.
Hydrophylic Vegetation Present? Yes No	la the Compled	Avec
Hydric Soil Present? Yes No	Is the Sampled within a Wetlan	
Wetland Hydrology Present? Yes No	. Within a wettan	iur res No
Remarks:		
VEGETATION		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Absolute	Dominant Indicator	Dominance Test worksheet:
	r Species? Status	Number of Dominant Species
1,		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant Species Across All Strata:  (B)
3		Species Across All Strata: (B)
4. Total Cover:		Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum	-	
1. Rosa carillarica 15	- Y FAC	Prevalence Index worksheet:
2. Rubus arminerceus 2		Total % Cover of:Multiply by:
3	ts t	OBL species x 1 =
4		FAC species x 2 =
5Total Cover: 17		FACUL enocine x 4 =
Herb Stratum 155		FACU species x 4 = UPL species x 5 =
1. Festuca perennis 3	AL FAC	Column Totals: (A) (B)
2. Forniculum uulgase 15		(b)
3. Juneus basiteds	N FINCH	Prevalence Index = B/A =
4. Distichris spirates 5	NEAC	Hydrophytic Vegetation Indicators:
5. Festuca myuros 80	y upl	Dominance Test is >50%
6. Bronnus diradrus 3	<u>. ~ ~ </u>	Prevalence Index is ≤3.0 <sup>1</sup>
7		Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8.		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum V = \S\	_	
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2.	•	be present.
Total Cover:		Hydrophytic
% Bare Ground in Herb Stratum % Cover of Biotic	Crust	Vegetation   Present?   Yes No
Remarks:	****	
Tree plot Size reduced to avoid enough ye	, Kornamity box	Jacies.
The Art of the state of the sta	) "J"	

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• 1	31I

Sampling Point:  $S\rho - 2$ 

Profile Desc	ription: (Descri	be to the depti	needed to document the indicat	or or confirm	the absence of inc	dicators.)
Depth	Matri:		Redox Features			
(inches)	Color (moist)	- %	Color (moist) % Type	e Loc²	Texture	Remarks
0-2	1048 2/1	100		·····	Sand	
2-16	10YR 3/4	G01			Sand	
	-				***************************************	
						<u> </u>
¹Type: C=Co	oncentration, D=D	epletion, RM=F	Reduced Matrix. <sup>2</sup> Location: PL=	— ——— Pore Linina. R	C=Root Channel. M	=Matrix.
			RRs, unless otherwise noted.)	<i>U</i> ,		roblematic Hydric Soils <sup>3</sup> ;
Histosol	(A1)		Sandy Redox (S5)		1 cm Muck (	A9) (LRR C)
	oipedon (A2)		Stripped Matrix (S6)			A10) (LRR B)
Black Hi	stic (A3)		Loamy Mucky Mineral (F1)		Reduced Ve	rtic (F18)
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)		Red Parent I	Material (TF2)
	d Layers (A5) (LR	RC)	Depleted Matrix (F3)		Other (Expla	in In Remarks)
	ick (A9) (LRR D)		Redox Dark Surface (F6)			
	Below Dark Sur		Depleted Dark Surface (F7)			
	ark Surface (A12)		Redox Depressions (F8)		3	
	łucky Mineral (S1	•	Vernal Pools (F9)			frophytic vegetation and
	eleyed Matrix (S4 ayer (if present				wetiand nydro	ology must be present.
	-h - a \		<del></del>		Headala Call Bass	No. X
	ches):				Hydric Soil Prese	ent? Yes No / \
Remarks:						
						минический поставляющий поставлени поставляющий поставляющий поставляющий поставляющий поставля
HYDROLO	GY					
Wetland Hvo	drology Indicato	rs:			Secondary 1	Indicators (2 or more required)
_	ators (any one in		ent)			Marks (B1) (Riverine)
Surface		dicator is sumo	Salt Crust (B11)			
	• •		Biotic Crust (B12)			ent Deposits (B2) (Riverine)
Saturatio	iter Table (A2)		Aquatic Invertebrates (B13	,		eposits (B3) (Riverine)
				•		ge Patterns (B10)
	arks (B1) ( <b>Nonri</b>		Hydrogen Sulfide Odor (C1			ason Water Table (C2)
	nt Deposits (B2) (		Oxidized Rhizospheres alo			uck Surface (C7)
	oosits (B3) (Nonri	verme)	Presence of Reduced Iron			h Burrows (C8)
	Soil Cracks (B6)	-1 I (D.7)	Recent Iron Reduction in F	•	•	ion Visible on Aerial Imagery (C9)
	on Visible on Aeri		Other (Explain in Remarks	,		V Aquitard (D3)
Field Observ	tained Leaves (B	9)			FAC-IN	eutral Test (D5)
		Von N	a X Danth (Inchas)			
Surface Water		162 N	Depth (inches):			and the state of t
Water Table			o X Depth (inches):	<b>I</b>	.,,	
Saturation Pr		Yes N	o X Depth (inches):	Wetla	and Hydrology Pres	sent? Yes No _X
(includes cap Describe Red		am gauge, mor	itoring well, aerial photos, previous	inspections). i	If available:	
		5 9 - 1 11.00		[		
Remarks:						
		i i				

	Sampling Date: 5	-10-24
1.6 0	City/County: Sampling Date: Sampling Date: Sampling Point:	
pplicant/Owner: LS Power	Section, Township, Range: SOO T3N LIE	
6 21 21 20	Lead rollof (concave convex none): 31010	(%): 10
andform (hillslope, terrace, etc.): 40001040	at: 38.071987 Long: -121.83252 Datum:	UA-D83
ubregion (LRR):	at: 38.07.15 NWI classification: 1/17	
oil Map Unit Name: Value 3/14 loan, orange	ne of year? Yes X No (If no, explain in Remarks.)	
re climatic / hydrologic conditions on the site typical for this tir	V	. No
re Vegetation, Soil, or Hydrology sign		
re Vegetation, Soil, or Hydrology natu	iany presentation	
UMMARY OF FINDINGS – Attach site map sh	owing sampling point locations, transects, important fea	tures, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No	Is the Sampled Area within a Wetland?  Yes No	
Remarks:		
EGETATION – Use scientific names of plants	Total Control of the	
	Absolute Dominant Indicator  6 Cover Species? Status  Number of Dominant Species That Are OBL, FACW, or FAC:	5 (A)
2.		_
3.	Total Number of Dominiant	(B)
4.		-0
- 10/	That Are OBL, FACW, or FAC:	33% (A/B)
Sapling/Shrub Stratum (Plot size: Y= 101)	Developed Index weekshoots	
1		tiply by:
2	OPI species v1=	
1	FAC species x 3 = _	
	C = Total Cover FACU species x 4 = _	
Herb Stratum (Plot size: V= 51	UPL species x 5 =	
Lotus tennis	5 Column Totals: (A)	
Hordeum marinum	40 Y FAC	, , ,
3. Lolium perenne	5 Prevalence Index = B/A =	
Elymus triticodes	2 N FAC Hydrophytic Vegetation Indicators	:
: trankenia salina	15 PACW Dominance Test is >50%	
s. Disticulis spicata	Prevalence Index is ≤3.01	
r. Polypagan monospeliensis	Morphological Adaptations¹ (Pro	
8. Sonchos oferaceus	data in Remarks or on a sep	
Woody Vine Stratum (Plot size: 101)	Problematic Hydrophytic Veget	
1 2	¹Indicators of hydric soil and wetlan be present, unless disturbed or pro	d hydrology mus blematic.
% Bare Ground in Herb Stratum 0 % Cove	= Total Cover Hydrophytic Vegetation	
% Bare Ground in Herb Stratum U % Cove	of Biotic Crust D Present? Yes	No
Remarks:	r of Biotic Crust Present? Yes	

### SOIL

Sampling Point: Sf - \

Profile Description: (Describe to the depth needed to docume	nt the indicator or confirm the absence of indicators.)
Depth Matrix Redox F	eatures
(inches) Color (moist) % Color (moist)	% Type <sup>1</sup> Loc <sup>2</sup> Texture Remarks
0-2 1046 2/1 100	SiLo
0-5	
	SiCLo
164R 4/2 30	
<u></u>	
5-16 10yr 4/4 100	siclo
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=C	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwi	
Histosol (A1) Sandy Redox ( Histic Epipedon (A2) Stripped Matrix	
Histic Epipedon (A2) Stripped Matrix Black Histic (A3) Loamy Mucky	1 T T T T T T T T T T T T T T T T T T T
Hydrogen Sulfide (A4) Loamy Gleyed	
Stratified Layers (A5) (LRR C) Depleted Matri	
1 cm Muck (A9) (LRR D) Redox Dark St	
Depleted Below Dark Surface (A11) Depleted Dark	
Thick Dark Surface (A12) Redox Depres	1
Sandy Mucky Mineral (S1) Vernal Pools (I	
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  Salt Crust (B	11) Water Marks (B1) (Riverine)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2)  Biotic Crust (B2)	11) Water Marks (B1) (Riverine) B12) Sediment Deposits (B2) (Riverine)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3)  HYDROLOGY  Salt Crust (B4) Salt Crust (B4) Apuatic Invertigation (B4) Apuatic Invertigation (B4)  Apuatic Invertigation (B4)	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> </ul>
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) (Nonriverine)	Water Marks (B1) (Riverine)  B12) Sediment Deposits (B2) (Riverine) tebrates (B13) Drift Deposits (B3) (Riverine) fide Odor (C1) Drainage Patterns (B10)
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) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Oxidized Rhiz	Water Marks (B1) (Riverine)  B12) Sediment Deposits (B2) (Riverine)  bebrates (B13) Drift Deposits (B3) (Riverine)  fide Odor (C1) Drainage Patterns (B10)  cosphere's along Living Roots (C3) Dry-Season Water Table (C2)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B2) Biotic Crust (B3)  Water Marks (B1) (Nonriverine) Aquatic Inverine)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhiz  Drift Deposits (B3) (Nonriverine) Presence of Base and Base a	Water Marks (B1) (Riverine)  B12) Sediment Deposits (B2) (Riverine)  bebrates (B13) Drift Deposits (B3) (Riverine)  fide Odor (C1) Drainage Patterns (B10)  cosphere's along Living Roots (C3) Dry-Season Water Table (C2)  Reduced Iron (C4) Crayfish Burrows (C8)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B1)  High Water Table (A2) Biotic Crust (B2)  Saturation (A3) Aquatic Inversion  Water Marks (B1) (Nonriverine) Wydrogen Surface Soil Crust (B2) (Nonriverine) Coxidized Rhiz  Drift Deposits (B3) (Nonriverine) Presence of B2  Surface Soil Cracks (B6) Recent Iron B2	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Educates (B13) Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Reduced Iron (C4) Crayfish Burrows (C8)  Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B1)  High Water Table (A2) Biotic Crust (B2)  Saturation (A3) Aquatic Inverting  Water Marks (B1) (Nonrivering) Sediment Deposits (B2) (Nonrivering)  Drift Deposits (B3) (Nonrivering) Presence of Facethy Surface Soil Cracks (B6) Recent Iron Facethy Surface Soil Cracks (B6) Thin Muck Surface Soi	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dray-Season Water Table (C2)  Reduced Iron (C4)  Crayfish Burrows (C8)  Seduction in Tilled Soils (C6)  Frace (C7)  Water Marks (B1) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B') High Water Table (A2) Biotic Crust (B') Saturation (A3) Aquatic Invertion Water Marks (B1) (Nonriverine) Wydrogen Surface Soil Cracks (B2) (Nonriverine) Presence of Becent Iron Becent I	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Educates (B13) Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Reduced Iron (C4) Crayfish Burrows (C8)  Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
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) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Drospheres along Living Roots (C3)  Reduced Iron (C4)  Reduced Iron (C4)  Reduction in Tilled Soils (C6)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Inface (C7)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
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) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes No Depth (incher	Water Marks (B1) (Riverine)  B12) Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Reduced Iron (C4) Crayfish Burrows (C8)  Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)  Drift Deposits (B3) (Riverine)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B2) Biotic Crust (B3)  Water Marks (B1) (Nonriverine) Aquatic Inverse Sediment Deposits (B2) (Nonriverine) Oxidized Rhiz Drift Deposits (B3) (Nonriverine) Presence of Basel Inundation Visible on Aerial Imagery (B7) Thin Muck Su Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Depth (inched	Water Marks (B1) (Riverine)  B12) Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Reduced Iron (C4) Crayfish Burrows (C8)  Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)  Drift Deposits (B3) (Riverine)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
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) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inchestication)  Depth (inchestication)	Water Marks (B1) (Riverine)  B12)
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) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inchestable) Depth (inchestable) Depth (inchestable)	Water Marks (B1) (Riverine)  B12)
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) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inche Saturation Present? Yes No Depth (inche (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phoses	Water Marks (B1) (Riverine)  B12)
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) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inchestication)  Depth (inchestication)	Water Marks (B1) (Riverine)  B12)
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) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inche Saturation Present? Yes No Depth (inche (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phoses	Water Marks (B1) (Riverine)  B12)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B1) High Water Table (A2) Biotic Crust (B2) Saturation (A3) Aquatic Inverting Sediment Deposits (B2) (Nonriverine) Oxidized Rhiz Drift Deposits (B3) (Nonriverine) Presence of B2 Surface Soil Cracks (B6) Recent Iron B3 Inundation Visible on Aerial Imagery (B7) Thin Muck Sumulation Visible on Aerial Imagery (B7) Thin Muck Sumulation Visible on Aerial Imagery (B7) Depth (inches Water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)	Water Marks (B1) (Riverine)  B12)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B1) High Water Table (A2) Biotic Crust (B2) Saturation (A3) Aquatic Inverse Sediment Deposits (B2) (Nonriverine) Oxidized Rhiz Drift Deposits (B3) (Nonriverine) Presence of Example Surface Soil Cracks (B6) Recent Iron Example Surface Soil Cracks (B9) Other (Explain Field Observations:  Surface Water Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)	Water Marks (B1) (Riverine)  B12)

pplicant/Owner: LS Power		Sampling Date: 5-10-2
The state of the s		
westigator(s): Faren Bach, Silvy Wells		
andform (hillslope, terrace, etc.):	Local relief (concave, c	onvex, none): (Oncove Slope (%): 5
ubregion (LRR): LRC Lat:	38.071965	Long: -121.83 2448 Datum: NAD
oil Map Unit Name: Vaider Silt Lam, Land	0-27. SIARES	NWI classification: <u>E2EMIN</u>
re climatic / hydrologic conditions on the site typical for this time of	of year? Yes X No _	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significa	1/2/	Normal Circumstances" present? Yes No
re Vegetation, Soil, or Hydrology naturally		
UMMARY OF FINDINGS – Attach site map show		
Hydrophytic Vegetation Present?         Yes         X         No           Hydric Soil Present?         Yes         X         No           Wetland Hydrology Present?         Yes         X         No		
Remarks:		
EGETATION – Use scientific names of plants.		
Tree Stratum (Plot size: 15 5 ) Absol	olute Dominant Indicator over Species? Status	Dominance Test worksheet:
1		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant Species Across All Strata: 2 (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5	<u> </u>	FAC species x 3 =
Herb Stratum (Plot size: $\Gamma = 5^1$	= Total Cover	FACU species x 4 =
1. Schoenopuetus acitus ssp. occidentalis 4	0 Y OBL	UPL species x 5 =
2. Tueha latifolia 3	O X OGL	Column Totals: (A) (B)
3. cotua coronopososia 7	N OBL	Prevalence Index = B/A =
4. Cyperus eracyostis	D N FACW	Hydrophytic Vegetation Indicators:
5. Alisma gramineum 3	N OOL	✓ Dominance Test is >50%
6		Prevalence Index is ≤3.01
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8	<u> </u>	data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size: (= 5)	O = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	<u> </u>	
% Bare Ground in Herb Stratum % Cover of Bio	= Total Cover	Hydrophytic Vegetation Present?  Yes No
		tions, and topographic boundaries.

Sampling Point: Sp - 2

Profile Description: (Describe to the dept		
Depth Matrix	Redox Features  Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
(inches) Color (moist) % 0 - 6 6 84\N2.5/30	Color (moist) % Type <sup>1</sup>	Si Le
	1040 4/6 15	C. 1
	1048 4/6 15	2, 6
6-16 2.54 5/ 80	104R 3/6 20	SiC
<del></del>		
		2 continue 21 continue DI = Doro Lining M-Moteix
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Hydric Soil Indicators: (Applicable to all L		1 cm Muck (A9) (LRR C)
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10) (LRR B)
Histic Epipedon (A2)	Stripped Matrix (S6) Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	
Thick Dark Surface (A12)	Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	wetland hydrology must be present, unless disturbed or problematic.
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
Restrictive Layer (if present):		
		V
Туре:	_	Hudric Soil Present? Yes No
Depth (inches):	ognic menter only gray soil	from rest of profile
Depth (inches):	ogspic menter and gray sail	
Depth (inches):  Remarks:  TOP layer a mix or black high  YDROLOGY	ognic menter only gray soil	
Depth (inches):		
Depth (inches):	heck all that apply)	from rest of profile
Depth (inches):  Remarks:  TOP layer a mix of black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of Surface Water (A1)	heck all that apply) Salt Crust (B11)	from rest of profile  Secondary Indicators (2 or more required)
Depth (inches):  Remarks:  TOP layer a mix of black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the control of the contr	heck all that apply)  Salt Crust (B11) Biotic Crust (B12)	from rest of frotile_  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Depth (inches):  Remarks:  TOP layer a mix or black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the control of the contr	heck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Depth (inches):  Remarks:  TOP layer a mix or black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the continuation of the continuation (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (inches):  Remarks:  TOP layer a mix or black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the control of the contr	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (inches):  Remarks:  OF law A MIX OF black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the control	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)
Depth (inches):  Remarks:  OF law a mix of black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the continuous of the continuo	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)
Depth (inches):  Remarks:  OF law a mix of black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Depth (inches):  Remarks:  TOP law a Mix Or black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (inches):  Remarks:  TOP law a Mix C+ black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; co  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  eld Observations:	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (inches):  Remarks:  OF law A MIX OF black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the content	Sheck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (inches):  Remarks:  OF law a mix of black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Veter-Stained Leaves (B9)  Veter Table Present?  Yes No	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 314	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):  Remarks:  OF law a mix of black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of saturation (A3)  Water Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Veter-Stained Leaves (B9)  Veter-Stained Leaves (B9)	Salt Crust (B11) Salt Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 311 Depth (inches): 514400	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Depth (inches):  Remarks:  TOP law a mix or black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Veter Table Present?  Ves No  Veter Table Present?	Salt Crust (B11) Salt Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 311 Depth (inches): 514400	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Depth (inches):  Remarks:  TOP law a mix or black high  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Veter Table Present?  Ves No  Veter Table Present?	Salt Crust (B11) Salt Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 311 Depth (inches): 514400	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Proposits (B2) (Nonriverine)  Surface Water (B2) (Nonriverine)  Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Water Table Present? Water Table Present Present Present Present Present Present Pr	Salt Crust (B11) Salt Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 311 Depth (inches): 514400	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Proposits (B2) (Nonriverine)  Surface Water (B2) (Nonriverine)  Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Water Table Present? Water Table Present Present Present Present Present Present Pr	Salt Crust (B11) Salt Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 311 Depth (inches): 514400	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Proposits (B2) (Nonriverine)  Surface Water (B2) (Nonriverine)  Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Water Table Present? Water Table Present Present Present Present Present Present Pr	Salt Crust (B11) Salt Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): 311 Depth (inches): 514400	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No

# W-4W-7

Project/Site: Collinville		city/County:	Sda	no Country &	Sampling Date: 5 -	10-24
Applicant/Owner: LS POWEY				State: CA S	Sampling Point: SR	-3
Investigator(s): Karen Buch, Sidney Wells		Section, Tov	vnship, Rar	nge: 500 T3N	RIE	
Landform (hillslope, terrace, etc.): foatslope		Local relief	(concave, c	convex, none): Sign S	slope (9	6): 5
Subregion (LRR): LRLC	Lat: 38	,0714	63	Long: -121.8319	53 Datum:	MADRS
Soil Map Unit Name: Vardez Sit Dam drahad						
Are climatic / hydrologic conditions on the site typical for this	time of year	r? Yes	∠ No_	(If no, explain in Re	marks.)	
Are Vegetation, Soil, or Hydrology sig	gnificantly o	disturbed?	Are "	Normal Circumstances" pr	esent? Yes	No
Are Vegetation, Soil, or Hydrology na			(If ne	eded, explain any answers	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site map s			g point le	ocations, transects,	important featu	res, etc.
Hydric Soil Present? Yes X No	<u></u>	1150000	e Sampled in a Wetlar		No	
VEGETATION						
		Dominant Species?		Dominance Test works		
1				Number of Dominant Sp That Are OBL, FACW, o		(A)
2.						
3.				Total Number of Domina Species Across All Strat		(B)
4						
Total Cover:				Percent of Dominant Sp That Are OBL, FACW, or		(A/B)
Sapling/Shrub Stratum	85	4	FAC	Prevalence Index work	reheati	
1. Rosa Californica 2. Baccharis pilvieris	110	N	UPL		Multiply b	v-
3. Rubis americas	-3	M	012	OBL species		
1				FACW species		
5				FAC species		
Total Cover:	98			FACU species		
Herb Stratum		1		UPL species		
1. Distictlis spicata	10	7	FAC	Column Totals:		
2. Foeniculum vulgare	5	N	URL			
3. Melilotus albus	13	7	TIBL		= B/A =	
4. Elymos trácoides	117		FAC	Hydrophytic Vegetation  Dominance Test is		
5				Prevalence Index is		
6				Morphological Ada		poorting
7				data in Remarks	s or on a separate sh	neet)
8Total Cover:	21			Problematic Hydro	phytic Vegetation <sup>1</sup> (E	explain)
Woody Vine Stratum		-				
1				<sup>1</sup> Indicators of hydric soi	il and wetland hydrol	ogy must
2				be present.		
Total Cover	:	-		Hydrophytic	-1.0	
% Bare Ground in Herb Stratum % Cover	of Biotic C	Crust		Vegetation Present? Ye	es_X No	
Remarks:				1,000		
Tomano.						
	2					

Sampling Point: SP-3

Depth inches)	Matrix Color (moist)	%	Color (moist)	dox Features	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	104R 2/1	100			_		SILO	
7-11	2.54 3/1	40	104R 4/4	46	C	M	<b>5</b> a	
11-16	Gley 1 N4/0	93	104R 4/10	7		RC	SCLO	
	ncentration, D=Deple					re Lining, F	RC=Root Char	nnel, M=Matrix.
	ndicators: (Applica	ble to all			d.)			s for Problematic Hydric Soils <sup>3</sup> :
Histosol (	(A1) ipedon (A2)		Sandy Red Stripped M					Muck (A9) (LRR C) Muck (A10) (LRR B)
Black His				cky Mineral	(F1)			ced Vertic (F18)
	Sulfide (A4)		Loamy Gle				- V	Parent Material (TF2)
_ Stratified	Layers (A5) (LRR C)		Depleted M				Other	(Explain in Remarks)
	k (A9) (LRR D)	11.74.	Redox Dar	No. 1. Company				
	Below Dark Surface	(A11)		Dark Surface				
	k Surface (A12) icky Mineral (S1)		Redox Dep	oressions (F	8)		3Indicators	of hydrophytic vegetation and
	eyed Matrix (S4)		veillai P00	//3 (I 3)				hydrology must be present.
estrictive La	ver (if present):							
Tuno: Alca	ne to 2211							
Type								\
	es):						Hydric Soil	Present? Yes No
			_				Hydric Soil	Present? Yes No
DROLOG etland Hydro imary Indicat Surface Wi High Water Saturation Water Mark	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) ss (B1) (Nonriverine	or is suffic	Salt Crust Biotic Crus Aquatic Inv	st (B12) vertebrates Sulfide Odo	r (C1)	iving Roo	Secon V S D D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2)
DROLOG etland Hydro imary Indicat Surface Wi High Water Saturation Water Mark	Y plogy Indicators: ors (any one indicator (A1) r Table (A2) (A3) (xs (B1) (Nonriverine Deposits (B2)	or is suffic ) verine)	Salt Crust Biotic Crus Aquatic Inv Hydrogen	st (B12) vertebrates Sulfide Odo Rhizosphere	or (C1) s along l		Secon V S D	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)
DROLOG etland Hydro mary Indicat Surface Wa High Water Saturation Water Mark Sediment D Drift Depos	y plogy Indicators: ors (any one indicator ater (A1) r Table (A2) (A3) ss (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine	or is suffic ) verine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) s along l Iron (C4	)	Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Crayfish Burrows (C8)
DROLOG etland Hydro imary Indicat Surface Wo High Water Saturation Water Mark Sediment D Drift Depos	y plogy Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) ss (B1) (Nonriverine Deposits (B2) (Nonriverine its (B3) (Nonriverine its (B3) (Nonriverine its (B3) (Nonriverine its (B6))	or is suffic ) verine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction	or (C1) es along l Iron (C4 n in Plow	)	Secon V S D D D D D D D D D D D D D D D D	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
DROLOG etland Hydro imary Indicat Surface With High Water Saturation Water Mark Sediment D Drift Depos Surface Sol	y plogy Indicators: ors (any one indicator ater (A1) r Table (A2) (A3) ss (B1) (Nonriverine peposits (B2) (Nonriverine its (B3) (Nonriverine	or is suffic ) verine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced	or (C1) es along l Iron (C4 n in Plow	)	Secon V S D	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Gediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)
DROLOG etland Hydro imary Indicat Surface With High Water Saturation Water Mark Sediment D Drift Depos Surface Sol	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) (xs (B1) (Nonriverine Deposits (B2) (Nonriverine il Cracks (B6) Visible on Aerial Imalied Leaves (B9)	or is suffic ) verine)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction	or (C1) es along l Iron (C4 n in Plow	)	Secon V S D	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Gediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)  Gaturation Visible on Aerial Imagery (C9)  Ghallow Aquitard (D3)
DROLOG etland Hydro imary Indicat Surface Wi High Water Saturation Water Mark Sediment D Drift Depos Surface So Inundation Water-Stain	y  plogy Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) ss (B1) (Nonriverine Deposits (B2) (Nonriverine ils (B3) (Nonriverine il Cracks (B6) Visible on Aerial Imaled Leaves (B9) ions:	or is suffic ) verine) e) gery (B7)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced n Reduction	or (C1) es along l Iron (C4 n in Plow	)	Secon V S D	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Gediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)  Gaturation Visible on Aerial Imagery (C9)  Ghallow Aquitard (D3)
Depth (inchemarks:  DROLOG etland Hydro imary Indicat Surface Wo High Water Saturation Water Mark Sediment D Drift Depos Surface So Inundation Water-Stair	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine III Cracks (B6) Visible on Aerial Imaled Leaves (B9) ions: Present? Yes	or is suffic ) verine) e) gery (B7)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction olain in Rem	or (C1) es along l Iron (C4 n in Plow	)	Secon V S D	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Gediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)  Gaturation Visible on Aerial Imagery (C9)  Ghallow Aquitard (D3)
DROLOG etland Hydro imary Indicat Surface With High Water Saturation Water Mark Sediment D Drift Depos Surface So Inundation Water-Stain Id Observati face Water Freduration Preservation	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine ill Cracks (B6) Visible on Aerial Imaled Leaves (B9) fons: Present? Yes ent? Yes ent? Yes	or is suffice  verine)  gery (B7)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction plain in Rem ches): ches):	or (C1) es along l Iron (C4 n in Plow	) ed Soils (C	Secon V S D	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Gediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)  Gaturation Visible on Aerial Imagery (C9)  Ghallow Aquitard (D3)
DROLOG etland Hydro imary Indicat Surface Water Mark Sediment D Drift Depos Surface So Inundation Water-Stain Id Observati face Water F ter Table Prese ludes capilla	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine ill Cracks (B6) Visible on Aerial Imaled Leaves (B9) fons: Present? Yes ent? Yes ent? Yes	or is suffice  or is	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction plain in Rem ches): ches):	or (C1) s along I Iron (C4 n in Plow arks)	ed Soils (C	Secon V S D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Schallow Aquitard (D3) (AC-Neutral Test (D5)
DROLOG etland Hydro imary Indicat Surface Water Mark Sediment D Drift Depos Surface So Inundation Water-Stain Id Observati face Water F ter Table Prese ludes capilla	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine Deposits (B3) (Nonriverine Deposits (B6) (Nonriverine Deposits	or is suffice  or is	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction plain in Rem ches): ches):	or (C1) s along I Iron (C4 n in Plow arks)	ed Soils (C	Secon V S D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Schallow Aquitard (D3) (AC-Neutral Test (D5)
Depth (inchemarks:  DROLOG etland Hydro imary Indicat Surface With High Water Saturation Water Mark Sediment D Drift Depos Surface So Inundation Water-Stain Id Observati face Water F ter Table Pre uration Prese ludes capilla scribe Record	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) ss (B1) (Nonriverine Deposits (B2) (Nonriverine il Cracks (B6) Visible on Aerial Imaled Leaves (B9) ions: Present? Yes ent? Yes e	or is suffice  verine)  gery (B7)  No	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction plain in Rem ches): ches): ches):	or (C1) s along l Iron (C4 n in Plow earks)	ed Soils (C	Secon	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Chin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  SAC-Neutral Test (D5)  The property of the prop
DROLOG etland Hydro imary Indicat Surface With High Water Saturation Water Mark Sediment D Drift Depos Surface Sol Inundation Water-Stain Id Observati face Water F ter Table Preseludes capilla scribe Record	y  pology Indicators: ors (any one indicatorater (A1) r Table (A2) (A3) (S (B1) (Nonriverine Deposits (B2) (Nonriverine Deposits (B3) (Nonriverine Deposits (B6) (Nonriverine Deposits	or is suffice  verine)  gery (B7)  No  uge, mon	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Other (Exp	st (B12) vertebrates Sulfide Odo Rhizosphere of Reduced in Reduction plain in Rem ches): ches): ches):	or (C1) s along I Iron (C4 n in Plow arks)	wetla	Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Chin Muck Surface (C7) Orayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Schallow Aquitard (D3) (AC-Neutral Test (D5)

[W-6/W-7]

vestigator(s): Karen Buch, Silvey We	<u> </u>	ection, Tow	nship, Ran	ge: 300 130 K	No. 10
andform (hillslope, terrace, etc.): bern / Mic	Herace 1	ocal relief (	concave, c	onvex, none):	Slope (%):
ubregion (LRR): LRRC	Lat: <u>38</u> ,	0/150	2.1	Long:121.83169	Datum: NAOS
oil Map Unit Name: Volde7 5: H 1067, 6					
e climatic / hydrologic conditions on the site typical	for this time of yea	r? Yes _/	→ No _	(If no, explain in Rema	arks.)
re Vegetation, Soil, or Hydrology	significantly d	listurbed?	Are "I	Normal Circumstances" pres	ent? Yes No
e Vegetation, Soil, or Hydrology	naturally prob	elematic?	(If ne	eded, explain any answers i	n Remarks.)
UMMARY OF FINDINGS - Attach site	nap showing	sampling	point lo	ocations, transects, in	mportant features, etc.
			E - 17 / 15	SAZ	
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No No	1177 SV	Sampled		X
Wetland Hydrology Present? Yes		within	n a Wetlan	id? Yes	No /
Demonstrat				The first control of the control	
Located on a raised, ory bern be	tween high	the Im	e and	Westing to the Not	
EGETATION	Absolute	Dominant	Indicator	Dominance Test worksh	neet:
Tree Stratum (Use scientific names.) (=101		Species?		Number of Dominant Spe	cies I
				That Are OBL, FACW, or	FAC: (A)
2				Total Number of Dominar	nt 3
8				Species Across All Strata	: (B)
l				Percent of Dominant Spe	ecies oo
	Cover:			That Are OBL, FACW, or	
Sapling/Shrub Stratum (=10)	20	¥	TAC	Prevalence Index works	sheet:
Buccharis piwaris	1.5		UPL		Multiply by:
Rubus armaniaceus	10	N			x1 =
					x 2 =
					x3=
	Cover: 45				x 4 =
Herb Stratum (=5		.1			x 5 =
. Foeniculum vulgare	30		JPL		(A) (B
Raphone Satur	2	N		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
. Rumex crispus	2	N			= B/A =
Elymos friticoides	3	- V		Hydrophytic Vegetatio	n Indicators:
. Juneus balticus	2	N .		Dominance Test is	
. Heterotheca gardinora		N		Prevalence Index is	
Distichis spicata		N		Morphological Adap	otations <sup>1</sup> (Provide supporting s or on a separate sheet)
				11 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	I Cover:			Problematic Hydron	ohytic Vegetation <sup>1</sup> (Explain)
Noody Vine Stratum (=10				Madientes of books	l and wattend budgeten with
				be present.	l and wetland hydrology must
2				EA ANT FAR AND	
Tota	l Cover:O	-		Hydrophytic Vegetation	✓
% Bare Ground in Herb Stratum 9	6 Cover of Biotic (	Crust		Present? Ye	s No
bale Glound in ricib Chatain					

W-6/W-7

SOIL

Sampling Point: 59-4

Profile Description: (Describe to the dept						
Depth Matrix (inches) Color (moist) %	Color (moist)	Features %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
Coloi (moist) 76	Odioi (ilioist)			I	Losa	
0-7 1011- 21 100			_		Coave	
0-7 104R2/1 100			-			
7-13 2.543/2 97	IOND 3/A	3	C.	M	301	
13-17 2.54 4/1 60	2.544/3	40	C	M/PL	Salo	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=				re Lining, R	C=Root Chang	nel, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :
Hydric Soil Indicators: (Applicable to all L			ea.)			fuck (A9) (LRR C)
Histosol (A1)	Sandy Redo					fluck (A10) (LRR B)
Histic Epipedon (A2) Black Histic (A3)	Stripped Mat		I /E1)			ed Vertic (F18)
						arent Material (TF2)
Hydrogen Sulfide (A4)	Loamy Gleye		(12)			Explain in Remarks)
Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D)	Depleted Ma Redox Dark		F6)		_ 5000	
Depleted Below Dark Surface (A11)	Redox Dark					
Thick Dark Surface (A12)	Redox Depre					
Sandy Mucky Mineral (S1)	Vernal Pools		0)		3Indicators	of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	veman ook	(10)				hydrology must be present.
Restrictive Layer (if present):	2					
T						1
Туре:						V
Depth (inches):					Hydric Soil	Present? Yes No X
and the state of t					Hydric Soil	Present? Yes No
Depth (inches):Remarks:						
Depth (inches):					Secon	dary Indicators (2 or more required)
Depth (inches):	cient)				Secon	dary Indicators (2 or more required) dater Marks (B1) (Riverine)
Depth (inches):	cient) Salt Crust (				Secon	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Depth (inches):	cient)				<u>Secon</u> W Si D	dary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
Depth (inches):	cient) Salt Crust (	(B12)	s (B13)		<u>Secon</u> W Si D	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Depth (inches):	cient) Salt Crust ( Biotic Crust	(B12) ertebrates			Secon W So D	dary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	cient) Salt Crust ( Biotic Crust Aquatic Inv	t (B12) ertebrate: Sulfide Oc	dor (C1)	Living Roo	Secon W Si D D	dary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
Depth (inches):	cient)  Salt Crust ( Biotic Crust Aquatic Invo	t (B12) ertebrates Sulfide Och hizospher	dor (C1) res along		Secon W Si D D D D ts (C3) Ti	dary Indicators (2 or more required)  later Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2)
Depth (inches):	cient)  Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized R	t (B12) ertebrates Sulfide Oc hizosphei f Reduce	dor (C1) res along d Iron (C	4)	Secon W Si D D D D D D D D D C	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  nin Muck Surface (C7)  rayfish Burrows (C8)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust ( Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o	t (B12) ertebrates Sulfide Oc hizospher f Reduce Reduction	dor (C1) res along d Iron (C on in Plo	4)	Secon W Si D D D D D Cs (C3) Ti C6) S	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  nin Muck Surface (C7)  rayfish Burrows (C8)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficed to sufface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust ( Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o	t (B12) ertebrates Sulfide Oc hizospher f Reduce Reduction	dor (C1) res along d Iron (C on in Plo	4)	Secon  W Si D D D D D Cs (C3) Ti C6) S	dary Indicators (2 or more required) /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Depth (inches):  Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust ( Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o	t (B12) ertebrates Sulfide Oc hizospher f Reduce Reduction	dor (C1) res along d Iron (C on in Plo	4)	Secon  W Si D D D D D Cs (C3) Ti C6) S	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	Salt Crust ( Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o	t (B12) ertebrates Sulfide Oc hizospher f Reduce a Reduction ain in Re	dor (C1) res along d Iron (C on in Plo marks)	4) wed Soils (C	Secon  W Si D D D D D Cs (C3) Ti C6) S	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes N	Salt Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Other (Expl	t (B12) ertebrate: Sulfide Ochizospher f Reduce n Reduction ain in Re	dor (C1) res along d Iron (C on in Plo marks)	4) wed Soils (C	Secon  W Si D D D D D Cs (C3) Ti C6) S	dary Indicators (2 or more required)  later Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Pepth (inches):  Remarks:  SYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes Notes the present?  Water Table Present? Yes Notes	Salt Crust ( Biotic Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Other (Expl	t (B12) ertebrate: Sulfide Ochizospher f Reduce: Reductionain in Re hes):	dor (C1) res along d Iron (C on in Plo marks)	4) wed Soils (C	Secon  W Si D D D D Cs (C3) Ti C6) S S F	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
Depth (inches):	Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iron Other (Expl	t (B12) ertebrates Sulfide Ochizospher f Reduces Reductionain in Re hes): hes):	dor (C1) res along d Iron (C on in Plot marks)	4) wed Soils (C	Secon  W Si D D Sts (C3) C6) S S F Sand Hydrolog	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  nin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficed and sufface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes Notes and suffaced water Present?	Salt Crust ( Biotic Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iron Other (Expl	t (B12) ertebrates Sulfide Ochizospher f Reduces Reductionain in Re hes): hes):	dor (C1) res along d Iron (C on in Plot marks)	4) wed Soils (C	Secon  W Si D D Sts (C3) C6) S S F Sand Hydrolog	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  nin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)
Perparks:    Surface Water (A1)	Salt Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Other (Expl	t (B12) ertebrate: Sulfide Ochizospher f Reduce: Reduction ain in Re hes): hes): hes):	dor (C1) res along d Iron (C on in Plot marks)	Wetlaspections),	Secon	dary Indicators (2 or more required)  later Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Perparks:    Surface Water (A1)	Salt Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Other (Expl	t (B12) ertebrate: Sulfide Ochizospher f Reduce: Reduction ain in Re hes): hes): hes):	dor (C1) res along d Iron (C on in Plot marks)	Wetlaspections),	Secon	dary Indicators (2 or more required)  later Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Depth (inches):  Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficed and sufface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes Notes the pre	Salt Crust ( Biotic Crust ( Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Other (Expl	t (B12) ertebrate: Sulfide Ochizospher f Reduce: Reduction ain in Re hes): hes): hes):	dor (C1) res along d Iron (C on in Plot marks)	Wetlaspections),	Secon	dary Indicators (2 or more required)  later Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)

# W-6/7

# WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: 10/1/191/10		City/County	. Sola	NO COUNTY Sampling Date: 06-03-24
Applicant/Owner: Us Power				State: Sampling Point: SP -5
Investigator(s): Sidney Wells, Faven ba	ch	Section, To	wnship, Ra	ange: SOO T3N RIE
Landform (hillslope, terrace, etc.): Foots tope		Local relief	(concave,	convex, none): _S() Slope (%): 3
Subregion (LRR): LFC	Lat: 3	8.070	148	Long: - 121.830918 Datum: NAO83
Soil Map Unit Name: Valde 2 Sit 10am, drahad	0-7 1/4	singes		NWI classification: 626M\N
Are climatic / hydrologic conditions on the site typical for thi	time of up	or? Voc	× No	(If no, explain in Remarks.)
			Aro.	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
Are Vegetation, Soil, or Hydrology				
SUMMARY OF FINDINGS – Attach site map	showing	samplin	g point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes N		Is th	e Sample	d Area
Hydric Soil Present? Yes N		23.77	in a Wetla	🗡
Wetland Hydrology Present? Yes N	lo_X_			
Siight uplandslope at toeslope at hi	11 to the	. north		
VEGETATION				D Test weedsheet
Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1		ороснос.		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				
3.				Total Number of Dominant Species Across All Strata:  (B)
4				
Total Cove	r:			Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum  1. ROSA CALIFOVNICA	110	V	FAC	Prevalence Index worksheet:
			17.0	Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
J. Total Cove	(4)		_	FACU species x 4 =
Herb Stratum V= 5		.1	201	UPL species x 5 =
1. Jahrynis jepson!	5	N	061	Column Totals: (A) (B)
2. Disherylis Spicata	80		FAC	
3. Xanthium strimanium	1	N	FAC	Prevalence Index = B/A =
4. Rumex crispus	-	N	FAC	Hydrophytic Vegetation Indicators:  Dominance Test is >50%
5. Helminthotheca echioides	_5		FAC	
6				Prevalence Index is ≤3.0¹
7				Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	all			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum V=15	14			
1				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2				be present.
Total Cover	:			Hydrophytic
$\cap$	of Biotic Cr	1		Vegetation Present? Yes No
Remarks:				/

Sampling Point: SP-5

Profile Description: (Describe to the depth needed to docu Depth Matrix Redi		or confirm	n the absence	of indicators.)
	ox FeaturesType¹	Loc <sup>2</sup>	Texture	Remarks
0-9 10 YR 4/3 100			Sa	Tomane
10 11= 1/3 100				
9-10 10 YR 2/1 100			1050	
10-14 10 /R 3/2 100			Siclo	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix.	<sup>2</sup> Location: PL=Po	re Lining, F	RC=Root Chan	nel, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless othe				for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Red	ox (S5)		1 cm !	Muck (A9) (LRR C)
Histic Epipedon (A2) Stripped Ma	atrix (S6)			Muck (A10) (LRR B)
Black Histic (A3) Loamy Muc	cky Mineral (F1)			ced Vertic (F18)
** ** ** ** ** ** ** ** ** ** ** ** **	yed Matrix (F2)			arent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted M				(Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark				(Explain in Normalius)
	ark Surface (F7)			
TILL D. L. O. L. C. L. C.	ressions (F8)			
Sandy Mucky Mineral (S1) Vernal Pool			31-4:	-614
Sandy Gleyed Matrix (S4)	is (F9)			of hydrophytic vegetation and
estrictive Layer (if present):			wetland	hydrology must be present.
Type: None				. /
Depth (inches):			Hydric Soil	Present? Yes No
emarks:			riyunc 30ii	riesenti les No
emarks:			Tryunc 30n	riesenti les No
/DROLOGY			Tryunc 3011	NO NO
/DROLOGY //etland Hydrology Indicators:				
/DROLOGY /etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)			Secon	idary Indicators (2 or more required)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient) Surface Water (A1) Salt Crust	(B11)		Secon	idary Indicators (2 or more required) /ater Marks (B1) (Riverine)
TOROLOGY  Tetland Hydrology Indicators:  Timary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Self Crust			Secon	adary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
TOROLOGY  Vetland Hydrology Indicators:  Timary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Biotic Crust	t (B12)		Secon	Idary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient) _ Surface Water (A1) Salt Crust _ High Water Table (A2) Biotic Crust _ Saturation (A3) Aquatic Inv	et (B12) vertebrates (B13)		Secor — W — S — D	Idary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  _ Surface Water (A1) Salt Crust (A2) Biotic Crust (A3) Aquatic Inv.  _ Saturation (A3) Aquatic Inv.  _ Water Marks (B1) (Nonriverine) Hydrogen Saturation (B1)	et (B12) vertebrates (B13) Sulfide Odor (C1)		Secor — W — S — D — D — D	Indary Indicators (2 or more required)  /ater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  _ Surface Water (A1) Salt Crust (A1)	et (B12) vertebrates (B13) Sulfide Odor (C1) chizospheres along		Secor — W — S — D — D — D	Idary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  _ Surface Water (A1) Salt Crust   _ High Water Table (A2) Biotic Crust   _ Saturation (A3) Aquatic Inv _ Water Marks (B1) (Nonriverine) Hydrogen St _ Sediment Deposits (B2) (Nonriverine) Oxidized R _ Drift Deposits (B3) (Nonriverine) Presence of	at (B12) vertebrates (B13) Sulfide Odor (C1) thizospheres along of Reduced Iron (C4	4)	Secor — W — S — D — D — D ts (C3) — T	Indary Indicators (2 or more required)  I/ater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  _ Surface Water (A1) Salt Crust (A1) High Water Table (A2) Biotic Crust (A2) Saturation (A3) Aquatic Inv.  _ Water Marks (B1) (Nonriverine) Hydrogen Staturation (B2) (Nonriverine) Oxidized R2	at (B12) vertebrates (B13) Sulfide Odor (C1) thizospheres along of Reduced Iron (C4	4)	Secon  W S D D D D D ts (C3) Ti	adary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crust Biotic Crust Biotic Crust Biotic Crust Biotic Crust Aquatic Inv. Saturation (A3) Aquatic Inv. Water Marks (B1) (Nonriverine) Hydrogen Stating Deposits (B2) (Nonriverine) Oxidized R. Drift Deposits (B3) (Nonriverine) Presence Compared to Surface Soil Cracks (B6) Recent Iron Inundation Visible on Aerial Imagery (B7) Other (Exp.	et (B12) vertebrates (B13) Sulfide Odor (C1) chizospheres along	4)	Secon  W S D D D D ts (C3) Ti C C6) S	Idary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)
/ Interpretation of the property of the proper	ot (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 on Reduction in Plow	4)	Secon  W S D D D D D Cs (C3) Ti C6) S S	Indary Indicators (2 or more required)  /ater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
/ Interpretation of the property of the proper	ot (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 on Reduction in Plow	4)	Secon  W S D D D D D Cs (C3) Ti C6) S S	Idary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  _ Surface Water (A1) Salt Crust (A1) Biotic Crust (A2) Biotic Crust (A2) Aquatic Inv.  _ Saturation (A3) Aquatic Inv.  _ Water Marks (B1) (Nonriverine) Hydrogen (A2) Could the county of the	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)	(Control of the Control of the Contr	Secon  W S D D D D D Cs (C3) Ti C6) S S	Indary Indicators (2 or more required)  /ater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
/ DROLOGY // Jetland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crust Biotic Crust Aquatic Inv. High Water Table (A2) Biotic Crust Aquatic Inv. Saturation (A3) Aquatic Inv. Water Marks (B1) (Nonriverine) Hydrogen St. Sediment Deposits (B2) (Nonriverine) Oxidized R. Drift Deposits (B3) (Nonriverine) Presence Compared Surface Soil Cracks (B6) Recent Iron Inundation Visible on Aerial Imagery (B7) Other (Exp. Water-Stained Leaves (B9)  Beld Observations: Inface Water Present? Yes No Depth (incompared to the control of	et (B12) /ertebrates (B13) Sulfide Odor (C1) chizospheres along of Reduced Iron (C4 n Reduction in Plow lain in Remarks)	red Soils (C	Secon  W S D D D D D Cs (C3) Ti C6) S S	Indary Indicators (2 or more required)  /ater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crust (A1) Biotic Crust (A2) Biotic Crust (A3) Aquatic Inv (A3) Hydrogen (A3) Hydrogen (A3) Hydrogen (A3) Sediment Deposits (B2) (Nonriverine) Oxidized (A3) Presence (A3) (Nonriverine) Presence (A3) (Nonriverine) Presence (A3) (Nonriverine) Presence (A3) Hydrogen (A3) Presence (A3)	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)	ed Soils (C	Secon  W S D D D Sts (C3) Ti C6) S F	Idary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  _ Surface Water (A1)	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):	ed Soils (C	Secon   W   S   D   D   S   C   C	Indary Indicators (2 or more required)  /ater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  eld Observations:  Urface Water Present?  Ves  No  Depth (includes capillary fringe)	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):	ed Soils (C	Secon   W   S   D   S   C   C	Idary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)
Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  eld Observations:  Urface Water Present?  Ves No Depth (incidudes capillary fringe)  escribe Recorded Data (stream gauge, monitoring well, aerial peace of the control of t	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):	ed Soils (C	Secon   W   S   D   S   C   C	Idary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Water-Stained Leaves (B9) Water Table Present? Ves No Depth (includes capillary fringe) Preserved Indicate Table Present? Ves No Depth (includes capillary fringe) Preserved Indicate Table Present? No Depth (includes capillary fringe)	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):  Ches):  Choos, previous ins	wetla	Secon  W S D D D S S C S S S S S S S S S S S S S	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9 hallow Aquitard (D3) AC-Neutral Test (D5)
Vetland Hydrology Indicators:  Irimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Veld Observations:  Urface Water Present?  Ves No Depth (incompleted)  Vescribe Recorded Data (stream gauge, monitoring well, aerial presents of the control of the contro	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):  Ches):  Choos, previous ins	wetla	Secon  W S D D D S S C S S S S S S S S S S S S S	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
//DROLOGY //etland Hydrology Indicators: rimary Indicators (any one indicator is sufficient) Surface Water (A1) Salt Crust (A1) High Water Table (A2) Biotic Crust (A2) Saturation (A3) Aquatic Inv (A3) Water Marks (B1) (Nonriverine) Hydrogen (A2) Sediment Deposits (B2) (Nonriverine) Oxidized R2	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):  Ches):  Choos, previous ins	wetla	Secon  W S D D D S S C S S S S S S S S S S S S S	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) hin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
/ Interest of the present? Yes No Depth (inc per formary Indicators)  // Interest of the present? Yes No Depth (inc per formary Indicators)  // Interest of the present? Yes No Depth (inc per formary Indicators (any one indicator is sufficient)  // Salt Crust (A1) Salt Crust (B2) (Interest (A2) Biotic Crust (A3) Aquatic Interest (A3) Aquatic Interest (A3) (Interest (A3) Aquatic Interest (A3) (Interest (A3) (I	et (B12) Vertebrates (B13) Sulfide Odor (C1) Chizospheres along of Reduced Iron (C4 In Reduction in Plow lain in Remarks)  Ches):  Ches):  Ches):  Choos, previous ins	wetla	Secon  W S D D D S S C S S S S S S S S S S S S S	Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)  hin Muck Surface (C7)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)

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W-6

Project/Site: CONIASUINE				Sampling Date: 6-4-24
Applicant/Owner: LS Power				
nvestigator(s): Karen Bach Sidney Very		Section, Tov	vnship, Rar	nge: 500 T3N RIE
andform (hillslope, terrace, etc.): toes are		Local relief	(concave, c	convex, none): flut Slope (%): 0
Subregion (LRR): LRR C	Lat: 38	.07130		Long: -121,831849 Datum: NAD83
Soil Map Unit Name: Valdez Six 10am, dain	ed, 0-	2./.		NWI classification: <u>E2EM\N</u>
are climatic / hydrologic conditions on the site typical for this				
are Vegetation, Soil, or Hydrology si			Are "	'Normal Circumstances" present? Yes No
are Vegetation, Soil, or Hydrology na				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s			g point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No.	)	Is the	e Sampled	I Area
Wetland Hydrology Present? Yes No				
/EGETATION				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3				Species Across All Strata: (B)
1				Percent of Dominant Species
Sapling/Shrub Stratum (>10) Total Cover	:			That Are OBL, FACW, or FAC: (A/B)
1. Sesbania punicea	2	V	FACUL	Prevalence Index worksheet:
2301110				Total % Cover of: Multiply by:
3.				OBL species x 1 =
				FACW species x 2 =
i				FAC species x 3 =
Total Cover	:			FACU species x 4 =
Herb Stratum r=51. Potentia anserina ssp. pacifica	20	Y	001	UPL species x 5 =
Juneus Mexicans	45	7	ACIL	Column Totals: (A) (B)
3. Hydrocotyle verkingta	7	N	OBL	Prevalence Index = B/A =
Diantago Ignicolata	-3	N	FAC	Hydrophytic Vegetation Indicators:
Distichlis spicater	10	N	FAC	∑ Dominance Test is >50%
Schoenoprectus acutus var. occidentalis	2	N	OBL	Prevalence Index is ≤3.0¹
				Morphological Adaptations <sup>1</sup> (Provide supporting
				data in Remarks or on a separate sheet)
Total Cover	: 87			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Voody Vine Stratum V= 10				
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
Total Cover  8 Bare Ground in Herb Stratum \( \sum_{\subset} \) \( \text{Cover} \)	of Biotic C	_		Hydrophytic Vegetation Present?  Yes No
Remarks:	J. Diolio O			
tomand,				

# SOIL

Sampling Point: SP-6

Profile Description: (Describ	e to the dep	oth needed	to docu	ment the i	iuicator	or confirm	the absence	ce of indicators.)
Depth Matrix				x Features		1 - 2	Taxtura	Remarks
(inches) Color (moist)	%_	Color (	-,-	%	Type'	_Loc²	Sa C	Remarks
0-2.5 2.543/2	98	7,548	716			_ <u>// /</u>	340	
0 5-16 01 1111	90	10110	11/6	- 0		W	Salo	
2.5-6.5 Gley N4/	92	10 YR	4/6			101	296	
6.5-9.5 Glour 1. N 5/		15.10	2//			- 101	-	
6.5-9.5 Gley 2 N 5/	90	royp	3/6	10		WIPL		
9.5-13.5 574/1	- 50	104R	ul.	10	-		Sa	
	- 10	LOYR	5/6	- 2		MPL/RO		-
13-18.5 aley 1 N 4/	1_		1 10	20				appel M-Metrix
<sup>1</sup> Type: C=Concentration, D=D Hydric Soil Indicators: (App						re Lining, F	Indicat	annel, M=Matrix. ors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	ilicable to a				eu.,			m Muck (A9) (LRR C)
Histic Epipedon (A2)		-	andy Red	T. I. S.			-	m Muck (A10) (LRR B)
Black Histic (A3)				Matrix (S6)	1/54\		· ·	duced Vertic (F18)
				icky Minera				d Parent Material (TF2)
Hydrogen Sulfide (A4)	D (C)			eyed Matrix				ner (Explain in Remarks)
Stratified Layers (A5) (LR	(RC)			Matrix (F3)			_ 00	iei (Explain in Remarks)
1 cm Muck (A9) (LRR D)				rk Surface				
Depleted Below Dark Sur				Dark Surfa				
Thick Dark Surface (A12)				pressions	(F8)		3	
Sandy Mucky Mineral (S1		_ \	/ernal Po	ols (F9)				tors of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) Restrictive Layer (if present							wet	and hydrology must be present.
Type: $\sqrt{/A}$ +0 20								100
Type. A//A				1			11 2 00	X
Depth (inches):Remarks:							Hydric	Soil Present? Yes No No
VIII VIII VIII VIII VIII VIII VIII VII							Hydric	Soil Present? Yes // No
Remarks:	ors:							
Remarks:		ufficient)						Secondary Indicators (2 or more required)
Remarks:  HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in		ufficient)	Salt Cru	ust (B11)				Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)		ufficient)		ust (B11)				Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)		ufficient)	Biotic C	rust (B12)	otas (B13)		<u>§</u>	iecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ndicator is si	ufficient)	Biotic C Aquatic	rust (B12) Invertebra			<u>§</u>	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri	ndicator is su	Ξ	Biotic C Aquatic Hydroge	rust (B12) Invertebra en Sulfide	Odor (C1	)	<u>§</u>	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (	ndicator is su iverine) (Nonriverine	Ξ	Biotic C Aquatic Hydroge Oxidize	rust (B12) Invertebra en Sulfide d Rhizospl	Odor (C1 neres alo	) ng Living R	Soots (C3)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Remarks:  HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (  Drift Deposits (B3) (Nonri	ndicator is su iverine) (Nonriverine) riverine)	Ξ	Biotic C Aquatic Hydroge Oxidize Present	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu	Odor (C1 neres alo ced Iron	) ng Living R (C4)	Soots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
HYDROLOGY  Wetland Hydrology Indicate  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (  Drift Deposits (B3) (Nonri  Surface Soil Cracks (B6)	ndicator is si iverine) (Nonriverine)	e)	Biotic C Aquatic Hydroge Oxidize Present	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu	Odor (C1 neres alo ced Iron	) ng Living R	Soots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)
Remarks:  HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (  Drift Deposits (B3) (Nonri	ndicator is si iverine) (Nonriverine)	e)	Biotic C Aquatic Hydrogo Oxidize Present Recent	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu	Odor (C1 neres alo ced Iron ction in P	) ng Living R (C4) lowed Soils	5 coots (C3)	Gecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
HYDROLOGY  Wetland Hydrology Indicate  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (  Drift Deposits (B3) (Nonri  Surface Soil Cracks (B6)	iverine) (Nonriverine) riverine)	e)	Biotic C Aquatic Hydrogo Oxidize Present Recent	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu	Odor (C1 neres alo ced Iron ction in P	) ng Living R (C4) lowed Soils	S   S   C   C	Gecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (  Drift Deposits (B3) (Nonri  Surface Soil Cracks (B6)  Inundation Visible on Aei	iverine) (Nonriverine) rial Imagery	e) 	Biotic C Aquatic Hydroge Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) lowed Soils	S   S   C   C	Gecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (Nonri  Surface Soil Cracks (B6)  Inundation Visible on Aei  Water-Stained Leaves (B	iverine) (Nonriverine) rial Imagery	e) 	Biotic C Aquatic Hydroge Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) lowed Soils	S   S   C   C	Gecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (  Drift Deposits (B3) (Nonri  Surface Soil Cracks (B6)  Inundation Visible on Aet  Water-Stained Leaves (E)	iverine) (Nonriverine) rial Imagery 39) Yes   Yes	e) (B7)	Biotic C Aquatic Hydrogo Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in I	Odor (C1 heres aloo ced Iron ction in P Remarks)	) ng Living R (C4) lowed Soils	S   S   C   C	Gecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Remarks:  HYDROLOGY  Wetland Hydrology Indicate  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (Nonri  Surface Soil Cracks (B6)  Inundation Visible on Aeri  Water-Stained Leaves (EField Observations:  Surface Water Present?  Water Table Present?	iverine) (Nonriverine) rial Imagery 39)  Yes  Yes	e) 	Biotic C Aquatic Hydrogo Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in I	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) lowed Soils	Soots (C3)   So (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicator Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonri Sediment Deposits (B2) (Nonri Surface Soil Cracks (B6) Inundation Visible on Aei Water-Stained Leaves (E Field Observations: Surface Water Present? Water Table Present?	iverine) (Nonriverine) rial Imagery 39)  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes	(B7) No No No	Biotic C Aquatic Hydrogo Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in I	Odor (C1 heres alo iced Iron ction in P Remarks)	ng Living R (C4) lowed Soils	s (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (Nonri  Surface Soil Cracks (B6)  Inundation Visible on Aer  Water-Stained Leaves (EField Observations:  Surface Water Present?  Water Table Present?  Water Table Present?  Saturation Present?  (includes capillary fringe)  Describe Recorded Data (streens)	iverine) (Nonriverine) rial Imagery 39)  Yes Yes Yes eam gauge,	e) (B7) No No No monitoring	Biotic C Aquatic Hydrogo Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in (inches): (inches): (inches):	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) llowed Soils ) w	s (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicator  Primary Indicators (any one in  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonri  Sediment Deposits (B2) (Nonri  Surface Soil Cracks (B6)  Inundation Visible on Aer  Water-Stained Leaves (EField Observations:  Surface Water Present?  Water Table Present?  Water Table Present?  Saturation Present?  (includes capillary fringe)  Describe Recorded Data (streens)	iverine) (Nonriverine) rial Imagery 39)  Yes Yes Yes eam gauge,	e) (B7) No No No monitoring	Biotic C Aquatic Hydrogo Oxidize Present Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in (inches): (inches): (inches):	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) llowed Soils ) w	s (C6)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Remarks:  HYDROLOGY  Wetland Hydrology Indicator Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonri Sediment Deposits (B2) (Nonri Surface Soil Cracks (B6) Inundation Visible on Ael Water-Stained Leaves (E Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streeping to the control of the control	iverine) (Nonriverine) rial Imagery 39)  Yes  Yes  Yes  Yes  Gam gauge,	(B7) No No No monitoring	Biotic C Aquatic Hydroge Oxidize Presence Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in I (inches): (inches): cial photos,	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) llowed Soils ) w	oots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Remarks:  HYDROLOGY  Wetland Hydrology Indicator Primary Indicators (any one in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonri Sediment Deposits (B2) (Nonri Surface Soil Cracks (B6) Inundation Visible on Ael Water-Stained Leaves (E Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (streeping to the control of the control	iverine) (Nonriverine) rial Imagery 39)  Yes  Yes  Yes  Yes  Gam gauge,	(B7) No No No monitoring	Biotic C Aquatic Hydroge Oxidize Presence Recent Other (I	rust (B12) Invertebra en Sulfide d Rhizospl ce of Redu Iron Redu Explain in I (inches): (inches): cial photos,	Odor (C1 heres alo ced Iron ction in P Remarks)	ng Living R (C4) llowed Soils ) w	oots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

# [W-7]

# WETLAND DETERMINATION DATA FORM - Arid West Region

pplicant/Owner: LS Power				State:CA Sa	mpling Date: 6/3/24 mpling Point: 50-1
vestigator(s): Koren Bad, Sidney well	Se	ection, Tow	nship, Rang	e: 500 T3N R1	6
andform (hillslope, terrace, etc.): +oestore	L	ocal relief (	concave, co	nvex, none): concare	Slope (%):
ubregion (LRR): LPRC	Lat: 38.	07135	0	Long: -121.831629	Datum: NAD 83
il Map Unit Name: Valdez Six 10am, daina, 0-					
e climatic / hydrologic conditions on the site typical for this ti					
e Vegetation, Soil, or Hydrology sign				ormal Circumstances" pres	~
e Vegetation, Soil, or Hydrology nat				ded, explain any answers	
UMMARY OF FINDINGS – Attach site map sh					
,		samping	politio		important leatures, etc.
Hydrophytic Vegetation Present? Yes No .		Is the	Sampled A	Area	
Hydric Soil Present? Yes X		withi	n a Wetland	d? Yes X	_ No
Wetland Hydrology Present? Yes No Remarks:					
Isolated vertical separated from coasting	e by u	way p	em		
EGETATION				4	
	Absolute	Dominant	711777	Dominance Test works	heet:
, , , ,		Species?	Status	Number of Dominant Spe	
				That Are OBL, FACW, or	FAC: (A)
3.				Total Number of Domina	
1				Species Across All Strata	a (D)
Total Cover:	0			Percent of Dominant Spe That Are OBL, FACW, or	
Sapling/Shrub Stratum (= 15)	_				
1. Rosa californica		1	FAC	Prevalence Index work	
2				Total % Cover of:	
3					x 1 =
1					x 2 =
5 Total Cover:	-2				x 3 =
Herb Stratum (=5)					x 4 = x 5 =
1. Cotora carondpoloria	20	Y	OBL		(A) (E
2. Typha angustipica	4	N	OBL	Column Totals.	(A) (E
3. Lodwigia Peoloides	25	Y	OBL	Prevalence Index	= B/A =
4. Scoenoguedus aculus	15	4	OBL	Hydrophytic Vegetation	
5. Chiperus e ragiostis	5	N	FACW	▲ Dominance Test is	>50%
6				Prevalence Index i	
7				Morphological Ada	ptations <sup>1</sup> (Provide supporting s or on a separate sheet)
8					phytic Vegetation <sup>1</sup> (Explain)
Total Cover	69			Floblematic Hydro	phylic vegetation (Explain)
Woody Vine Stratum (= \5\				1 Indicators of hydric so	il and wetland hydrology mus
1				be present.	and welland hydrology mus
2	~				
Total Cover	:	- 0		Hydrophytic Vegetation	X
% Bare Ground in Herb Stratum $45$ % Cover	of Biotic (	Crust		Present? Yo	es No
Remarks:					

Sampling Point: Sp-)

Profile Desc Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-7	101/2 3/1	99	7.51R4/6		<u>C</u>	_M_	Clo.	
7-8	2.54 3/1	95	25144	5	C	M	5als	
8-9.5	25 4 3/1	90	7.54R 3/4	10	<u>C</u>	<u>M</u>	LoSa_	
9.5-66	54 4/2	93	104E 4/4	7	С	$\mathcal{M}$	SiCLO	
						re Lining, F	RC=Root Channel,	
lydric Soil In	dicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A	A1)		Sandy Redo	x (S5)			1 cm Muc	k (A9) (LRR C)
_ Histic Epip	pedon (A2)		Stripped Mat	rix (S6)			2 cm Muc	k (A10) (LRR B)
_ Black Hist			Loamy Muck		I (F1)		Reduced	
	Sulfide (A4)		Loamy Gleye					nt Material (TF2)
	ayers (A5) (LRR (	C)	Depleted Ma					plain in Remarks)
	(A9) (LRR D)		Redox Dark		(F6)			
	Below Dark Surface	e (A11)	Depleted Da				. 197	
	Surface (A12)	,	Redox Depre					
	cky Mineral (S1)		Vernal Pools		-)		3Indicators of h	ydrophytic vegetation and
	yed Matrix (S4)		volitari ools	(, 0)				Irology must be present.
	yer (if present):							37 se present
	None							,
. , , ,								
Donth (inch			_				Undete Call D	anta Vas
	es):		_				Hydric Soil Pre	sent? Yes No No
marks:	es):						Hydric Soil Pre	sent? Yes No No
marks:	es):			1				No No
DROLOGY	es):						Secondary	y Indicators (2 or more required)
PROLOGY  Stland Hydrol  mary Indicato	es):		ient)	:11)			Secondary Water	/ Indicators (2 or more required) Marks (B1) (Riverine)
DROLOGY tland Hydrol mary Indicato Surface Wat	logy Indicators: rs (any one indicator (A1)		ient) Salt Crust (B	(11) (B12)			Secondary Water Sedin	/ Indicators (2 or more required) Marks (B1) (Riverine) nent Deposits (B2) (Riverine)
DROLOGY otland Hydrol mary Indicato Surface Wat High Water	logy Indicators: rs (any one indicator (A1) Table (A2)		ient) Salt Crust (B Biotic Crust (	(B12)	(P12)		Secondary Water Sedim	/ Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
PROLOGY  Itland Hydrol  mary Indicato  Surface Wat  High Water	logy Indicators: rs (any one indicator (A1) Table (A2)	tor is suffic	ient) Salt Crust (B Biotic Crust (	(B12) rtebrates			Secondary Water Sedim Drift D	/ Indicators (2 or more required)  Marks (B1) (Riverine)  ment Deposits (B2) (Riverine)  Deposits (B3) (Riverine)  age Patterns (B10)
DROLOGY  Itland Hydrol  mary Indicato  Surface Wat  High Water  Saturation (A	logy Indicators: rs (any one indicater (A1) Table (A2) A3) s (B1) (Nonriverin	tor is suffic	ient) Salt Crust (B Biotic Crust ( Aquatic Inve Hydrogen Su	(B12) rtebrates ulfide Odd	or (C1)		Secondary	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2)
DROLOGY  Itland Hydrol  mary Indicato  Surface Water  High Water  Saturation (A  Water Marks  Sediment De	logy Indicators: rs (any one indicator (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Non	tor is suffic e) riverine)	ient) Salt Crust (B Siotic Crust (Aquatic Inve	(B12) rtebrates ilfide Odd zosphere	or (C1) es along L		Secondary Water Sedim Drift D Draina Dry-Si S (C3) Thin M	/ Indicators (2 or more required) Marks (B1) (Riverine) nent Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) Muck Surface (C7)
DROLOGY etland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit	logy Indicators: rs (any one indicator (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonriveri	tor is suffic e) riverine)	ient) Salt Crust (B Biotic Crust ( Aquatic Inve Hydrogen Su Oxidized Rhi Presence of	(B12) rtebrates ilfide Odd zosphere Reduced	or (C1) es along L I Iron (C4)		Secondary Water Sedim Drift D Draina Dry-Si S (C3) Thin M Crayfi	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2)
DROLOGY etland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil	logy Indicators: rs (any one indicater (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6)	tor is suffic e) iverine) ne)	ient) Salt Crust (B Siotic Crust (Aquatic Inve	(B12) rtebrates ilfide Odd zosphere Reduced	or (C1) es along L I Iron (C4)		Secondary   Water   Water   Sedim   Drift   Draina   Dry-State   Cayfii	/ Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Muck Surface (C7) Muck Surface (C7) Muck Burrows (C8)
DROLOGY tland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil	logy Indicators: rs (any one indicator (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering (B3) (Nonriveri	tor is suffic e) iverine) ne)	ient) Salt Crust (B Biotic Crust ( Aquatic Inve Hydrogen Su Oxidized Rhi Presence of	(B12) rtebrates ulfide Odd zosphere Reduced	or (C1) es along L I Iron (C4) n in Plowe		Secondary	/ Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Muck Surface (C7) Muck Surface (C7) Muck Burrows (C8)
DROLOGY tland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil Inundation V	logy Indicators: rs (any one indicater (A1) Table (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6)	tor is suffic e) iverine) ne)	ient)  Salt Crust (B Biotic Crust of Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F	(B12) rtebrates ulfide Odd zosphere Reduced	or (C1) es along L I Iron (C4) n in Plowe		Secondary Water Sedim Drift D Draina Dry-S (C3) Thin M Crayfi S (A) Shallo	Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Meason Water Table (C2) Muck Surface (C7) Muck Surface (C8) Mation Visible on Aerial Imagery (C
DROLOGY  Itland Hydrol  Mary Indicato  Surface Wat  High Water  Saturation (A  Water Marks  Sediment De  Drift Deposit  Surface Soil  Inundation V  Water-Staine	logy Indicators: rs (any one indicators (any one indicators) ter (A1) Table (A2) A3) s (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonriveri	tor is suffic e) iverine) ne)	ient)  Salt Crust (B Biotic Crust of Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F	(B12) rtebrates ulfide Odd zosphere Reduced	or (C1) es along L I Iron (C4) n in Plowe		Secondary Water Sedim Drift D Draina Dry-S (C3) Thin M Crayfi S (A) Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deason Water Table (C2) Muck Surface (C7) Sh Burrows (C8) Detion Visible on Aerial Imagery (Com Aquitard (D3)
PROLOGY etland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Stained d Observation	logy Indicators: rs (any one indicators: rs (any one indicators) rs (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonriverin	e) riverine) ne) agery (B7)	ient)  Salt Crust (B Biotic Crust (Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron F Other (Explain	(B12) rtebrates ulfide Odd zosphere Reduced Reduction in IRem	or (C1) es along L I Iron (C4) n in Plowe		Secondary Water Sedim Drift D Draina Dry-S (C3) Thin M Crayfi S (A) Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deason Water Table (C2) Muck Surface (C7) Sh Burrows (C8) Detion Visible on Aerial Imagery (Com Aquitard (D3)
emarks:  DROLOGY  etland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Stained d Observation face Water Pr	logy Indicators: rs (any one indicator (A1) Table (A2) A3) s (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonrivering (B3) (Nonrivering (B4) (B4)) Cracks (B6) risible on Aerial Imped Leaves (B9) ons: resent? Yes	e) riverine) ne) agery (B7)	ient)  Salt Crust (B Biotic Crust of Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron R Other (Explain	(B12) rtebrates ulfide Odd zosphere Reduced Reduction in in Rem	or (C1) es along L I Iron (C4) n in Plowe narks)		Secondary Water Sedim Drift D Draina Dry-S (C3) Thin M Crayfi S (A) Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deason Water Table (C2) Muck Surface (C7) Sh Burrows (C8) Detion Visible on Aerial Imagery (Cay Aquitard (D3)
PROLOGY  Petland Hydrol mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Staine d Observation face Water Preser Table Preservation	logy Indicators: rs (any one indicator (A1) Table (A2) A3) s (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonrivering (B4) (Nonrivering (B4) (Nonrivering (B4) (B4	e) iverine) ne) agery (B7)	ient)  Salt Crust (B  Biotic Crust (B  Aquatic Inve  Hydrogen St  Oxidized Rhi  Presence of  Recent Iron F  Other (Explain	(B12) rtebrates ulfide Odd zosphere Reduced Reduction in in Rem ess):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Secondary Water Sedim Drift D Draina Dry-S (C3) Thin M Crayfi Satura Shallo	Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Mage Patterns (B10) Mage Surface (C7) Muck Surface (C7) Mage Batrows (C8) Mation Visible on Aerial Imagery (Cay Aquitard (D3) Meutral Test (D5)
PROLOGY Patland Hydrol Mary Indicato Surface Wat High Water Saturation (A Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Stained d Observation face Water Preserration Preser	logy Indicators: rs (any one indicators: rs (any one indicators) rable (A2) A3) s (B1) (Nonrivering eposits (B2) (Nonrivering Cracks (B6) risible on Aerial Immed Leaves (B9) cons: resent? resent? Yes resent? Yes resent? Yes	e) iverine) ne) agery (B7)	ient)  Salt Crust (B Biotic Crust of Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron R Other (Explain	(B12) rtebrates ulfide Odd zosphere Reduced Reduction in in Rem ess):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Secondary Water Sedim Drift D Draina Dry-S (C3) Thin M Crayfi Satura Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) Deposits (B10) Deason Water Table (C2) Muck Surface (C7) Sh Burrows (C8) Detion Visible on Aerial Imagery (Com Aquitard (D3)
PROLOGY  Itland Hydrol  mary Indicato  Surface War  High Water  Saturation (A  Water Marks  Sediment De  Drift Deposit  Surface Soil  Inundation V  Water-Stained  d Observation  ace Water Preservation Preservation Preservations	logy Indicators: rs (any one indicators: rs (any one indicator (A1) Table (A2) A3) s (B1) (Nonrivering (B3) (Nonrivering	e) iverine) ne) agery (B7)	ient)  Salt Crust (B  Biotic Crust (B  Aquatic Inve  Hydrogen St  Oxidized Rhi  Presence of  Recent Iron F  Other (Explain	(B12) rtebrates ulfide Odd zosphere Reduced Reduction in in Rem ess):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Secondary Water Sedim Drift D Draina Dry-Si S (C3) Thin M Crayfi Shallo FAC-N	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) meason Water Table (C2) Muck Surface (C7) sh Burrows (C8) mation Visible on Aerial Imagery (Co
emarks:  DROLOGY etland Hydrol mary Indicato Surface Wat High Water Saturation (/ Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Staine d Observation face Water Pre er Table Preservation Preservation Preservation cribe Recorde	logy Indicators: rs (any one indicators: rs (any one indicators) rs (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonriverin	e) riverine) ne) agery (B7) No	Salt Crust (B Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Other (Explain	(B12) rtebrates alfide Odd zosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (Co	Secondary  Water Sedim Drift D Draina Dry-Si S (C3) Thin M Crayfi S Satura Shallo FAC-N	A Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Mack Surface (C7) Muck Surface (C7) Mation Visible on Aerial Imagery (Callet Aguitard (D3) Meutral Test (D5)  Mesent? Yes No
emarks:  DROLOGY etland Hydrol mary Indicato Surface Wat High Water Saturation (/ Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Staine d Observation face Water Pre er Table Preservation Preservation Preservation cribe Recorde	logy Indicators: rs (any one indicators: rs (any one indicators) rs (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonriverin	e) riverine) ne) agery (B7) No	Salt Crust (B Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Other (Explain	(B12) rtebrates alfide Odd zosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (Co	Secondary  Water Sedim Drift D Draina Dry-Si S (C3) Thin M Crayfi S Satura Shallo FAC-N	A Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Mack Surface (C7) Muck Surface (C7) Mation Visible on Aerial Imagery (Callet Aguitard (D3) Meutral Test (D5)  Mesent? Yes No
emarks:  DROLOGY etland Hydrol mary Indicato Surface Wat High Water Saturation (/ Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Staine d Observation face Water Pre er Table Preservation Preservation Preservation cribe Recorde	logy Indicators: rs (any one indicators: rs (any one indicators) rs (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonriverin	e) riverine) ne) agery (B7) No	Salt Crust (B Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Other (Explain	(B12) rtebrates alfide Odd zosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (Co	Secondary  Water Sedim Drift D Draina Dry-Si S (C3) Thin M Crayfi S Satura Shallo FAC-N	A Indicators (2 or more required) Marks (B1) (Riverine) Ment Deposits (B2) (Riverine) Meposits (B3) (Riverine) Mage Patterns (B10) Mack Surface (C7) Muck Surface (C7) Mation Visible on Aerial Imagery (Callet Aguitard (D3) Meutral Test (D5)  Mesent? Yes No
DROLOGY tland Hydrol mary Indicato Surface Wat High Water Saturation (/ Water Marks Sediment De Drift Deposit Surface Soil Inundation V Water-Staine d Observation ace Water Pre er Table Pres ration Preser udes capillary cribe Recorde	logy Indicators: rs (any one indicators: rs (any one indicators) rs (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonriverin	e) riverine) ne) agery (B7) No	Salt Crust (B Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Other (Explain	(B12) rtebrates alfide Odd zosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (Co	Secondary  Water Sedim Drift D Draina Dry-Si S (C3) Thin M Crayfi S Satura Shallo FAC-N	Indicators (2 or more required) Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) age Patterns (B10) meason Water Table (C2) Muck Surface (C7) sh Burrows (C8) mation Visible on Aerial Imagery (Co

# W-8

WETLAND DETE	RMINATI	ON DATA	FORM -	- Arid West Region
Project/Site: CONINGINO		City/County	Solani	Sampling Date: $6 - 3 - 24$
Applicant/Owner: LS Power				State: CA Sampling Point: Sp-1
Investigator(s): Kuren Bach, Sidney Well				
				convex, none): Slope (%):
				Long: -121,830671 Datum: NAD 83
Soil Map Unit Name: Valdez Sit 10am Drain				
Are climatic / hydrologic conditions on the site typical for the				
Are Vegetation, Soil, or Hydrology				"Normal Circumstances" present? Yes X
Are Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
			g point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes I	No X		e Sampled in a Wetlar	I Area nd? Yes No
Remarks: Small isolated depression separated from be	y deria 6	y upland	bern.	
VEGETATION				
Lecianea	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Use scientific names.) ~ IS	% Cover	Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4Total Cove Sapling/Shrub Stratum でいい	er: 0			Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
1				Prevalence Index worksheet:
2.				Total % Cover of: Multiply by:
				OBL species x 1 =
				FACW species x 2 =
				FAC species x 3 =
Total Cove	r:O			FACU species x 4 =
erb Stratum V=S	10	V	FAC	UPL species x 5 =
Dutichli spicate	40	-	OBL	Column Totals: (A) (B)
Sulicornia Pacifica		1	FACW	Prevalence Index = B/A =
Atripex prostrata			THUM	Hydrophytic Vegetation Indicators:
				✓ Dominance Test is >50%
				Prevalence Index is ≤3.0¹
				Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Total Cover	: 112			Problematic Hydrophytic Vegetation¹ (Explain)
oody Vine Stratum (=\S'				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
Total Cover  Bare Ground in Herb Stratum % Cover	of Biotic Cr	ust <u>5</u>		Hydrophytic Vegetation Present?  Yes No
emarks:	- COLDEN			,
emarks:				

_	-		
•	1	ш	
u	v		_

Sampling Point: SP-1

Histosol (A1)	Remarks
Color   Colo	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.   PL=Pore Lining, RC=Root Channel Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix. 2Location: PL=Pore Lining, RC=Root Channel Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Sandy Redox (S5) Indicators: Histosol (A2) Stripped Matrix (S6) Indicators	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix. 2Location: PL=Pore Lining, RC=Root Chann Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators  Histosol (A1) Sandy Redox (S5) Indicators: Histosol (A2) Stripped Matrix (S6) Indicators  Histosol (A2) Stripped Matrix (S6) Indicators  Histosol (A2) Stripped Matrix (S6) Indicators  Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Matrix (S6) Indicators  Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Reduced Matrix (F2) Indicators  Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Indicators  Hydric Soil Place (A12) Redox Depressions (F8) Indicators  Hydric Soil Restrictive Layer (if present):  Type: Noce to 27 Indicators  Hydric Soil Place (A12) Indicators  Hydric Soil Place (A13) Indicators  Hydrology Indicators: Second (A13) Indicators (B13) Indicators (B13) Aquatic Invertebrates (B13) Indicators (B13) Indicators (B15) Indicators	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Sandy Redox (S5) 1 cm M Histosol (A2) Stripped Matrix (S6) 2 cm M Histosol (A2) Stripped Matrix (S6) 2 cm M Histosol (A2) Loamy Mucky Mineral (F1) Reduce Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Polytogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Polytogen Sulfide (A9) (LRR C) Depleted Matrix (F3) Other (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators Sandy Gleyed Matrix (S4) Wetland Restrictive Layer (if present): Type: Nore to 27! Depth (inches): Hydric Soil  Remarks:  Hydric Soil  Remarks:  Hydric Soil  Remarks:  Hydric Soil  Remarks:  Hydric Soil  YPROLOGY  Wetland Hydrology Indicators: Secon  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Salt Crust (B13)  Hydrogen Sulfide Odor (C1)	
Histosol (A1)	
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm M Black Histic (A3) Loamy Mucky Mineral (F1) Reduce Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Properties (A5) (LRR C) Depleted Matrix (F3) Other of the Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9)  Restrictive Layer (if present): Type: Nove to 27' Depth (inches): Hydric Soil  Remarks: HWO Soil RE Excelled Within Potential wettend both with Same soil Rote (Not Instituted and Pools (F9))  MYDROLOGY  Wetland Hydrology Indicators: Secon Primary Indicators (any one indicator is sufficient) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	for Problematic Hydric Soils <sup>3</sup> :
Black Histic (A3) Loamy Mucky Mineral (F1) Reduce Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Properties (A5) (LRR C) Depleted Matrix (F3) Other (A5) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Sandy Mucky Mineral (S1) Vernal Pools (F9) Sandy Gleyed Matrix (S4) Wetland Restrictive Layer (if present):  Type: Nore to 27!  Depth (inches): Hydric Soil  Remarks: How Soil At Excalated within potential wettend both with same soil professional (Not Sales Very Jack No redox to 27! Let soil day no redox or light (Not Sales Matrix) (A1) Sale Crust (B11) Surface Water (A1) Surface Water (A1) Soil Crust (B12) Destination (A3) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	luck (A9) (LRR C)
Hydrogen Sulfide (A4)	luck (A10) (LRR B)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (F6)  1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)  Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)  Thick Dark Surface (A12) Redox Depressions (F8)  Sandy Mucky Mineral (S1) Vernal Pools (F9)  Sandy Gleyed Matrix (S4) Wetland  Restrictive Layer (if present):  Type:	ed Vertic (F18)
1 cm Muck (A9) (LRR D)	rent Material (TF2)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Indicators wetland Restrictive Layer (if present): Depth (inches): Depth (inches): Hydric Soil Remarks: Two Soil Ak (Acadate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) within Potonian wetland both with Same Soil Arc (Adate) (Adate) Soil Crust (B12) Soil Crust (B12) Soil Crust (B12) Dependent of the Soil Arc (B13) Dependent of	Explain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9)  Sandy Mucky Mineral (S1) Vernal Pools (F9)  Sandy Gleyed Matrix (S4)	
Sandy Mucky Mineral (S1) Vernal Pools (F9)   Sandy Gleyed Matrix (S4)    Restrictive Layer (if present):  Type: have to 27"   Depth (inches): Hydric Soil  Remarks:  +wo soil Pik excalated within Potential wettend both with same soil protection of taged years dark no relox to 27! let soil day, no relox or light (not superall) condition  HYDROLOGY  Wetland Hydrology Indicators:       Secondary Indicators (any one indicator is sufficient)   Surface Water (A1)       Salt Crust (B11)       Saturation (A3)   Aquatic Invertebrates (B13)   D  Water Marks (B1) (Nonriverine)   Hydrogen Sulfide Odor (C1)   D	
Sandy Gleyed Matrix (S4)  Restrictive Layer (if present):  Type:	
Restrictive Layer (if present):  Type:	of hydrophytic vegetation and
Type:hare to 27"  Depth (inches):	hydrology must be present.
Depth (inches):	
Remarks:  +wo soil Pik excalated within potential wetland both with same soil protein and layer layer years dark no redox to 27! let soil day, no redox or light (not saturate) condition  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)	· · · · · · · · · · · · · · · · · · ·
The soil fix executated within potential wetlend both with same soil from tower lagers very dark no redox to 27! let soil dry, no redox or listed (not subject) condition  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Salt Crust (B11)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Description of the soil protection of the soil protecti	Present? Yes No _>
YOROLOGY   Wetland Hydrology Indicators: Secon   Surface Water (A1)   Salt Crust (B11)   Surface Water (A2)   Suturation (A3)   Aquatic Invertebrates (B13)   Duration   Duration   Surface Water (B1)   Marks (B1) (Nonriverine)   Hydrogen Sulfide Odor (C1)   Duration   Duration   Surface Water (B1)   Duration   Surface Water (A3)   Marks (B1) (Nonriverine)   Hydrogen Sulfide Odor (C1)   Duration   Surface Water (B1)   Surface Water (B1)   Duration   Surface Water (B1)   Surface Water (B1)   Duration   Surface Water (B1)   Surface Wate	
YOROLOGY   Wetland Hydrology Indicators: Secon   Surface Water (A1)   Salt Crust (B11)   Surface Water (A2)   Surface (A3)   Aquatic Invertebrates (B13)   Duration   Surface (B13)   Surfac	ile, took multiple slices.
Value   Constitution     Value   Constitutio	ening occurso at moist
Wetland Hydrology Indicators:       Secon         Primary Indicators (any one indicator is sufficient)       W         Surface Water (A1)       Salt Crust (B11)       S         High Water Table (A2)       Biotic Crust (B12)       D         Saturation (A3)       Aquatic Invertebrates (B13)       D         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       D	
Primary Indicators (any one indicator is sufficient)         W          Surface Water (A1)        Salt Crust (B11)        S          High Water Table (A2)        Biotic Crust (B12)        D          Saturation (A3)        Aquatic Invertebrates (B13)        D          Water Marks (B1) (Nonriverine)        Hydrogen Sulfide Odor (C1)	
Surface Water (A1)       Salt Crust (B11)       S         High Water Table (A2)       Biotic Crust (B12)       D         Saturation (A3)       Aquatic Invertebrates (B13)       D         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       D	dary Indicators (2 or more required)
High Water Table (A2)       Biotic Crust (B12)       D         Saturation (A3)       Aquatic Invertebrates (B13)       D         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       D	ater Marks (B1) (Riverine)
High Water Table (A2)       Biotic Crust (B12)       D         Saturation (A3)       Aquatic Invertebrates (B13)       D         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Odor (C1)       D	ediment Deposits (B2) (Riverine)
Saturation (A3) Aquatic Invertebrates (B13) D  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) D	rift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) D	rainage Patterns (B10)
Out the state of t	y-Season Water Table (C2)
[HONGLED] [HONGLED HONGLED HER HONGLED	nin Muck Surface (C7)
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) C	rayfish Burrows (C8)
Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) S	aturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) \(^{\omega} \) S	nallow Aquitard (D3)
Water-Stained Leaves (B9)	AC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes ✓ No Depth (inches):	5.0
Seturation Proceeds	X
Saturation Present? Yes No Depth (inches): Wetland Hydrology (includes capillary fringe)	Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	
Large Diff deposits found within sp result of storm sugges return than my	
raise a let actions town mithing the resource stoller entire they will	V- V
	nor tidal action
	nor tides action
	nor tidal action

WETLAND DETER	MINATIO	N DATA	FORM - A	Arid West Region
Project/Site: Collins VIII &	С	ity/County:	Colan	O County Sampling Date: 06-03-24
Applicant/Owner: US Power				State: Sampling Point: SP-
Investigator(s): Sianen Wells, Karen	Bachs	ection, Tow		
Landform (hillslope, terrace, etc.): +0010PC	ı	ocal relief (	concave, co	nvex, none): <u>concave</u> Slope (%): <u>0</u>
Subregion (LRR): LFR C	Lat: 38	,07080	12	Long: -121.830475 Datum: NAD83
Soil Man Unit Name: Valle? S. H. John Jahal.	2-211			NWI classification:
Are climatic / hydrologic conditions on the site typical for this	time of vea	r? Yes	X No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sig			Are "N	ormal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology na				ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s			point lo	cations, transects, important features, etc.
Hydric Soil Present? Yes X			e Sampled A	×
VEGETATION				
		Dominant		Dominance Test worksheet:
Tree Stratum (Use scientific names.) V=101		Species?	Charles A. L.	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata:  (B)
3 4			-	
Total Cover	0			Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum Y=10'			- "	
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species x 1 = FACW species x 2 =
4		_		FAC species x 3 =
5Total Cove	. 0	-		FACU species x 4 =
Herb Stratum Y=S	-	- VI	4.0	UPL species x 5 =
1. Distictlis spicata	65	1	FAC	Column Totals: (A) (B)
2. Frankenia Salina	17	N	FACW	
3. Lepidium latitolium	20	- A	FAC	Prevalence Index = B/A =
4. Rumex Mispus	5	N	FAC	Hydrophytic Vegetation Indicators:
5. Schoenopletus autus var. occidentali	\$ 35		OBL	
6. Heliotropium curascavicum	_5_	_W	FACU	Prevalence Index is ≤3.0¹
7			-	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8	V/0	-		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum Y= 101 Total Cove	r: 145	_		
1				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
2				
Total Cove	r: <u> </u>	-3		Hydrophytic
% Bare Ground in Herb Stratum % Cove	r of Biotic	Crust	7	Vegetation Present?  Yes No
Remarks:				

-	_	

ing Point: SP-1

Depth	Matrix			x Feature				D
(inches)	Color (moist)	<u>%</u>	Color (moist)	-%	Type'	Loc <sup>2</sup>	Texture	Remarks
<u> </u>	10/R2/1	010	7.5 YR3/4	10	<u> </u>	<u>M</u>	CILO	
3-16	Gley 2104 3/	010	7.54R3/4	W	C	M	Sa	
		=				=		
	oncentration, D=Deple					e Lining, F		nnel, M=Matrix.
	Indicators: (Applica	bie to all i			ea.)			[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Histosol	pipedon (A2)		✓ Sandy Redo  Stripped Ma					Muck (A9) (LRR C) Muck (A10) (LRR B)
Black His			Stripped Ma		1/F1)			uced Vertic (F18)
	n Sulfide (A4)		Loamy Gley					Parent Material (TF2)
	Layers (A5) (LRR C)		Depleted M		(1 -)			r (Explain in Remarks)
	ck (A9) (LRR D)		→ Redox Dark		(F6)			No. 1
	Below Dark Surface	(A11)	Depleted Da					
_ Thick Da	rk Surface (A12)	200	Redox Depr					
_ Sandy M	lucky Mineral (S1)		Vernal Pool		4.5			s of hydrophytic vegetation and
	leyed Matrix (S4)						wetlar	nd hydrology must be present.
estrictive L	ayer (if present):							. /
								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Туре:			_					
	/ (M/L) shes): 0		_				Hydric Sc	oil Present? Yes No No
Depth (inclemarks:	hes): 0							
Depth (inclemarks:	GY Irology Indicators:							ondary Indicators (2 or more required)
Depth (inclemarks:	hes): 0	tor is suffic	cient)					
Depth (included included inclu	GY Irology Indicators:	or is suffic	Salt Crust	,			Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (included in the control of th	GY Irology Indicators:	or is suffic		,			Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Depth (included in the control of th	GY Irology Indicators: ators (any one indicat Nater (A1) ter Table (A2)	or is suffic	Salt Crust	st (B12)	es (B13)		Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (inclemarks:  /DROLOG /etland Hydrimary Indica _ Surface V _ High Wat  / Saturatio	GY Irology Indicators: ators (any one indicat Nater (A1) ter Table (A2)		Salt Crust Biotic Crus	st (B12) vertebrate			Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Depth (inclemarks:  /DROLOG /etland Hydrimary Indical Surface N High Wat Saturatio Water Ma	GY Irology Indicators: ators (any one indicators (A1) ter Table (A2) n (A3)	<b>e</b> )	Salt Crust Biotic Crust Aquatic In	st (B12) vertebrate Sulfide O	dor (C1)	Living Ro	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Depth (included in the control of th	GY Irology Indicators: ators (any one indicat Nater (A1) ter Table (A2) in (A3) arks (B1) (Nonriverin	e) iverine)	Salt Crust Biotic Crus Aquatic In Hydrogen	st (B12) vertebrate Sulfide O Rhizosphe	dor (C1) eres along		Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (included in the control of th	drology Indicators: ators (any one indicators (Any one indicators) ater (A1) are Table (A2) arks (B1) (Nonrivering) arks (B2) (Nonrivering)	e) iverine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	st (B12) vertebrate Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C4	4)	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
/DROLOG /etland Hyd rimary Indica Surface N High Wate Saturatio Water Ma Sediment Drift Depo	GY Irology Indicators: ators (any one indicators) Arter (A1) ter Table (A2) in (A3) arks (B1) (Nonrivering) at Deposits (B2) (Nonrivering) aris (B3) (Nonrivering)	e) iverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence	st (B12) vertebrate Sulfide O Rhizosphe of Reduce in Reduct	dor (C1) eres along ed Iron (C4 ion in Plov	4)	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
/DROLOG /etland Hydrimary Indica Surface W High Water Ma Sediment Drift Depo Surface S Inundatio	GY Irology Indicators: ators (any one indicators (A1) are Table (A2) n (A3) arks (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonrivering (B3	e) iverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence	st (B12) vertebrate Sulfide O Rhizosphe of Reduce in Reduct	dor (C1) eres along ed Iron (C4 ion in Plov	4)	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
/DROLOG /etland Hydrimary Indica Surface W High Water Ma Sediment Drift Depo Surface S Inundatio	drology Indicators: ators (any one indicators) ater (A1) are Table (A2) arks (B1) (Nonrivering) arks (B3) (Nonrivering) aris (	e) iverine) ne)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reducti blain in Re	dor (C1) eres along ed Iron (C4 ion in Plov	4)	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inclination)  Depth (in	GY  Irology Indicators: ators (any one indicators) Auter (A1) ter Table (A2) in (A3) arks (B1) (Nonrivering) at Deposits (B2) (Nonrivering) cosits (B3) (Nonrivering) in Cracks (B6) in Visible on Aerial Impained Leaves (B9) attions:	e) iverine) ne) agery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrate Sulfide O Rhizosphe of Reduce in Reduct blain in Re	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	4)	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inclination)  Depth (inclination)  Possible American American  Possible American Ameri	GY  Irology Indicators: ators (any one indicators (any one indicators) ators (A1) are Table (A2) arks (B1) (Nonrivering (B2) (Nonrivering (B3) (Nonrivering	e) riverine) ne) agery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	st (B12) vertebrate Sulfide O Rhizosphe of Reduce in Reduct blain in Re	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	4)	Sec	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inclemarks:  /DROLOG /etland Hydrimary Indica Surface V High Water Ma Sediment Drift Depo Surface S Inundatio Water-Stateld Observation	ches): O  Irology Indicators: ators (any one indicators) Atter (A1) Arter (A2) Irology Indicators: Atter (A3) Arter (A1) Arter (A3) Arks (B1) (Nonrivering to the content of the content o	e) riverine) ne) agery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	vertebrate Sulfide O Rhizosphe of Reduction Reduction Reduction In Indiana Indiana In India	dor (C1) eres along ed Iron (C4 ion in Plov emarks)	4) ved Soils	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (inclemarks:  /DROLOG /etland Hydrimary Indica Surface Water Max Sediment Drift Depo Surface S Inundatio Water-Stateld Observationer Table F aturation Presidudes capi	ches): O  Irology Indicators: ators (any one indicators) Atter (A1) Arter (A2) Irology Indicators: Atter (A3) Arter (A1) Arter (A3) Arks (B1) (Nonrivering to the content of the content o	e) iverine) ne) agery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Other (Exp	set (B12) vertebrate Sulfide O Rhizosphe of Reduction Reduction Dain in Reduction ches):	dor (C1) eres along ed Iron (C4) ion in Plov ermarks)	4) ved Soils	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inclemarks:  /DROLOG /etland Hydrimary Indica Surface Water Max Sediment Drift Depo Surface S Inundatio Water-Stateld Observationer Table F aturation Presidudes capi	GY  Irology Indicators: ators (any one indicat Nater (A1) ter Table (A2) n (A3) arks (B1) (Nonriverin to Deposits (B2) (Nonriverin coits (B3) (Nonriverin coit Cracks (B6) n Visible on Aerial Im ained Leaves (B9) ations: r Present? Yes esent? Yes ellary fringe)	e) iverine) ne) agery (B7	Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Other (Exp  Depth (inc	set (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re ches): ches):	dor (C1) eres along ed Iron (C4) ion in Plov ermarks)	4) ved Soils  Wet	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inclemarks:  /DROLOG /etland Hydrimary Indica Surface Water Max Sediment Drift Depo Surface S Inundatio Water-Stateld Observationer Table F aturation Presidudes capi	GY  Irology Indicators: ators (any one indicators) ators (any one indicators) are (A1) are Table (A2) arks (B1) (Nonrivering) attention (B3) (Nonrivering) attent	e) riverine) ne) agery (B7	Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Other (Exp  Depth (inc	set (B12) vertebrate Sulfide O Rhizosphe of Reduce on Reducti plain in Re ches): ches):	dor (C1) eres along ed Iron (C4) ion in Plov ermarks)	4) ved Soils  Wet	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

### WETLAND DETERMINATION DATA FORM - Arid West Region Project/Site: (allinsville City/County: Soland Sampling Date: Applicant/Owner: LS Paver State: CA Sampling Point: Investigator(s): Kara Buch, Sidney Well Section, Township, Range: SO TW R) E Landform (hillslope, terrace, etc.): foot local relief (concave, convex, none): Concave Slope (%): O Datum: NMD 83 NWI classification: EZEM\N Soil Map Unit Name: Vallez sitt 10am, aringol, 0-21, No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes 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? Is the Sampled Area Hydric Soil Present? No within a Wetland? Wetland Hydrology Present? Remarks: VEGETATION Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Use scientific names.) 30 ×5 = % Cover Species? Status Number of Dominant Species 1. Salix laevinata 10 Y FACIN That Are OBL, FACW, or FAC: 2. **Total Number of Dominant** Species Across All Strata: Percent of Dominant Species Total Cover: 10 That Are OBL, FACW, or FAC: Sapling/Shrub Stratum 5x5#+ Prevalence Index worksheet: 1. Rosa Californica Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ Total Cover: Herb Stratum 5x5f+ UPL species x 5 = 1. TUDNA angustifolia UBL Column Totals: \_\_\_\_\_ (A) OBI 2. Alisma grownineum Prevalence Index = B/A = FAC 3. DISTICH'S COICATA FACW Hydrophytic Vegetation Indicators: balticus 30 4. JUNCUS FAC ➤ Dominance Test is >50% 5. BUMEI CHSPUS OBL Prevalence Index is ≤3.01 6. LATHYUS 18/25mil 036 encemonientes acutus vacorcadantalis Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Total Cover: 120 Woody Vine Stratum 15f+ x 5f+ <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present. Total Cover: \_\_ Hydrophytic Vegetation % Cover of Biotic Crust 5 Present? % Bare Ground in Herb Stratum

Shape/size of profs adjusted to avoid crossing wettend/vey community boundary

_	_	

Sampling Point: SP2

Depth	Matrix			x Feature		. ,	Tardura	Remarks
	olor (moist)	%	Color (moist)	%	Type'	_Loc²	Texture	Remarks
10-3 IDV	12 4/2	97	7.51/R3/3	3		-M	Sici	
			21				0:01	
3-45 Gler	1-1043/1	98	10/K 3/4	2		IVC	Sici	-
			104/2 3/6	10		M	SiCI	
45-12 Gley	TNA	90	10412 70					
12-16 Che	2N4	90	10 YR 3/6	10		$\overline{M}$	LoSa	
¹Type: C=Concentra	tion D=Deple	tion, RM=				e Lining, F	RC=Root Chan	nel, M=Matrix.
Hydric Soil Indicato	rs: (Applicat	ole to all L	RRs, unless other	wise note	ed.)			for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)			Sandy Redo	x (S5)				Muck (A9) (LRR C)
Histic Epipedon	(A2)		Stripped Ma	trix (S6)				Muck (A10) (LRR B)
Black Histic (A3)	/		Loamy Much	y Mineral	I (F1)			ced Vertic (F18)
Hydrogen Sulfide	(14)		Loamy Gley					arent Material (TF2)
			Depleted Ma				Other	(Explain in Remarks)
Stratified Layers			The second secon		TC)		-	, , , , , , , , , , , , , , , , , , , ,
1 cm Muck (A9) (			Redox Dark					
Depleted Below D	ark Surface (	A11)	Depleted Da					
Thick Dark Surface	e (A12)		Redox Depre	essions (F	-8)			
Sandy Mucky Min			Vernal Pools	(F9)				of hydrophytic vegetation and
Sandy Gleyed Ma			-				wetland	hydrology must be present.
Restrictive Layer (if								
Type:	-							\/
			_				1 - 5 - 5 - 5 - 5	Present? Yes No
A STATE OF S							Hydric Soil	Present? Yes No
Depth (inches): emarks:			_				Hydric Soil	Present? Yes / No
Depth (inches): emarks:							Hydric Soil	Present? Yes / No
Depth (inches):emarks:	dicators:							ndary Indicators (2 or more required)
Depth (inches):emarks:  DROLOGY etland Hydrology Inc		is sufficie	ent)				Secon	
Depth (inches):emarks:  DROLOGY  etland Hydrology Incomary Indicators (any	one indicator	is sufficie		311)			Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine)
Depth (inches):emarks:  DROLOGY etland Hydrology Incomary Indicators (any Surface Water (A1)	one indicator	is sufficie	Salt Crust (E				Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine)
Depth (inches):emarks:  DROLOGY  etland Hydrology Incomary Indicators (any	one indicator	is sufficie	— Salt Crust (€  ✓ Biotic Crust)	(B12)			Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) dediment Deposits (B2) (Riverine) Orift Deposits (B3) (Riverine)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A)	one indicator	is sufficie	— Salt Crust (€  ✓ Biotic Crust)	(B12)	(B13)		Secor 	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rift Deposits (B3) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3)	one indicator	is sufficie	Salt Crust (E  Biotic Crust  Aquatic Inve	(B12) rtebrates	(B13) or (C1)		Secor 	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rift Deposits (B3) (Riverine) Orift Deposits (B3) (Riverine) Originage Patterns (B10)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I	one indicator A2) Nonriverine)		Salt Crust (E  Biotic Crust  Aquatic Inve	(B12) rtebrates ulfide Odd	or (C1)	iving Roo	Secor W S D D D D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) dediment Deposits (B2) (Riverine) defining Patterns (B10) dry-Season Water Table (C2)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3)	one indicator A2) Nonriverine)		Salt Crust (B Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh	(B12) rtebrates ulfide Odd izosphere	or (C1) es along L		Secor W S D D D ts (C3) T	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) Orainage Patterns (B10) Ory-Season Water Table (C2) Whin Muck Surface (C7)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A1) High Water Table (A2) Water Marks (B1) (I1) Sediment Deposits	one indicator A2) Nonriverine) (B2) (Nonrive	erine)	Salt Crust (B  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of	(B12) rtebrates ulfide Odd izosphere Reduced	or (C1) es along L I Iron (C4)	)	Secor W S D D D Ts (C3) T C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) very-Season Water C7) very-Season Water C7) very-Season Water C7) very-Season Water C7)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I) Sediment Deposits (B3) (I)	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine)	erine)	Salt Crust (B  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of	(B12) rtebrates ulfide Odd izosphere Reduced	or (C1) es along L I Iron (C4)	)	Secor W S D D D Ts (C3) T C	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) very-Season Water C7) very-Season Water C7) very-Season Water C7) very-Season Water C7)
Depth (inches):emarks:  DROLOGY  etland Hydrology Incomers Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I) Sediment Deposits (B3) (I) Surface Soil Cracks	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine) (B6)	erine)	Salt Crust (Bild Crust Aquatic Inverse Hydrogen Solution Presence of Recent Iron	(B12) rtebrates ulfide Odd izosphere Reduced Reduction	or (C1) es along L I Iron (C4) n in Plowe	)	Secor W S D D D D D D D Cs (C3) T	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Prift Deposits (B3) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I Sediment Deposits (B3) (I Surface Soil Cracks Inundation Visible of	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine) (B6) n Aerial Image	erine)	Salt Crust (B  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of	(B12) rtebrates ulfide Odd izosphere Reduced Reduction	or (C1) es along L I Iron (C4) n in Plowe	)	Secor W S S S S S S S S S S S S S S S S S S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) verin Muck Surface (C7) veryfish Burrows (C8) veryfish Burrows (C8) veryfish Staturation Visible on Aerial Imagery (Catalog Catalog C
Depth (inches):emarks:  DROLOGY  etland Hydrology Incomers Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I) Sediment Deposits (B3) (I) Surface Soil Cracks	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine) (B6) n Aerial Image	erine)	Salt Crust (Bild Crust Aquatic Inverse Hydrogen Solution Presence of Recent Iron	(B12) rtebrates ulfide Odd izosphere Reduced Reduction	or (C1) es along L I Iron (C4) n in Plowe	)	Secor W S S S S S S S S S S S S S S S S S S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Prift Deposits (B3) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8)
Depth (inches):emarks:  DROLOGY  etland Hydrology Inc mary Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I Sediment Deposits (B3) (I Surface Soil Cracks Inundation Visible of	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine) (B6) n Aerial Image	erine) ery (B7)	Salt Crust (E  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates Intebrates Intebrates Interpretation Interpretati	or (C1) es along L I Iron (C4) n in Plowe narks)	)	Secor W S S S S S S S S S S S S S S S S S S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) verinin Muck Surface (C7) veryfish Burrows (C8) veryfish Burrows (C8) veryfish Staturation Visible on Aerial Imagery (Catalog April 1988)
Depth (inches):emarks:emarks:emarks:en	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine) (B6) n Aerial Image	erine) ery (B7)	Salt Crust (E  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates Intebrates Intebrates Interpretation Interpretati	or (C1) es along L I Iron (C4) n in Plowe narks)	)	Secor W S S S S S S S S S S S S S S S S S S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) verinin Muck Surface (C7) veryfish Burrows (C8) veryfish Burrows (C8) veryfish Staturation Visible on Aerial Imagery (Cathallow Aquitard (D3)
Depth (inches):emarks:  DROLOGY  etland Hydrology Incomercy Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I) Sediment Deposits (B3) (I) Sediment Deposits (B3) (I) Surface Soil Cracks Inundation Visible or Water-Stained Leaved d Observations: ace Water Present?	Nonriverine) (B2) (Nonriverine) (B6) (B6) (A2) (B6) (A2) (B6) (B6) (A2) (B6) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	erine) ery (B7)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Other (Expla	(B12) Intebrates Intebrates Intebrates Intebrates Italian Interpretation Interpre	or (C1) es along L I Iron (C4) n in Plowe narks)	)	Secor W S S S S S S S S S S S S S S S S S S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) verin Muck Surface (C7) veryfish Burrows (C8) veryfish Burrows (C8) veryfish Veryfish (C8) veryfish Staturation Visible on Aerial Imagery (C8) veryfish Staturation Visible on Aerial Imagery (C8) veryfish Staturation Visible on Aerial Imagery (C8)
Depth (inches):emarks:emarks:emarks:en	one indicator A2) Nonriverine) (B2) (Nonrive Nonriverine) (B6) n Aerial Image	erine) ery (B7) No _	Salt Crust (E  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates ulfide Odd izosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)  Face	) ed Soils (C	Secor W S D D D Ts (C3) T C6) S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8) Estaturation Visible on Aerial Imagery (C8) Estaturation Aquitard (D3) EAC-Neutral Test (D5)
Depth (inches):emarks:	Nonriverine) (B2) (Nonriverine) (B6) (B6) (A2) (B6) (A2) (B6) (B6) (A2) (B6) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	erine) ery (B7) No _	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Other (Expla	(B12) Intebrates ulfide Odd izosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)  Face	) ed Soils (C	Secor W S D D D Ts (C3) T C6) S F	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) vediment Deposits (B2) (Riverine) verift Deposits (B3) (Riverine) verinage Patterns (B10) very-Season Water Table (C2) verin Muck Surface (C7) veryfish Burrows (C8) veryfish Burrows (C8) veryfish Veryfish (C8) veryfish Staturation Visible on Aerial Imagery (C8) veryfish Staturation Visible on Aerial Imagery (C8) veryfish Staturation Visible on Aerial Imagery (C8)
Depth (inches):emarks:emark	Nonriverine) (B2) (Nonriverine) (B3) (Nonriverine) (B6) (A Aerial Image es (B9)  Yes Yes Yes Yes	erine) ery (B7) No _ No _ No _	Salt Crust (E  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates ulfide Odd izosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)  Face Face	) ed Soils (C	Secor	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8) Estaturation Visible on Aerial Imagery (C8) Estaturation Aquitard (D3) EAC-Neutral Test (D5)
Depth (inches):emarks:emarks:emarks:emarks:enarks:enarks:emarks:	Nonriverine) (B2) (Nonriverine) (B3) (Nonriverine) (B6) (A Aerial Image es (B9)  Yes Yes Yes Yes	erine) ery (B7) No _ No _ No _	Salt Crust (E  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates ulfide Odd izosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)  Face Face	) ed Soils (C	Secor	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8) Estaturation Visible on Aerial Imagery (C8) Estaturation Aquitard (D3) EAC-Neutral Test (D5)
Depth (inches):emarks:emarks:emarks:emarks:enarks:enarks:emarks:	Nonriverine) (B2) (Nonriverine) (B3) (Nonriverine) (B6) (A Aerial Image es (B9)  Yes Yes Yes Yes	erine) ery (B7) No _ No _ No _	Salt Crust (E  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates ulfide Odd izosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)  Face Face	) ed Soils (C	Secor	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8) Estaturation Visible on Aerial Imagery (C8) Estaturation Aquitard (D3) EAC-Neutral Test (D5)
Depth (inches):emarks:  DROLOGY  etland Hydrology Incompany Indicators (any Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) (I Sediment Deposits (B3) (I Sediment Deposits (B3)) Drift Deposits (B3) (I Surface Soil Cracks Inundation Visible on Water-Stained Leaved Observations: ace Water Present? ace Water Present? artion Present? action Present? actio	Nonriverine) (B2) (Nonriverine) (B3) (Nonriverine) (B6) (A Aerial Image es (B9)  Yes Yes Yes Yes	erine) ery (B7) No _ No _ No _	Salt Crust (B  Biotic Crust  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) Intebrates ulfide Odd izosphere Reduced Reduction in in Rem es):	or (C1) es along L I Iron (C4) n in Plowe narks)  Face Face	) ed Soils (C	Secor	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) rediment Deposits (B2) (Riverine) Prainage Patterns (B10) Pry-Season Water Table (C2) Prin Muck Surface (C7) Prayfish Burrows (C8) Estaturation Visible on Aerial Imagery (C8) Estaturation Aquitard (D3) EAC-Neutral Test (D5)

WETLAND	DETERMINATION DATA FORM – Arid West Region
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Applicant/Owner: LS Porce					State: CA Sar	moling Point: SD-	3
Investigator(s): Karen Bach,	Sidney very	S	Section.	Township, Ra	ange: SOO T3N K	16 16	
Landform (hillslope, terrace, etc.):	toesise		Local re	elief (concave,	, convex, none):	Slope (%):	0
Subregion (LRR): LFRC		Lat: _3	8.070	2548	Long: -121.829686	Datum: N	AD'
Soil Map Unit Name: Vaule2 5	il+10am, dra	nd, 1-2	2%		NWI classification	1:_62E /N\N	/
Are climatic / hydrologic conditions or							
Are Vegetation, Soil,	or Hydrology	_ significantly	disturbed	d? Are	"Normal Circumstances" prese	ent? Yes X No	
Are Vegetation, Soil,	or Hydrology	_ naturally pro	oblematic	? (If n	eeded, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS -	Attach site ma	p showing	sampl	ing point	locations, transects, in	portant features	s, et
Hydrophytic Vegetation Present?	Yes X	No		Angelon.	7.00		
Hydric Soil Present?	Yes	No +		the Sample	d Area ind? Yes	×	
Wetland Hydrology Present? Remarks:		No X	W	itnin a vvetia	ndr res	NO	
Tree Stratum (Use scientific names 1 2 3		% Cover	Species		Dominance Test workshe Number of Dominant Speci That Are OBL, FACW, or FA Total Number of Dominant	es AC: <u>3</u>	, ,
apling/Shrub Stratum (= IS	Total Cov	er:			Species Across All Strata:  Percent of Dominant Specie That Are OBL, FACW, or FA	es ,	, ,
Rosa californica					Prevalence Index worksho Total % Cover of:		
					OBL species	_ x 1 =	_
					FACW species		
			_		FAC species		
rb Stratum (=5)	Total Cove	er:			FACU species		_
formiculum vulgare		4	N	UPL	UPL species	_ x 5 =	- ,
Eignus tritioides		40	Y	FAC	Column Totals.	_ (A)	_ (
Francesia salina		3	N	FACW	Prevalence Index = E	B/A =	_
Distichio spicater		30	Y	FAC	Hydrophytic Vegetation In		
Carex barburaes			N	GAC	▲ Dominance Test is >50		
Helmorthathera echiales		1	Ν	FAC	Prevalence Index is ≤3		
					Morphological Adaptati data in Remarks or	ons¹ (Provide suppo on a separate sheet)	
dy Vine Stratum (=151	Total Cover	r: <u>83</u>			Problematic Hydrophyt	ic Vegetation <sup>1</sup> (Expla	in)
					<sup>1</sup> Indicators of hydric soil and be present.	d wetland hydrology	mus
	Total Cover	. 0			Hydrophytic	/	
re Ground in Herb Stratum	_	of Biotic Crus	st _ O	)	Vegetation Present? Yes	No	
	the second secon		1777				
arks:							

0	^	••	
	.,		

W-9/V-6

Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature:	Type <sup>1</sup>	Loc2	Texture	Remarks
1-7.5	104 E 2/1	100					LoSa	
7.5 - 9	2.5 4 3/2	100					Sa	
7-14	7.5423/2	100					CLO	
14 11	2011/2	_	1000 0/1	20	C		C . C	1.12. 1.25.
14-16	2.544/2	80_	1040 3/6			///	5iC	ledox prominent
	oncentration, D=Depl					re Lining,		annel, M=Matrix.
ydric Soil I	ndicators: (Applica	ble to all	LRRs, unless othe	rwise not	ed.)		Indicato	rs for Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Sandy Red					Muck (A9) (LRR C)
	pipedon (A2)		Stripped M					Muck (A10) (LRR B)
_ Black His			Loamy Mu				T T T T T T T T T T T T T T T T T T T	uced Vertic (F18)
	n Sulfide (A4)		Loamy Gle					Parent Material (TF2)
	Layers (A5) (LRR C	•)	Depleted N				_ Oth	er (Explain in Remarks)
	ck (A9) (LRR D)	(844)	Redox Dar					
	l Below Dark Surface ark Surface (A12)	(A11)	Depleted [					
	lucky Mineral (S1)		Redox Dep Vernal Poo		(F8)		3Indicate	ors of hydrophytic vegetation and
	sleyed Matrix (S4)		vernal Poo	ois (F9)				nd hydrology must be present.
	ayer (if present):						Wella	nd hydrology must be present.
								×
Type: _ \	1/2							
Type:			_				Hydric S	oil Present? Yes No
Type:							Hydric S	oil Present? Yes No
Depth (included) Remarks:	GY							
Depth (inc Remarks: YDROLO	GY drology Indicators:	otor is suff	Tojont)					condary Indicators (2 or more required)
Depth (inc Remarks: YDROLO Vetland Hyd Primary Indic	GY drology Indicators:	ator is suff		1.004)				condary Indicators (2 or more required) Water Marks (B1) (Riverine)
Depth (included included inclu	GY drology Indicators: cators (any one indic	ator is suff	Salt Crus					condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Depth (income property of the comments)  YDROLOGY Vetland Hydrimary Indication  Surface of the comments of the	GY drology Indicators: eators (any one indic Water (A1) ter Table (A2)	ator is suff	Salt Crus	ust (B12)	(D40)		Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Depth (income property of the comments)  YDROLOGY  Yorkelland Hydromary Indicome Surface of High Wa	GY drology Indicators: cators (any one indicators) Water (A1) ter Table (A2) on (A3)		Salt Crus Biotic Cr Aquatic	ust (B12) Invertebra			Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Pepth (inc Remarks: YDROLO Vetland Hyd Primary Indic Surface ' High Wa Saturatic Water M	GY drology Indicators: eators (any one indic Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver	ine)	Salt Crus Biotic Cr Aquatic Hydroge	ust (B12) Invertebra n Sulfide (	Odor (C1)	)	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Pepth (inc Remarks: PDROLOG Vetland Hyd Surface High Wa Saturation Water M Sediment	GY drology Indicators: cators (any one indicators (any one indicators) Water (A1) ter Table (A2) on (A3) arks (B1) (Nonrivering (B2) (Nonrivering (B2))	ine) nriverine)	Salt Crus Biotic Cr Aquatic Hydroge Oxidized	ust (B12) Invertebra n Sulfide ( I Rhizosph	Odor (C1) neres alor	) ng Living R	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Primary Indicates Surface Surf	GY  drology Indicators: cators (any one indic Water (A1) drer Table (A2) on (A3) darks (B1) (Nonriver ant Deposits (B2) (Nonriver) ossits (B3) (Nonriver)	ine) nriverine)	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence	ust (B12) Invertebra n Sulfide ( I Rhizosph e of Redu	Odor (C1) neres alor ced Iron (	) ng Living R (C4)	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Primary Indicates and Market M	GY drology Indicators: eators (any one indice Water (A1) ther Table (A2) on (A3) larks (B1) (Nonriver int Deposits (B2) (Non cosits (B3) (Nonriver Soil Cracks (B6)	ine) nriverine) rine)	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presenc Recent I	ust (B12) Invertebra n Sulfide ( I Rhizosph e of Redu ron Reduc	Odor (C1) neres alor ced Iron ( ction in Pl	) ng Living R (C4) owed Soil	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Popth (income control of the control	GY  drology Indicators: eators (any one indice Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver at Deposits (B2) (Nonriver coosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I	ine) nriverine) rine)	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presenc Recent I	ust (B12) Invertebra n Sulfide ( I Rhizosph e of Redu	Odor (C1) neres alor ced Iron ( ction in Pl	) ng Living R (C4) owed Soil	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Popth (income control of the control	GY  drology Indicators: eators (any one indice Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver at Deposits (B2) (Nonriver cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9)	ine) nriverine) rine)	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presenc Recent I	ust (B12) Invertebra n Sulfide ( I Rhizosph e of Redu ron Reduc	Odor (C1) neres alor ced Iron ( ction in Pl	) ng Living R (C4) owed Soil	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Popth (income control of the control	GY  drology Indicators: cators (any one indic Water (A1) ter Table (A2) on (A3) tarks (B1) (Nonriver to Deposits (B2) (Non cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations:	ine) nriverine) rine) magery (B	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presenc Recent I Other (E	ust (B12) Invertebra n Sulfide (I I Rhizosph e of Redu ron Redu explain in F	Odor (C1) neres alor ced Iron ( ction in PI Remarks)	) ng Living R (C4) owed Soil	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Pepth (income control of the control	GY  drology Indicators: eators (any one indice Water (A1) eter Table (A2) on (A3) earks (B1) (Nonriver et Deposits (B2) (Non cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) evations: er Present?	ine) nriverine) rine) magery (B	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presenc Recent I Other (E	ust (B12) Invertebra n Sulfide (I Rhizosphe of Reduron Reduction In Facility (Explain in Facility)	Odor (C1) neres alor ced Iron ( ction in Pl Remarks)	ng Living F C4) owed Soil:	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Popth (income control of the control	GY  drology Indicators: eators (any one indice Water (A1) eter Table (A2) on (A3) earks (B1) (Nonriver et Deposits (B2) (Non cosits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) evations: er Present?	ine) nriverine) rine) magery (B	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presenc Recent I Other (E	ust (B12) Invertebra n Sulfide (I Rhizosphe of Reduron Reduction In Facility (Explain in Facility)	Odor (C1) neres alor ced Iron ( ction in Pl Remarks)	ng Living F C4) owed Soil:	Se	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Depth (incomercial contents)  POROLOGY  Vetland Hydrimary Indicion  High Water M  Sediment  Drift Dept  Surface Inundation  Water-Strield Observ  Gurface Water  Vater Table  Saturation Princludes cap	GY  drology Indicators: eators (any one indice Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver at Deposits (B2) (Nonriver ot Deposits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y	ine) nriverine) rine) magery (E es es	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Other (E	ust (B12) Invertebra n Sulfide (I Rhizosphe of Reduction Reduction Reduction Inches): _ inches): _ inches): _ inches): _	Odor (C1) heres alor ced Iron ( ction in PI Remarks)	ng Living F C4) lowed Soils	Section (C3)	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (incomercial contents)  POROLOGY  Vetland Hydrimary Indicion  High Water M  Sediment  Drift Dept  Surface Inundation  Water-Strield Observial contents  Vater Table Saturation Princludes cap	GY  drology Indicators: eators (any one indicators) water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver) at Deposits (B2) (Nonriver) Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations: er Present? Present? Y	ine) nriverine) rine) magery (E es es	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Other (E	ust (B12) Invertebra n Sulfide (I Rhizosphe of Reduction Reduction Reduction Inches): _ inches): _ inches): _ inches): _	Odor (C1) heres alor ced Iron ( ction in PI Remarks)	ng Living F C4) lowed Soils	Section (C3)	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (incomercial contents)  POROLOGY  Vetland Hydrimary Indicion  High Water M  Sediment  Drift Dept  Surface Inundation  Water-Strield Observial contents  Vater Table Saturation Princludes cap	GY  drology Indicators: eators (any one indice Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver at Deposits (B2) (Nonriver ot Deposits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y	ine) nriverine) rine) magery (E es es	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Other (E	ust (B12) Invertebra n Sulfide (I Rhizosphe of Reduction Reduction Reduction Inches): _ inches): _ inches): _ inches): _	Odor (C1) heres alor ced Iron ( ction in PI Remarks)	ng Living F C4) lowed Soils	Section (C3)	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Pepth (income and income and inco	GY  drology Indicators: eators (any one indice Water (A1) ter Table (A2) on (A3) arks (B1) (Nonriver at Deposits (B2) (Nonriver ot Deposits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y	ine) nriverine) rine) magery (E es es	Salt Crus Biotic Cr Aquatic Hydroge Oxidized Presence Recent I Other (E	ust (B12) Invertebra n Sulfide (I Rhizosphe of Reduction Reduction Reduction Inches): _ inches): _ inches): _ inches): _	Odor (C1) heres alor ced Iron ( ction in PI Remarks)	ng Living F C4) lowed Soils	Section (C3)	condary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

W-1D

roject/Site: Collinsville		C	tv/County	Soloni	country	Sampling Date: 6-5-24
pplicant/Owner: LS Power						
vestigator(s): Keren Bach, Sid						
andform (hillslope, terrace, etc.): 1001	~					
ubregion (LRR): LRR C		Lat: 28	07851	0	Long: -121.82	7 5 47 Datum: NADX 3
oil Map Unit Name: Vandez Six 1						
re climatic / hydrologic conditions on the						
re Vegetation, Soil, or Hy						" present? Yes No
re Vegetation, Soil, or Hy					eded, explain any ans	
UMMARY OF FINDINGS - Atta						
Hydrophytic Vegetation Present?	Yes No	X	lo the	Sampled	Area	. /
Hydric Soil Present?	Yes _ Yes No		100000	n a Wetlan	d? Yes	No
Netland Hydrology Present?	Yes No				<u> </u>	
Remarks: Slight deproviet adjacent ?	porad where	to dail	agers	to perch	above any lay	yer during short periods
in the wet season but no	1 long enough	10000	TOP WC	110000	7.cm (your 5	
EGETATION		Absolute	Dominant	Indicator	Dominance Test w	vorksheet:
ree Stratum (Use scientific names.)		% Cover	Species?	Status	Number of Domina That Are OBL, FAC	nt Species ( W, or FAC: (A)
					Total Number of Do	
					Species Across All	Strata: (B)
					Percent of Domina	nt Species - //
Sapling/Shrub Stratum (= 15)	Total Cover	:			That Are OBL, FAC	SW, or FAC: $SO'$ / <sub>(A/B)</sub>
					Prevalence Index	worksheet:
					Total % Cover	
						x1=
						x 2 =
					FAC species _	x 3 =
	Total Cover	. 0			FACU species _	x 4 =
erb Stratum Y = 5		40	1		The second secon	x 5 =
Distichiis spirata		30	7	FAC	Column Totals: _	(A) (B)
Rumex crispus	- 100	50	- 1	FAC ()	Drovolonoo	Index = B/A =
Heliotropium curassavi	COLAN	40	- 1	UPL	-	getation Indicators:
Bromus madritensis	4.0.	- = =	-	FAC	Dominance	
Helminthothera echicid	8	10	- N	FACW		
Suncus mexicany		3	1	FACIN		al Adaptations <sup>1</sup> (Provide supporting
Frankleria salina		- 0	- 1/	FACU	- data in D	emarks or on a separate sheet)
Luctura seriora		165		21100	Problematic	Hydrophytic Vegetation <sup>1</sup> (Explain)
loody Vine Stratum V = 15	Total Cove	r. <u>1.6</u> /	-			
- NOODY VINE OLIVION					Indicators of hybe present.	dric soil and wetland hydrology must
	T.1.10	- D			Hydrophytic	
	Total Cove	r:	-	_	Vegetation	· · · · · ·
Bare Ground in Herb Stratum	% Cove	r of Biotic	Crust	0	Present?	Yes No
				_		
emarks:						
	)					

W-170

SOIL

Sampling Point: SP-1

(inches) Color (moist) %	Redo	x Feature	s			
-1 - 0	Color (moist)	%	Type <sup>1</sup>	_Loc²_		Remarks
0-2 104R3/1 98	7.54R A/6	_2_		MPL	<u>51C</u>	
2-4 2.5 4/2 05	7.54246	35	$\overline{C}$	M/PL	5.C	remeasured source knes
4-6 2.5/3/2 100					Sa	
6-7.5 2.54 3/2 97	104R 3/6	3	C	M	Salp	
0 1.3 2.31 010	10 11- 10				200	
15-14 2.5Y 3/2 100	-				Sa	
Type: C=Concentration, D=Depletion, RM	=Reduced Matrix	<sup>2</sup> Location	PL=Por	e Linina. R	C=Root Chan	nel. M=Matrix.
Hydric Soil Indicators: (Applicable to all				2		for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redo				1 cm N	Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Ma					Muck (A10) (LRR B)
Black Histic (A3)	Loamy Muc					ed Vertic (F18)
_ Hydrogen Sulfide (A4)	Loamy Gley		(F2)			arent Material (TF2)
_ Stratified Layers (A5) (LRR C)	∠ Depleted Ma				Other	(Explain in Remarks)
_ 1 cm Muck (A9) (LRR D)	Redox Dark					
_ Depleted Below Dark Surface (A11)	Depleted Da					
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Depr Vernal Pools		0)		3Indicators	of hydrophytic vegetation and
Sandy Midcky Milleral (S1) Sandy Gleyed Matrix (S4)	venial Pools	(1 9)				hydrology must be present.
estrictive Layer (if present):						
Type: None to 2011						× ×
Depth (inches):					Hydric Soil	Present? Yes X No
emarks:					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	sient)				Secon	dary Indicators (2 or more required) ater Marks (B1) ( <b>Riverine</b> )
DROLOGY etland Hydrology Indicators: mary Indicators (any one indicator is suffice). Surface Water (A1)	Salt Crust (				Secon	dary Indicators (2 or more required)
DROLOGY etland Hydrology Indicators: mary Indicators (any one indicator is suffic	Salt Crust (	(B12)			W Se	dary Indicators (2 or more required) ater Marks (B1) (Riverine)
DROLOGY etland Hydrology Indicators: mary Indicators (any one indicator is suffice). Surface Water (A1)	Salt Crust ( Biotic Crust Aquatic Inve	(B12) ertebrates			Seconi 	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
emarks:  DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is sufficed to the sufficed	Salt Crust (i Biotic Crust Aquatic Inve Hydrogen S	(B12) ertebrates ulfide Odd	or (C1)		Secon W Se Dr Dr Dr	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2)
emarks:  DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is sufficed to the sufficed	Salt Crust (i Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh	(B12) ertebrates sulfide Odo nizosphere	or (C1) es along L		Second W Se Dr Dr Dr Sr (C3)	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7)
emarks:  DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is suffice) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of	(B12) ertebrates ulfide Odd nizosphere Reduced	or (C1) es along L Iron (C4)		Second 	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) iin Muck Surface (C7) ayfish Burrows (C8)
emarks:  DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is suffice) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron	(B12) ertebrates ulfide Odd nizosphere Reduced	or (C1) es along L Iron (C4)		Second 	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) iin Muck Surface (C7) ayfish Burrows (C8)
emarks:  DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is suffice) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron	(B12) ertebrates fulfide Odd nizosphere Reduced Reduction	or (C1) es along L Iron (C4) n in Plowe		Secon 	dary Indicators (2 or more required) ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) iin Muck Surface (C7) ayfish Burrows (C8)
PROLOGY  Petland Hydrology Indicators:  mary Indicators (any one indicator is suffice)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron	(B12) ertebrates fulfide Odd nizosphere Reduced Reduction	or (C1) es along L Iron (C4) n in Plowe		Secon  W Se Dr Dr Dr Cr S (C3) Cr S (C3) S (C3) S (C3)	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
DROLOGY  Detland Hydrology Indicators:  mary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Id Observations:	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized RI Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odd nizosphere f Reduced Reduction ain in Rem	or (C1) es along L Iron (C4) n in Plowe narks)	ed Soils (C	Secon  W Se Dr Dr Dr Cr S (C3) Cr S (C3) S (C3) S (C3)	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3)
emarks:  DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is suffice) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes No	Salt Crust () Biotic Crust Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odo nizosphere f Reduced Reduction ain in Rem	or (C1) es along L Iron (C4) in in Plowe narks)	ed Soils (C	Secon  W Se Dr Dr Dr Cr S (C3) Cr S (C3) S (C3) S (C3)	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3)
DROLOGY  Detland Hydrology Indicators:  mary Indicators (any one indicator is suffice  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Id Observations:	Salt Crust () Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odo nizosphere f Reduced Reduction ain in Rem	or (C1) es along L Iron (C4) in in Plowe narks)	ed Soils (C	Secon  W Se Dr Dr Dr Cr S (C3) Cr S (C3) S (C3) S (C3)	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3)
PROLOGY  Petland Hydrology Indicators:  mary Indicators (any one indicator is sufficed Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Ind Observations:  face Water Present? Yes Noter Table Capillary fringe)	Salt Crust () Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odo nizosphere Reduced Reduction ain in Rem nes): nes):	or (C1) es along L Iron (C4) n in Plowe narks)	ed Soils (C	Secon   W   Se   Dr   Dr   Dr   Cr   Si   Si   Si   FA	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) iff Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3)
PROLOGY  Petland Hydrology Indicators:  mary Indicators (any one indicator is suffice to sufface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Id Observations:  face Water Present? Yes Noter Table Present? Yes Note Table Present?	Salt Crust () Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odo nizosphere Reduced Reduction ain in Rem nes):	or (C1) es along L Iron (C4) n in Plowe narks)	ed Soils (C	Secon   W   Se   Dr   Dr   Dr   Cr   Si   Si   Si   FA	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) allow Aquitard (D3) AC-Neutral Test (D5)
PROLOGY  Petland Hydrology Indicators:  mary Indicators (any one indicator is sufficed Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Ind Observations:  face Water Present? Yes Noter Table Capillary fringe)	Salt Crust () Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odo nizosphere Reduced Reduction ain in Rem nes):	or (C1) es along L Iron (C4) n in Plowe narks)	ed Soils (C	Secon   W   Se   Dr   Dr   Dr   Cr   Si   Si   Si   FA	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3) AC-Neutral Test (D5)
DROLOGY  etland Hydrology Indicators: mary Indicators (any one indicator is suffice Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Id Observations: face Water Present? Yes Noter Table Present? Yes Note Table Present?	Salt Crust () Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates sulfide Odo nizosphere Reduced Reduction ain in Rem nes):	or (C1) es along L Iron (C4) n in Plowe narks)	ed Soils (C	Secon   W   Se   Dr   Dr   Dr   Cr   Si   Si   Si   FA	dary Indicators (2 or more required) ater Marks (B1) (Riverine) adiment Deposits (B2) (Riverine) ift Deposits (B3) (Riverine) ainage Patterns (B10) y-Season Water Table (C2) in Muck Surface (C7) ayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) nallow Aquitard (D3) AC-Neutral Test (D5)

WETLAND DETER	RMINATIO	ON DATA	FORM -	Arid West Region	\W11\
() allianill				_	Sampling Date: 06-06-24
Applicant/Owner: US POWEV		only, county.	-	State: (A	Sampling Point:
Investigator(s): Signey Wells, Karen Ba	ch :	Section Tow	nshin Ran	ne. 500 T21	RIE
andform (hillslope, terrace, etc.): +0051000					
Subregion (LRR): LRC	Lat: 38	0785	97	Long: -171 873	439 Datum: <u>NAD83</u>
Soil Map Unit Name: Valdez Sitt Day Oraling					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology s				Normal Circumstances"	
Are Vegetation, Soil, or Hydrology n				eded, explain any answ	
SUMMARY OF FINDINGS – Attach site map	showing	sampling	g point lo	ocations, transect	s, important features, etc.
Hydric Soil Present? Yes N	o o		e Sampled n a Wetlan		✓ No
Remarks:					
/EGETATION				50	
ZOZIANON	Absolute	Dominant	Indicator	Dominance Test wo	rkehoot
<u>Tree Stratum</u> (Use scientific names.)		Species?		Number of Dominant	
1				That Are OBL, FACW	
2				Total Number of Dom	inant 1
3				Species Across All St	rata: (B)
4				Percent of Dominant	Species I A
Sapling/Shrub Stratum  Total Cove	r:	-		That Are OBL, FACW	, or FAC: (A/B)
1,				Prevalence Index w	orksheet:
2				Total % Cover of	Multiply by:
3				OBL species	x 1 =
4				FACW species	x 2 =
5					x 3 =
Total Cove	r:	- ,			x 4 =
1. Rumex Crispus Compdeek	15	N	FAC		x 5 =
2. Xanthium Strimanium (coelebrary	70	7	FAC	Column Totals:	(A) (B)
3. Schoenoplectus ocutis yar, ocu danto	5 35	Y	OBL		ex = B/A =
4. Na Oxillaris Covery	3	N	PACU	Hydrophytic Vegeta	
5. Asclepias Fascicularis (milkwed	2	N	FAC	Dominance Tes	
6. Festuca pevennes	25	N	TAU	Prevalence Inde	x is ≤3.0 <sup>1</sup>
7			_	Morphological A	daptations <sup>1</sup> (Provide supporting
8					arks or on a separate sheet)
Woody Vine Stratum	L: 100			Problematic Hyd	drophytic Vegetation <sup>1</sup> (Explain)
1				1Indicators of hydric	soil and wetland hydrology must
2				be present.	son and wedand nydrology must
Total Cove	r:			Hydrophytic	^
				Vegetation	
Remarks:	er of Blotic C	Crust		Present?	Yes No
ricinarios.				7	
				1	

-	-		
•	1	ш	

Sampling Point: 8P-1

		cator or comm	m the absence of in	
epth Matrix	Redox Features	vpe <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
nches) Color (moist) %		/ IA A	<u> </u>	
-6.5 10xx211 99	LOYR 5/10 1	C WI		
5-135 254 9/2 05	10 VR 4/6 35 (	M	SiCLO	
5-14 2.54 4/2 65	104K 5/8 32 0			
Гуре: C=Concentration, D=Depletion, RN	M=Reduced Matrix. <sup>2</sup> Location: F	PL=Pore Lining,	RC=Root Channel, M	=Matrix.
ydric Soil Indicators: (Applicable to a			Indicators for P	roblematic Hydric Solls :
Histosol (A1)	Sandy Redox (S5)		1 cm Muck (	A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)			A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F	1)	Reduced Ve	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2	2)		Material (TF2) iin in Remarks)
Stratified Layers (A5) (LRR C)	∠ Depleted Matrix (F3)		Other (Expla	III III (Cinaiko)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6			
Depleted Below Dark Surface (A11)	Depleted Dark Surface (	F/)		
Thick Dark Surface (A12)	Redox Depressions (F8) Vernal Pools (F9)		3Indicators of hyd	drophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)		wetland hydro	ology must be present.
Sandy Gleyed Matrix (S4)  Restrictive Layer (if present);				
Type: Nore to 2611				<b>/</b>
Depth (inches):			Hydric Soil Pres	ent? Yes No No
1			200	
			140	-
			Secondary	Indicators (2 or more required)
Wetland Hydrology Indicators:	(5.1.a)			Indicators (2 or more required) Marks (B1) (Riverine)
Wetland Hydrology Indicators: Primary Indicators (any one indicator is si	ufficient)		Water	Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sue Surface Water (A1)	Salt Crust (B11)		Water   Sedime	Marks (B1) (Riverine) ent Deposits (B2) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	R13)	Water   Sedime	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is so Surface Water (A1) High Water Table (A2) Saturation (A3)	<ul><li>✓ Salt Crust (B11)</li><li>✓ Biotic Crust (B12)</li><li>✓ Aquatic Invertebrates (</li></ul>		Water Sedime Drift De Draina	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is so Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	★ Salt Crust (B11)     ★ Biotic Crust (B12)     ★ Aquatic Invertebrates (     ★ Hydrogen Sulfide Odor	(C1)	Water   Sedime Drift De Draina Dry-Se	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is so  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (  Hydrogen Sulfide Odor  Oxidized Rhizospheres	(C1) along Living R	Water   Sedime Drift De Draina Dry-Se oots (C3) Thin M	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is so  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (  Hydrogen Sulfide Odor  Oxidized Rhizospheres  Presence of Reduced	(C1) along Living R ron (C4)	Water   Sedime   Drift De   Draina   Dry-Se   oots (C3) Thin M   Crayfis	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor  Oxidized Rhizospheres Presence of Reduced Recent Iron Reduction	(C1) s along Living R fron (C4) in Plowed Soils	Water   Sedime   Drift De   Draina   Dry-Se   Crayfis   Crayfis   (C6)	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor  Oxidized Rhizospheres Presence of Reduced Recent Iron Reduction	(C1) s along Living R fron (C4) in Plowed Soils		Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is so  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor  Oxidized Rhizospheres Presence of Reduced Recent Iron Reduction	(C1) s along Living R fron (C4) in Plowed Soils		Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (  Hydrogen Sulfide Odor  Oxidized Rhizospheres  Presence of Reduced I  Recent Iron Reduction  Other (Explain in Remains)	c (C1) s along Living R dron (C4) in Plowed Soils arks)		Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches):	s along Living R laron (C4) in Plowed Soils arks)		Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes  Water Table Present?	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor  Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction  Other (Explain in Remains)  No Depth (inches):	s along Living R ron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches): No Depth (inches):	s along Living R lron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches): No Depth (inches):	s along Living R lron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sue Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes Water Table Present? Yes Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge,	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches): No Depth (inches):	s along Living R lron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is si  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Saturation Present? Yes  Saturation Present? Yes	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches): No Depth (inches):	s along Living R lron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sue Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Water Table Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge,	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches): No Depth (inches):	s along Living R lron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)
Primary Indicators (any one indicator is surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge,	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates ( Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Other (Explain in Remains)  No Depth (inches): No Depth (inches):	s along Living R lron (C4) in Plowed Soils arks)	Water Sedime Drift De Drift De Dry-Se oots (C3) Thin M Crayfis (C6) Satura Shallor FAC-N	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2) uck Surface (C7) h Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) eutral Test (D5)

				And West Region	
Project/Site: 00 11/15/11/		City/County:	Colan	o Country s	ampling Date: 06.05-20
Applicant/Owner: US VOWEV				State: CA S	ampling Point:
Investigator(s): Sidvey Wells, Kanen De	wh .	Section, Tov	wnship, Ran	ge: 500 T3N R1	E
Landform (hillslope, terrace, etc.): 1001000		Local relief	(concave, c	convex, none): funt	Slope (%):
Subregion (LRR): LFRC	Lat: 38	2.078	688	Long: -121,8334	471 Datum: NO D8.
Soil Map Unit Name: Valder Sit 10cm raine					
Are climatic / hydrologic conditions on the site typical for this	time of year	ar? Yes	X No	(If no, explain in Ren	narks.)
Are Vegetation, Soil, or Hydrology sign				Normal Circumstances" pre	sent? Yes No
Are Vegetation, Soil, or Hydrology na				eded, explain any answers	
SUMMARY OF FINDINGS – Attach site map s			g point lo	ocations, transects, i	mportant features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No No			e Sampled in a Wetlan	\ /	_ No
Remarks:					
VEGETATION					
Tree Stratum (Use scientific names.) 1		Species?	Status	Number of Dominant Spe That Are OBL, FACW, or	ecies A
2				Total Number of Dominal Species Across All Strata	
4Total Cover:				Percent of Dominant Spe That Are OBL, FACW, or	ecies Inf
Sapling/Shrub Stratum				Prevalence Index works	
1				Total % Cover of:	
2 3					x 1 =
4.					x 2 =
5.					x 3 =
Total Cover:				FACU species	x 4 =
Herb Stratum	25	V	FAC		x 5 =
1. Puney Onspos	25	7	FIL	Column Totals:	(A) (B)
2. Polypugan monospetiensis	35	14	FACW	Provolence Index	= B/A =
3. Districtions spicato	35	-11	FAC	Hydrophytic Vegetation	
4. Xanthium strmanium	15	-11	FAC	Dominance Test is	
5. Bromus madn tensis 6. Cressa truxillensis	2	14	FACW	Prevalence Index is	
	_	_14_	111011		tations <sup>1</sup> (Provide supporting
7				data in Remarks	or on a separate sheet)
8Total Cover:	aa			Problematic Hydrop	hytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum	-1-1				
1				<sup>1</sup> Indicators of hydric soil be present.	and wetland hydrology must
2				The same of the sa	
% Bare Ground in Herb Stratum % Cover	of Biotic C	rustC	)	Hydrophytic Vegetation Present? Yes	No
Remarks:		410		in overwards	
17077F					

Profile Desc Depth	Matrix		Redo	x Features	2			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-5.5	10 VL 2/1		1 11/-				SiCI	
0 0.0	TOTELL		-					
/ / 11	2.543/2	an	104R5/6	1	0	M	Salo	
5.5-11	601014	18	100160	-		-	Ju	
1 110	0014/2	MK	104R 4/6	5	^	M	0:01	•
11-110	4.37 12	00	1045-10		-	1,0	21/16	<u>u</u>
								_
								_
					_	-		
Type: C=C	oncentration, D=Dep	letion, RM	1=Reduced Matrix.	<sup>2</sup> Location	n: PL=Po	ore Lining,	RC=Root Ch	nannel, M=Matrix.  ors for Problematic Hydric Soils <sup>3</sup> :
		able to al	I LRRs, unless other		eu.)			
Histosol			Sandy Red					m Muck (A9) (LRR C) m Muck (A10) (LRR B)
	pipedon (A2)		Stripped Ma		1 (E1)			duced Vertic (F18)
	istic (A3)		Loamy Muc					d Parent Material (TF2)
	en Sulfide (A4)		Loamy Gle					ner (Explain in Remarks)
	d Layers (A5) (LRR (	-)	Depleted M				_ 011	(Explain in Normano)
	uck (A9) (LRR D)	0 (011)	Redox Dark Depleted D					
<del>,</del> .	d Below Dark Surfac	e (A11)						
	ark Surface (A12)		Redox Dep		(ГО)		3Indicat	tors of hydrophytic vegetation and
	Mucky Mineral (S1) Gleyed Matrix (S4)		Vernal Poo	is (F9)				and hydrology must be present.
	Layer (if present):							\ /
			-11					
I NDE.	V (01 0	70 1	.0.1					X
	Moul		0.				Hydric S	Soil Present? Yes No
Depth (in	ches):		<u></u>				Hydric S	Soil Present? Yes No
	ches):		<u></u>				Hydric S	Soil Present? Yes No
Depth (in Remarks:	ches):		<u>0'</u>					econdary Indicators (2 or more required)
Depth (in Remarks: YDROLO Wetland Hy	ches):							
Depth (in Remarks: IYDROLO Wetland Hy Primary India	ches):			t (B11)				econdary Indicators (2 or more required)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India Surface	dGY drology Indicators: cators (any one indic		fficient) Salt Crus					econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Depth (in Remarks: IYDROLO Wetland Hy Primary India Surface High Wa	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2)		fficient) Salt Crus Biotic Cru	ust (B12)	tes (B13)			econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India  Surface  High Wa  Saturati	drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3)	eator is su	fficient) Salt Crus Biotic Cru	ust (B12) nvertebrat				econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India Surface High Wa Saturati Water M	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver	ator is su	fficient) Salt Crus Biotic Cru Aquatic Ir Hydroger	ust (B12) nvertebrat n Sulfide (	Odor (C1	)	<u>S</u> 6	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India Surface High Wa Saturati Water M Sedime	drology Indicators: cators (any one indic Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver int Deposits (B2) (No	ator is su ine) nriverine	fficient)  Salt Crus  Biotic Cru  Aquatic Ir  Hydroger  ) Oxidized	ust (B12) nvertebrat n Sulfide ( Rhizosph	Odor (C1 eres alo	) ng Living F	<u>S</u> 6	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India Surface High Wa Saturati Water M Sedimel Drift De	dGY drology Indicators: cators (any one indicators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver (A3) Int Deposits (B2) (Nonriver (A3)) Int Deposits (B3) (Nonriver (A3))	ator is su ine) nriverine	fficient)  Salt Crus  Biotic Cru  Aquatic Ir  Hydroger  Dyidized Presence	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduc	Odor (C1 eres alo ced Iron	) ng Living F (C4)	Si	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India Surface High Water M Sedime Drift Detensions	drology Indicators: cators (any one indicators	eator is su ine) nriverine rine)	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduction Reduction	Odor (C1 eres alo ced Iron ction in P	) ng Living F (C4) lowed Soil	Service	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Primary India Saturati Water M Sedime Drift De Surface Inundati	drology Indicators: cators (any one indicators	eator is su ine) nriverine rine)	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduction Reduction	Odor (C1 eres alo ced Iron ction in P	) ng Living F (C4) lowed Soil	Seconds (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Primary India Surface High Water M Sedime Drift De Surface Inundati Water-S	drology Indicators: cators (any one indicators) defer (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver nt Deposits (B2) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9)	eator is su ine) nriverine rine)	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduction Reduction	Odor (C1 eres alo ced Iron ction in P	) ng Living F (C4) lowed Soil	Seconds (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Primary India Surface High Water M Sedime Drift De Surface Inundati Water-S	drology Indicators: cators (any one indicators) defer (A1) ater Table (A2) on (A3) flarks (B1) (Nonriver nt Deposits (B2) (Nonriver Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9)	eator is su ine) nriverine rine)	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduc on Reduc xplain in R	Odor (C1 eres alo ced Iron ction in P Remarks)	) ng Living F (C4) lowed Soil	Seconds (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (in Remarks:  YDROLO  Wetland Hy Primary India Surface High Water Now Sedime Drift De Surface Inundati Water-S  Field Obser	dGY drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial stained Leaves (B9) revations:	eator is su ine) nriverine rine)	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduction Reduction	Odor (C1 eres alo ced Iron ction in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Primary India Saturati Water M Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat	drology Indicators: cators (any one indicators (any one indicators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver (B2) (Nonriver (B3) (N	ine) nriverine rine)	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduc on Reduc xplain in R	Odor (C1 eres alo ced Iron ction in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (in Remarks:  YDROLO Wetland Hy Primary India Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P	drology Indicators: cators (any one indicators) cators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonriver Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: der Present? Present?	ine) nriverine rine) Imagery (	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduc con Reduc kplain in F	Odor (C1 eres alo ced Iron etion in P Remarks)	) ng Living F (C4) lowed Soil	Seconds (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (in Remarks:    YDROLO     Wetland Hy     Primary India     Surface     High Wa     Saturati     Water N     Sedime     Drift De     Surface     Inundati     Water-S     Field Obser     Surface Water Table     Saturation P     (includes ca	drology Indicators: cators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: der Present? Present? Present? Present? Present? Present? Present? Present? Present?	ine) nriverine rine) magery ( 'es 'es	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduct con Reduct c	Odor (C1 eres alo ced Iron tion in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (in Remarks:    YDROLO     Wetland Hy     Primary India     Surface     High Wa     Saturati     Water N     Sedime     Drift De     Surface     Inundati     Water-S     Field Obser     Surface Water Table     Saturation P     (includes ca	drology Indicators: cators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: der Present? Present? Present? Present? Present? Present? Present? Present? Present?	ine) nriverine rine) magery ( 'es 'es	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduct con Reduct c	Odor (C1 eres alo ced Iron tion in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (in Remarks:    YDROLO     Wetland Hy     Primary India     Surface     High Wa     Saturati     Water N     Sedime     Drift De     Surface     Inundati     Water-S     Field Obser     Surface Water Table     Saturation P     (includes ca	drology Indicators: cators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: der Present? Present? Present? Present? Present? Present? Present? Present? Present?	ine) nriverine rine) magery ( 'es 'es	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduct con Reduct c	Odor (C1 eres alo ced Iron tion in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (in Remarks:  IYDROLO  Wetland Hy Primary India Surface High Wa Saturati Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	drology Indicators: cators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: der Present? Present? Present? Present? Present? Present? Present? Present? Present?	ine) nriverine rine) magery ( 'es 'es	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduct con Reduct c	Odor (C1 eres alo ced Iron tion in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Primary India Surface High Water N Sedime Drift De Surface Inundati Water-S Field Obser Surface Water Table Saturation P (includes ca Describe Re	drology Indicators: cators (any one indicators) dater Table (A2) on (A3) Marks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial Stained Leaves (B9) rvations: der Present? Present? Present? Present? Present? Present? Present? Present? Present?	ine) nriverine rine) magery ( 'es 'es	fficient)  Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir B7) Other (Ex	ust (B12) nvertebrat n Sulfide ( Rhizosph e of Reduct con Reduct c	Odor (C1 eres alo ced Iron tion in P Remarks)	) ng Living F (C4) lowed Soil	Solution (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

W-11

Project/Site: COLLINGUILLE	c	ity/County:	Soron	O Carry Sampling	g Date: 45/24	_
Applicant/Owner: LS POWEr				State:CA_ Sampling	g Point: SP-	5
Investigator(s): Karen Bach, Victoria yestrene						
Landform (hillslope, terrace, etc.): toesione	1	_ocal relief (	(concave, co	onvex, none): fiat	Slope (%):	0
Subregion (LRR): LPCC	Lat: 38	,0788	91	Long: -121.833543	_ Datum: NAC	587
Soil Map Unit Name: Valder SIL 100m, dian	w, 0-	2'1 510	w	NWI classification:	>EMICH	
Are climatic / hydrologic conditions on the site typical for this t						
Are Vegetation, Soil, or Hydrology sig			Are "N	Normal Circumstances" present?	Yes X No	
Are Vegetation, Soil, or Hydrology na			(If nee	eded, explain any answers in Ren	narks.)	
SUMMARY OF FINDINGS – Attach site map s			point lo	cations, transects, impo	rtant features,	etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	,	1000000	e Sampled n a Wetlan		. X	
Wetland Hydrology Present? Yes No		Withi	n a vvetian	ur res m		
Remarks:  VEGETATION						
		Dominant		Dominance Test worksheet:		
Tree Stratum (Use scientific names.) (=30 <sup>1</sup>		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:		(A)
2				Total Number of Dominant Species Across All Strata:	2	(B)
3					=	
Total Cover:	0			Percent of Dominant Species That Are OBL, FACW, or FAC:	50%	(A/B)
Sapling/Shrub Stratum (5)						•
1				Prevalence Index worksheet: Total % Cover of:		
2		_		OBL species		_
3				FACW species		
4				FAC species		
5 Total Cover:	0			FACU species	x 4 =	_
Herb Stratum (55)		· ·		The state of the s	x 5 =	_
1. Festuca perennis	60		FAC	Column Totals:	(A)	_ (B)
2. Bromus madritusis	45		TACW TACW	Prevalence Index = B/A	=	
3. Francia salina	1	-1	FAC	Hydrophytic Vegetation Indi		_
4. Rumex crispus	8	10	FAC	Dominance Test is >50%		
5. Distichlis Soicate		_/V	+110	Prevalence Index is ≤3.0		
6				Morphological Adaptation	ns1 (Provide suppor	rting
7				data in Remarks or on	a separate sheet)	)
8Total Cover:	119			Problematic Hydrophytic	Vegetation <sup>1</sup> (Expla	ain)
Woody Vine Stratum (= 15) Total Cover:	111					
1				<sup>1</sup> Indicators of hydric soil and to be present.	wetland hydrology	must
2.				be present.		
Total Cover:	0			Hydrophytic	\/	
% Bare Ground in Herb Stratum	of Biotic C	rust		Vegetation Present? Yes	No_X	
Remarks:						
Telliane.						

Sampling Point: 51-3

	Features	2	5
(inches) Color (moist) % Color (moist)	%Type <sup>1</sup> Loc	1	Remarks
0-5 loye 2/1 100		<u>Lo</u>	
5-15 2.573/2 100		5a	
2.5 3 2 100			
	2 DI - Dave lini	ing PC=Poot Chapt	nol M-Matrix
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.  lydric Soil Indicators: (Applicable to all LRRs, unless other	<sup>2</sup> Location: PL=Pore Lini wise noted.)		for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1) Sandy Redo		1 cm N	fuck (A9) (LRR C)
Histic Epipedon (A2) Stripped Ma			fluck (A10) (LRR B)
	ky Mineral (F1)	Reduc	ed Vertic (F18)
	ved Matrix (F2)	Red Pa	arent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted M			(Explain in Remarks)
	Surface (F6)	-	
	ark Surface (F7)		
	ressions (F8)		
Sandy Mucky Mineral (S1) Vernal Poo		3Indicators	of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	15 (1-9)		I hydrology must be present.
estrictive Layer (if present):		Wotani	, areaegyaaraa process.
Type: None to 20"		1145.53	<b>V</b>
			10 V 11 X
Depth (inches):emarks:		Hydric Soi	I Present? Yes No
emarks:		Hydric Soi	Present? Yes No _/ \_
Pemarks:			ondary Indicators (2 or more required)
YDROLOGY Wetland Hydrology Indicators:		Seco	
YDROLOGY Wetland Hydrology Indicators:	t (B11)	Seco	ondary Indicators (2 or more required)
POROLOGY  Vetland Hydrology Indicators:  Irimary Indicators (any one indicator is sufficient)  Surface Water (A1)  Salt Crus		Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
VDROLOGY  Vetland Hydrology Indicators:  Irimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Biotic Crus	ıst (B12)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) High Water Table (A2) Saturation (A3)  Aquatic In	ust (B12) nvertebrates (B13)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)  Hydroger	ust (B12) nvertebrates (B13) n Sulfide Odor (C1)	Seco	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Oxidized	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi	Secondary Second	windary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence	nst (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi tof Reduced Iron (C4)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Presence	nst (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi tof Reduced Iron (C4)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Portion of the property of the	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed	Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Vetland Hydrology Indicators:  Irimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed	Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Vetland Hydroger Hydroger Oxidized Presence Recent Ir	nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
Vetland Hydrology Indicators:  Inimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crus High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present?  Ves No Depth (in	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed kplain in Remarks)	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Vetland Hydrology Indicators:  Inimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crus High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Orift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present?  Ves No Depth (in Vetland (in the content of the cont	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed explain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
POROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crus High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Orift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Ves No Depth (includes capillary fringe)	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Proposits (B2) (Nonriverine)  Surface Soil Cracks (B6)  Drift Deposits (B2) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Table Present?  Proposits (Part of the control of	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Proposition (Proposition (Propo	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Print Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Table Present?  Water Table Present?  Water Table Present?  Water Table Present?  Wester Marks (B1) (Nonriverine)  Surface Soil Cracks (B9)  Water Marks (B1) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Water Table Present?  Yes No Depth (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Print Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Table Present?  Water Table Present?  Water Table Present?  Water Table Present?  Wester Marks (B1) (Nonriverine)  Surface Soil Cracks (B9)  Water Marks (B1) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Water Table Present?  Yes No Depth (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Vetland Hydrology Indicators:  Inimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crus High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Orift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Ves No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial	ust (B12) nvertebrates (B13) n Sulfide Odor (C1) Rhizospheres along Livi of Reduced Iron (C4) on Reduction in Plowed eplain in Remarks)  nches):	Secondary Second	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)

WETLAND DETERM				
Project/Site: Collinguille	Ci	ity/County: _	Solund	State: GA Sampling Point: 5P-1
Applicant/Owner: W 10004				State Currising , com
Investigator(s): Karen Bach, Victoria Yetreman	kouns	ection, Tow	nship, Range	E SOG TSN KIE
Landform (hillslope, terrace, etc.):	L	ocal relief (	concave, cor	nvex, none): Slope (%):
Subregion (LRR): LRRC	Lat: 38	.0781	39 1	ong: -121,838506 Datum: 104965
Soil Map Unit Name: Vaidez Sith Clay 10	2600	cay Su	Strutu	NWI classification:
Are climatic / hydrologic conditions on the site typical for this ti	ime of year	r? Yes X	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sig	nificantly d	isturbed?	Are "No	ormal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology nat			(If need	ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sl	howing	sampling	point loc	cations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes K No		la tha	Sampled A	100
Hydric Soil Present? Yes X No		27.77.7	n a Wetland	X
Wetland Hydrology Present? Yes No		With	Ta Woulding	
VEGETATION				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
4				Percent of Dominant Species
Total Cover:	_0_	0.		That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (>15				Prevalence Index worksheet:
1 2				Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
Total Cover:	0			FACU species x 4 =
Herb Stratum V=5	5	N	OBL	UPL species x 5 =
1. Schoeropecias actions S.P. occidentalis	-0	- V	FAC	Column Totals: (A) (B)
2. Leadism patitorium	8	4	FAC	Prevalence Index = B/A =
3. <u>Dilichlis spicate</u> 4. Bolboschoenus marikmus	5	- /	001_	Hydrophytic Vegetation Indicators:
5 Atiplex postrata	10	- <del>'</del>	FACW	Dominance Test is >50%
6. Hajotopum curasmicum	2	N	FACU	Prevalence Index is ≤3.0¹
7. PUMEX Crispus	1	N	FAC	Morphological Adaptations <sup>1</sup> (Provide supporting
7. COMEX CASINS				data in Remarks or on a separate sheet)
8 Total Cover	37			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (=15)				
1				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
2				
Total Cover  **Bare Ground in Herb Stratum 60	of Biotic		10	Hydrophytic Vegetation Present?  Yes No
Remarks:	3. 210110		•	1000000
Remains.				

(W-12)

Sampling Point: Sp-I

Profile Desc Depth	Matrix		Pedov	Feature				
(inches)	Color (moist)	%	Color (moist)	%		_Loc <sup>2</sup>	Texture	Remarks
0-4	10 4/2 2/1	99	7.5 YR 3/4	ı	C	M	Sa	organic materials Porg
4-9.5	54 14/1	91	104/2 3/4	9	L	<u>_</u>	LoSa	
9.5-16	2.54 3/2	97	10412 4/4	В	L	<u>M</u>	Sa	
Hydric Soil II  Histosol ( Histic Epi Black His Hydrogen Stratified 1 cm Muc Depleted Thick Darl Sandy Mu	ndicators: (Applica (A1) pedon (A2) tic (A3) is Sulfide (A4) Layers (A5) (LRR C) kk (A9) (LRR D) Below Dark Surface kk Surface (A12) icky Mineral (S1) eyed Matrix (S4) iyer (if present):	ble to all	Reduced Matrix. 2 LRRs, unless otherw Sandy Redox Stripped Matr Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark Redox Depres Vernal Pools (	vise not (S5) ix (S6) v Minera d Matrix rix (F3) surface ( c Surface ssions (I	ed.) I (F1) (F2) F6) e (F7)	e Lining, F	Indicators  1 cm 2 cm Reduction Red F Other	nnel, M=Matrix. s for Problematic Hydric Soils³: Muck (A9) (LRR C) Muck (A10) (LRR B) ced Vertic (F18) Parent Material (TF2) (Explain in Remarks) s of hydrophytic vegetation and d hydrology must be present.
Type: _ ^ ^	es):						Hydric Soil	I Present? Yes No No
Type:	es):							I Present? Yes No
Type:	es):Y	or is suffici	ent)				Secon	ndary Indicators (2 or more required)
Type:	y  plogy Indicators: prs (any one indicators) ater (A1) Table (A2) (A3) s (B1) (Nonriverine reposits (B2) (Nonriverine ts (B3) (Nonriverine tracks (B3)) I Cracks (B6) Visible on Aerial Imaged Leaves (B9)	) verine)	ent)  Salt Crust (B. W. Biotic Crust (I. W. Aquatic Invertor Hydrogen Sultant Presence of F. W. Recent Iron R. Other (Explain	B12) tebrates lfide Od zosphere Reduced	or (C1) es along L I Iron (C4) n in Plowe		Secon	,
Type:	y  plogy Indicators: prs (any one indicatorater (A1) Table (A2) (A3) (S (B1) (Nonriverine deposits (B2) (Nonriverine deposits (B3) (Nonriverine deposits (B6) (Visible on Aerial Imaged Leaves (B9)  pons: present? present.	) verine) e) gery (B7)  No No No	Salt Crust (B  Biotic Crust (I  Aquatic Invert  Hydrogen Sul  Oxidized Rhiz  Presence of F  Recent Iron R  Other (Explain  Depth (incheded)  Depth (inched)	B12) tebrates lfide Od cosphere Reduced Reduction in Rer s):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Secon	ndary Indicators (2 or more required)  Nater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)
Type:	y  plogy Indicators: prs (any one indicatorater (A1) Table (A2) (A3) (S (B1) (Nonriverine deposits (B2) (Nonriverine deposits (B3) (Nonriverine deposits (B6) (Visible on Aerial Imaged Leaves (B9)  pons: present? present.	) verine) e) gery (B7)  No No No	Salt Crust (B  Biotic Crust (I  Aquatic Invert  Hydrogen Sul  Oxidized Rhiz  Presence of F  Recent Iron R  Other (Explain  Depth (inche	B12) tebrates lfide Od cosphere Reduced Reduction in Rer s):	or (C1) es along L I Iron (C4) n in Plowe narks)	ed Soils (C	Secon	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (CS)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

[W-12]

WETLAND DET	ERMINATION DATA FORM	- Arid West Region
Project/Site: CONINVILLE	City/County: _ Solar	O County Sampling Date: 6/6/24
Applicant/Owner: LS POW-6-		State: CA Sampling Point: SP-2
Investigator(s): Karen Bach, Victoria Yelm	CAN Section, Township, Ra	ange: 5\$0 +3N RIE
		convex, none): Slope (%):
		Long: -12 .838606 Datum: NAD83
		NWI classification: NA
Are climatic / hydrologic conditions on the site typical for		
		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		needed, explain any answers in Remarks.)
		locations, transects, important features, etc.
Hydric Soil Present?  Wetland Hydrology Present?  Yes  Yes	No Is the Sample No within a Wetla	V
Remarks: Slightly elevated area adjacent to si	p-1.	
VEGETATION		
Tree Stratum (Use scientific names.) (= 30	Absolute Dominant Indicator	
1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2		
3		Total Number of Dominant Species Across All Strata:  (B)
4		
Total Co	over: 8	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum ~ 15		
1,		Prevalence Index worksheet:
2		
3		FACW species x 2 =
4		FAC species x 3 =
p= \$ Total Co	over:	FACU species x 4 =
Herb Stratum		UPL species x 5 =
1. Lzfidium lutafolium	100 Y FAC	— Column Totals: (A) (B)
2. ScHollactic actions vot.	3 N 08L	
3. becidentalus		Prevalence Index = B/A =
a. Fustivum percumbus	55 Y FAC	
5		_ \ \times Dominance Test is >50%
6		Prevalence Index is ≤3.0¹
7·		Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Total Co	over: 158	i iobicinatio rivaroprivae vegetation (Explain)
Woody Vine Stratum Y-15		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.
2		_
Total Co  W Bare Ground in Herb Stratum % Co	over:	Hydrophytic Vegetation Present?  Yes No
Remarks:	A CI DIOIIO OTUST	100111 100
NGHIAIAS.		

SOIL

Sampling Point: 5p-2

Depth Matrix	depth needed to document the indicator or	
	Redox Features  Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
(inches) Color (moist) % 0-2 10 Y/2 2/2 99		M/PL CILO
		MIPE Sacilo redox frameway
2-66 2.54 3/1 95		
6-9,5 2.5/4/2 45	7.5 4 p 3/4 35 C	MPL Sa
9.5-16 54 4/1 97	10 YR 3/6 3 C 1	<b>y S</b> a
¹Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix. <sup>2</sup> Location: PL=Pore L	ining, RC=Root Channel, M=Matrix.
Hydric Soil Indicators: (Applicable to		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11)		
Thick Dark Surface (A12)	Redox Depressions (F8)	31-di-eters of hydrophytic vogotation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Vernal Pools (F9)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present.
Restrictive Layer (if present):		wettand hydrology must be present.
Type: none to 2011		
Depth (inches):		Hydric Soil Present? Yes X No
Remarks:		1,4
IYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (any one indicator is s	ufficient)	
		Water Marks (B1) (Riverine)
Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Surface Water (A1) High Water Table (A2)	<pre> Salt Crust (B11) Biotic Crust (B12)</pre>	Sediment Deposits (B2) (Riverine)
High Water Table (A2)	Biotic Crust (B12)	<ul><li>Sediment Deposits (B2) (Riverine)</li><li>Drift Deposits (B3) (Riverine)</li></ul>
High Water Table (A2) Saturation (A3)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	<ul> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livit Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Soils (C6)  Saturation Visible on Aerial Imagery (C9)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livit Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livit Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations:	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes	Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin  Presence of Reduced Iron (C4)  Recent Iron Reduction in Plowed (B7)  Other (Explain in Remarks)	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Ves Water Table Present? Yes	Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin  Presence of Reduced Iron (C4)  Recent Iron Reduction in Plowed (B7)  Other (Explain in Remarks)  No Depth (inches):  Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Ves Vater Table Present? Ves Saturation Present?	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Ves Nater Table Present? Ves Saturation Present? Yes Saturation Present? Yes Sincludes capillary fringe)	Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin  Presence of Reduced Iron (C4)  Recent Iron Reduction in Plowed (B7)  Other (Explain in Remarks)  No Depth (inches):  Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Sincludes capillary fringe) Describe Recorded Data (stream gauge, includes capillary fringe)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Ves Nater Table Present? Ves Saturation Present? Yes Includes capillary fringe)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Ves Nater Table Present? Ves Saturation Present? Ves includes capillary fringe) Describe Recorded Data (stream gauge, includes capillary fringe)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Ves Vater Table Present? Ves Saturation Present? Ves Sincludes capillary fringe) Describe Recorded Data (stream gauge, includes capillary fringe)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Ves Nater Table Present? Ves Saturation Present? Ves includes capillary fringe) Describe Recorded Data (stream gauge, includes capillary fringe)	Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed (B7) Other (Explain in Remarks)  No Depth (inches): No Depth (inches):	Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) ng Roots (C3) Thin Muck Surface (C7) Crayfish Burrows (C8) Soils (C6) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No

W-12

		JII DAIA TOM		6/6/24
Project/Site: CONAJVILE		City/County: 5010	ind County s	Sampling Date: 50-3
Applicant/Owner: LS Pauce			State: CFT S	sampling Point:
Investigator(s): Luren Duch, Victoria ye	fremonous	Section, Township, F	Range: 3/0 1 3/0	KIE
Landform (hillslope, terrace, etc.): Backs) of	e	Local relief (concave	e, convex, none): Slove	Slope (%):
Subregion (LRR): LRQC,	Lat: 38	.078393	Long:12 .8380	Datum: NAD 8.
Soil Map Unit Name: Valdez Sitty Clay 10	am, clay s	ubstratum	NWI classificat	ion: N/f
Are climatic / hydrologic conditions on the site typical	for this time of year	ar? Yes X No	(If no, explain in Rer	marks.)
Are Vegetation, Soil, or Hydrology	significantly	disturbed? Ar	e "Normal Circumstances" pre	esent? Yes X No
Are Vegetation, Soil, or Hydrology			needed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site i			locations, transects,	important features, etc
Hydrophytic Vegetation Present? Yes	No	Is the Sample	ed Area	\/
Hydric Soil Present? Yes	No X		and? Yes	_ NoX
	_ No _ <del>&gt;</del> _		(100)	
Remarks:				
VEGETATION				
T Stratum (115		Dominant Indicator		
Tree Stratum (Use scientific names.) (=30)		Species? Status	<ul> <li>Number of Dominant Spe</li> <li>That Are OBL, FACW, or</li> </ul>	
1				
2			Total Number of Dominar Species Across All Strata	- 1
4.				
Total	Cover: O	1	Percent of Dominant Spec That Are OBL, FACW, or	
Sapling/Shrub Stratum (=15)	<b>a</b> 0	V CAC		
1. Rosa californica		- y + TIC		
2				
3			FACW species	
4			FAC species	
5 Total	Cover: 90		FACU species	
Herb Stratum (=5'	2	/ 0	UPL species	
1. Baccharis gluthasa		Y FACY	Column Totals:	(A) (B)
2. Polypoyon Konsperiens is		y facw		
3. Junus baltius		Y FACW		= B/A =
4. Distichiu spicator		y FAC		
5			_ Dominance Test is >	
6				ations <sup>1</sup> (Provide supporting
7			data in Remarks of	or on a separate sheet)
8	Cover: 14		Problematic Hydroph	ytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (= \S\	Cover: _ ' \			
1				and wetland hydrology must
2.			be present.	
-	Cover:		Hydrophytic	4.14
% Bare Ground in Herb Stratum %		ust	Vegetation Present? Yes	X No
Remarks:	23.0. 0. 5.0.0 01		7.35-17.00	
remarks.				

Sampling	Point:	
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Depth (inches)	Color (mo		%	Color (me	oist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	10/R 3	,							Sa	
0-6	10/12	10	100						24	
6-15	2.5 4	3/2	98	10412	4/6	2	C	<u>M</u>	Sa	* = 1/
						_				
									-	· · · · · · · · · · · · · · · · · · ·
								re Lining, F		annel, M=Matrix.
	ndicators: (A	Applica	ble to al	I LRRs, unles	s other	wise not	ed.)			rs for Problematic Hydric Soils <sup>3</sup> :
_ Histosol				∠ San						Muck (A9) (LRR C)
	ipedon (A2)					trix (S6)				Muck (A10) (LRR B)
_ Black His						ky Minera				uced Vertic (F18)
	n Sulfide (A4)					ed Matrix				Parent Material (TF2)
	Layers (A5) (		)			atrix (F3)			Othe	er (Explain in Remarks)
	ck (A9) (LRR					Surface	. ,			
	Below Dark S		(A11)			ark Surfac				
	rk Surface (A					ressions (	F8)		3	
	ucky Mineral (			Ver	nal Pool	s (F9)				rs of hydrophytic vegetation and
	leyed Matrix (		£						wetla	nd hydrology must be present.
	one to 2	0"								
Туре:	none to 2			_					Undela Ca	U Procent? Voc X
Type: Depth (inc	hes):			=					Hydric So	oil Present? Yes No No
Type:	hes):								Hydric Sc	oil Present? Yes No No
Type:	hes):									ondary Indicators (2 or more required)
Type:	hes):	ators:								
Type:	GY Irology Indica	ators:		ficient)	lt Crust	(B11)				ondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type:	GY  rology Indicators (any one Water (A1)	ators:		ficient)	It Crust					ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type:	GY  Irology Indicators (any one Water (A1) ter Table (A2)	ators:		ficient) Sa Bio	tic Crus	t (B12)	es (B13)			ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Type:	GY  Irology Indicators (any one Water (A1) er Table (A2) n (A3)	ators: e indica	utor is suf	ficient) Sa Bic Aq	otic Crus uatic Inv	t (B12) vertebrate				ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Type:	GY  Irology Indicated ators (any one Water (A1) ter Table (A2) in (A3) arks (B1) (Nor	ators: e indica	ne)	ficient) Sa Bio Aq Hy	otic Crus uatic Inv drogen	et (B12) vertebrate Sulfide O	dor (C1)	I Living Ro	Sec	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type:	GY  rology Indicators (any one Nater (A1) rer Table (A2) n (A3) arks (B1) (Nor t Deposits (B2)	ators: e indica nriverii 2) (Non	ne)	ficient) Sa Bio Aq Hy Ox	otic Crus uatic Inv drogen s idized R	et (B12) vertebrate Sulfide O Rhizosphe	dor (C1) eres along	Living Roo	Sec — — — — — ots (C3)	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7)
Type:	GY  Irology Indicators (any one Nater (A1) er Table (A2) n (A3) arks (B1) (Nor t Deposits (B2) osits (B3) (No	ators: e indica nriverii 2) (Non	ne)	ficient) Sa Bid Aq Hy Ox Pro	otic Crus uatic Inv drogen idized R	et (B12) vertebrate Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C	4)	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8)
Type:	GY  Irology Indicators (any one Nater (A1) er Table (A2) n (A3) arks (B1) (Nor t Deposits (B2) osits (B3) (No Soil Cracks (B	ators: e indica nriverii 2) (Non onriveri 36)	ntor is suf ne) riverine) ine)	ficient) Sa Bic Aq Hy Ox Pro	uatic Invalored Researce of the control of the cont	ot (B12) vertebrate Sulfide O thizosphe of Reduction Reduction	dor (C1) eres along ed Iron (C ion in Ploy	A	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Type:	Frology Indicators (any one Water (A1) are Table (A2) arks (B1) (Nor t Deposits (B3) (No Soil Cracks (B on Visible on A	ators: e indica nriverii 2) (Non ponriveri 86)	ntor is suf ne) riverine) ine)	ficient) Sa Bic Aq Hy Ox Pro	uatic Invalored Researce of the control of the cont	et (B12) vertebrate Sulfide O Rhizosphe of Reduce	dor (C1) eres along ed Iron (C ion in Ploy	4)	Sec ————————————————————————————————————	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Frology Indicators (any one Water (A1) are Table (A2) arks (B1) (Nor t Deposits (B3) (No Soil Cracks (Bar Visible on Aained Leaves	ators: e indica nriverii 2) (Non ponriveri 86)	ntor is suf ne) riverine) ine)	ficient) Sa Bic Aq Hy Ox Pro	uatic Invalored Researce of the control of the cont	ot (B12) vertebrate Sulfide O thizosphe of Reduction Reduction	dor (C1) eres along ed Iron (C ion in Ploy	4)	Sec ————————————————————————————————————	wondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Type:	GY  Irology Indicators (any one Nater (A1) ter Table (A2) in (A3) arks (B1) (Nor t Deposits (B2) osits (B3) (No Soil Cracks (Bin Visible on Alained Leaves rations:	ators: e indica nriverio 2) (Non porriverio 66) Aerial In (B9)	ne) riverine) ine) nagery (E	ficient)  Sa Bio Aq Hy Ox Pro Re 37) Ot	uatic Crus uatic Inv drogen : idized R esence c cent Iron her (Exp	et (B12) vertebrate Sulfide O Rhizosphe of Reduce n Reducti	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (	Sec ————————————————————————————————————	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Arches):	ators: e indica nriverii 2) (Non ponriveri 66) Aerial In (B9)	ne) riverine) ine) nagery (E	ficient)  Sa Bic Aq Hy Ox Pro Re 37) Ot	otic Crus uatic Inv drogen idized R esence o cent Iron her (Exp	ot (B12) vertebrate Sulfide O thizosphe of Reduce n Reduct lain in Re	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (	Sec ————————————————————————————————————	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	Arches):	ators: e indica nriverio 2) (Non ponriverio 66) Aerial In (B9)	ne) riverine) nagery (E	ficient)  Sa Bio Aq Hy Ox Pro Re 37) Ot	otic Crus uatic Inv drogen idized R esence o cent Iron her (Exp	vertebrate Sulfide O thizosphe of Reduce n Reducti clain in Re	dor (C1) eres along ed Iron (C ion in Plot ermarks)	4) wed Soils (	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	rology Indicators (any one Water (A1) ter Table (A2) in (A3) arks (B1) (Nor to Deposits (B3) (No Goil Cracks (Bin Visible on Alained Leaves rations: ar Present? esent? esent?	ators: e indica nriverio 2) (Non onriverio 66) Aerial In (B9)	ne) riverine) nagery (E	ficient)  Sa Bio Aq Hy Ox Pro Re Ro Ot	otic Crus uatic Inv drogen idized R esence o cent Iron her (Exp epth (inc epth (inc	t (B12) vertebrate Sulfide O thizosphe of Reduce n Reducti clain in Re ches): ches): ches):	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (	Sec ————————————————————————————————————	water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Type:	rology Indicators (any one Water (A1) er Table (A2) on (A3) arks (B1) (Nor to Deposits (B3) (No Soil Cracks (Bon Visible on Aained Leaves rations:  er Present?  Present?	ators: e indica nriverio 2) (Non onriverio 66) Aerial In (B9)	ne) riverine) nagery (E	ficient)  Sa Bio Aq Hy Ox Pro Re Ro Ot	otic Crus uatic Inv drogen idized R esence o cent Iron her (Exp epth (inc epth (inc	t (B12) vertebrate Sulfide O thizosphe of Reduce n Reducti clain in Re ches): ches): ches):	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	rology Indicators (any one Water (A1) ter Table (A2) in (A3) arks (B1) (Nor to Deposits (B3) (No Goil Cracks (Bin Visible on Alained Leaves rations: ar Present? esent? esent?	ators: e indica nriverio 2) (Non onriverio 66) Aerial In (B9)	ne) riverine) nagery (E	ficient)  Sa Bio Aq Hy Ox Pro Re Ro Ot	otic Crus uatic Inv drogen idized R esence o cent Iron her (Exp epth (inc epth (inc	t (B12) vertebrate Sulfide O thizosphe of Reduce n Reducti clain in Re ches): ches): ches):	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
Type:	rology Indicators (any one Water (A1) ter Table (A2) in (A3) arks (B1) (Nor to Deposits (B3) (No Goil Cracks (Bin Visible on Alained Leaves rations: ar Present? esent? esent?	ators: e indica nriverio 2) (Non onriverio 66) Aerial In (B9)	ne) riverine) nagery (E	ficient)  Sa Bio Aq Hy Ox Pro Re Ro Ot	otic Crus uatic Inv drogen idized R esence o cent Iron her (Exp epth (inc epth (inc	t (B12) vertebrate Sulfide O thizosphe of Reduce n Reducti clain in Re ches): ches): ches):	dor (C1) eres along ed Iron (C ion in Plot emarks)	4) wed Soils (	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)

Project/Site: Coll:ns///	c	ity/County:	Solano	carrity Sampling	Date: 6/6/24
Applicant/Owner: L5 Pour				State: CA Sampling	Point:
nvestigator(s): Norm Bocks , Victoria yellor	vonvaits	Section, Tow	vnship, Rang	10: 500 TON RIE	
andform (hillslope, terrace, etc.):	-	ocal relief	(concave, co	onvex, none): Conceve	Slope (%):
Subregion (LRR): LRC	Lat: 38	.0798	72	Long: -121,890326	Datum: NAOX S
ioil Map Unit Name: Tamba Muy Clay				NWI classification:	245BA
are climatic / hydrologic conditions on the site typical for this	time of yea	r? Yes	/ No		
re Vegetation, Soil, or Hydrology si			Are "N	Normal Circumstances" present?	Yes X No
				eded, explain any answers in Rem	
are Vegetation, Soil, or Hydrology n					
SUMMARY OF FINDINGS – Attach site map s	showing	sampling	g point io	cations, transects, impor	tant features, etc.
Hydrophytic Vegetation Present? Yes No		lo the	e Sampled	Area	
Hydric Soil Present? Yes X No		15,000	in a Wetlan	X	
Wetland Hydrology Present? Yes X		With	iii a Wedaii		
Remarks:					
V.					
/EGETATION					
EGETATION	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Use scientific names.)		Species?		Number of Dominant Species	1
1	1000			That Are OBL, FACW, or FAC:	(A)
2				Total Number of Dominant	1
3				Species Across All Strata:	(B)
4				Percent of Dominant Species	100
Sapling/Shrub Stratum ( 55	· 0			That Are OBL, FACW, or FAC:	(A/B)
1.				Prevalence Index worksheet:	
2.				Total % Cover of:	Multiply by:
3.				OBL species	x 1 =
4.				FACW species	x 2 =
5.				FAC species	x 3 =
Total Cover	r0_			FACU species	Y . The second s
Herb Stratum Y-5		V	ObL	UPL species	
1. Saliconia pacifica 2. Polypyon mon speliansis	_75			Column Totals:	(A)(B)
2. Poly pyon mon spariens is		_ ~	FACW	Prevalence Index = B/A	_
3				Hydrophytic Vegetation Indi	
4				Dominance Test is >50%	
5				Prevalence Index is ≤3.0¹	
6				Morphological Adaptation	
7		-		data in Remarks or on	a separate sheet)
8Total Cove		-		Problematic Hydrophytic	Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum	/1	-			
1	0			<sup>1</sup> Indicators of hydric soil and v	vetland hydrology must
2.	0			be present.	
Total Cove	r: 76		×	Hydrophytic	
	r of Biotic C	t:	5	Vegetation Present? Yes	No
	i di bidiid C	Ji u St		rieselli les /	
Remarks:					

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)   Profile   Profil	/	e debili needed to docum	ICILL LITE I	Hulcator	01 00111111		
Color mosts							
Sy   1/1   45   7,5   7,5   7,5   5   6   M/FL   5   1   1   1   1   1   1   1   1   1	(inches) Color (moist)	6 Color (moist)	%		Loc		
Sy 3/1	0-35 2.54 4/1 9	5 10412 4/4	5	0	M	-	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix   Total Callon: PL=Pore Lining, RC=Root Channel, M=Matrix   Type: C=Concentration, D=Depletion, RM=Reduced Matrix   Total Callon: PL=Pore Lining, RC=Root Channel, M=Matrix   Total Callon: PL=Pore Lining, RC=Root Channel, M=Matrix   Total Callon: Provided Scilin Indicators for Problematic Hydric Soils*:	3.5-6 54 4/1 4		5_	6			
Color   Colo	59 3/1 4	5 7.5 YR 3/3	5	C	M/PL		
**Type: C=Concentration, D=Depletion, RM=Reduced Matrix. **Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	6-10 2.54 4/1 9			L	M/PL	Sick	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Redox Dark Surface (A10) (LRR C) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Redox Dark Surface (F1) Redox Dark Surface (F1) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Redox Depleted Matrix (F2) Redox Dark Surface (F7) Redox Depleted Matrix (F2) Redox Depleted Matrix (F2) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Redox Depressions (F9) Primary Indicators of hydrophytic vegetation and wetland hydrology must be present.  **Wetland Hydrology Indicators:**  Type: Depth (inches): Surface (A12) Salt Crust (B11) Sufface Water (A1) Secondary Indicators (2 or more required) Salt Crust (B12) Dirth Deposits (B2) (Riverine) Salt Crust (B12) Dirth Deposits (B2) (Riverine) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (A2) Saturation (A3) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) (Nonriverine) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Sediment Deposits (B3) (Nonriverine) Presence of Reduced from (C4) Crayfib Burrows (C8) Sulface (C7) Drift Deposits (B3) (Nonriverine) Presence of Reduced from (C4) Crayfib Burrows (C8) Shallow Aquitard (D3) Field Observations:  Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): No Depth (inches	10-16 Blzy 1 N25/09	5 7.5 YR 3/3	5	L	Μ	Sid	
Wetland Hydrology Indicators:       Secondary Indicators (2 or more required)         Primary Indicators (any one indicator is sufficient)	Hydric Soil Indicators: (Applicable  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A12) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Restrictive Layer (if present): Type:	to all LRRs, unless other  Sandy Red Stripped Ma Loamy Muc Loamy Gley Depleted M Redox Dark 1) Redox Dep	ox (S5) atrix (S6) ky Minera yed Matrix atrix (F3) c Surface ark Surface ressions (	ed.) al (F1) a (F2) (F6) be (F7)	re Lining, F	Indicat  Ind	tors for Problematic Hydric Soils*: cm Muck (A9) (LRR C) cm Muck (A10) (LRR B) educed Vertic (F18) ed Parent Material (TF2) ther (Explain in Remarks) ettors of hydrophytic vegetation and land hydrology must be present.
Saturation (A3)	a decision and the control of the co					Hydric	Soli Present? Tes No
Field Observations:  Surface Water Present? Yes No _X Depth (inches):  Water Table Present? Yes No _X Depth (inches):  Saturation Present? Yes No Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (any one indicator Surface Water (A1)	y Salt Crust					econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Surface Water Present? Yes No _X Depth (inches): Water Table Present? Yes No _X Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image	∑   Salt Crust   Biotic Crust   Aquatic In     Hydrogen     ∑ Oxidized     Presence     Recent In	st (B12) Evertebrate Sulfide O Rhizosphe of Reduct on Reduct	odor (C1) eres along ed Iron (C tion in Plo	24)		iecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Water Table Present?  Yes No Depth (inches):  Saturation Present? Yes No Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Water-Stained Leaves (B9)	∑   Salt Crust   Biotic Crust   Aquatic In     Hydrogen     ∑ Oxidized     Presence     Recent In	st (B12) Evertebrate Sulfide O Rhizosphe of Reduct on Reduct	odor (C1) eres along ed Iron (C tion in Plo	24)		iecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Saturation Present? Yes No Depth (inches): 10" Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image Water-Stained Leaves (B9)  Field Observations:	∑   Salt Crust	st (B12) Evertebrate Sulfide C Rhizosphe of Reduct on Reduct plain in Re	odor (C1) eres along ed Iron (C tion in Plo	24)		iecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes	Salt Crust   Biotic Cru   Aquatic In     Hydrogen   Y Oxidized     Presence     Recent In     Other (Ex	st (B12) Evertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re	odor (C1) eres along ed Iron (C tion in Plo emarks)	24)		iecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Remarks:	Remarks:  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes _  Water Table Present?	Salt Crust	st (B12) evertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re aches):	odor (C1) eres along ed Iron (C tion in Plo emarks)	(24) wed Soils	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Remarks:	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Unift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Image Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	Salt Crust	st (B12) evertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re aches): aches):	eres along ed Iron (C tion in Plo emarks)	(4) wed Soils  We	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge)	Salt Crust	st (B12) evertebrate Sulfide O Rhizosphe of Reduct on Reduct plain in Re aches): aches):	eres along ed Iron (C tion in Plo emarks)	(4) wed Soils  We	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

W-13

				And west Region	6/6/2	u
Project/Site: CONSAJUTILE	C	ity/County:	Soluna	Sampling D	Date: 6/6/6	
Applicant/Owner: LS Power	- 10 = 10	73. / Tar S		State: CA Sampling F		
Investigator(s): Kurn Buch, Victoria yetrem	-					
Landform (hillslope, terrace, etc.): Toes lope						
Subregion (LRR): LPAC						
Soil Map Unit Name: Tamba Muchy Clay			1		42 BH	_
Are climatic / hydrologic conditions on the site typical for this					V	
Are Vegetation, Soil, or Hydrology si				Normal Circumstances" present? Y		_
re Vegetation, Soil, or Hydrology n				eded, explain any answers in Rema		4-
SUMMARY OF FINDINGS – Attach site map s	snowing	sampling	g point ic	ocations, transects, import	ant leatures, e	ic.
Hydrophytic Vegetation Present? Yes No		Is the	Sampled	Area	<b>\</b>	
Hydric Soil Present? Yes No		withi	n a Wetlan	nd? Yes No_	X	
Wetland Hydrology Present? Yes No Remarks:						
Remarks: Putentilly manuall bern separating	w-13 °	no w-l	7			
EGETATION	Absolute	Deminent	Indicator	Dominance Test worksheet:		
Tree Stratum (Use scientific names.) \ 0 スプロ	% Cover			Number of Dominant Species That Are OBL, FACW, or FAC:	_2	A)
2.				Total Number of Dominant	3 "	
3				Species Across All Strata:		(B)
1				Percent of Dominant Species	(0)	
Sapling/Shrub Stratum   0 x 15 Total Cover				That Are OBL, FACW, or FAC:	60%	(A/B)
1.				Prevalence Index worksheet:		
2.				Total % Cover of:	Multiply by:	
1.				OBL species x	1 =	
				FACW species x	2 =	
i.				FAC species x		
Total Cover	r:O			FACU species x	4 =	-
Herb Stratum 5 x 5	60	<b>V</b>	FAC		(5=	-
festica perennis	45	4	UPL	Column Totals: (	A)	_ (B)
Bromw Madritonis	30	4	FACW	Prevalence Index = B/A =		
- Polypoyar Monspeliansis Franklina saling	2	1	FACW	Hydrophytic Vegetation Indic		_
Salicornia pacisica	3	N	OBL	✓ Dominance Test is >50%		
Suite partition			700	Prevalence Index is ≤3.0¹		
				Morphological Adaptations	1 (Provide support	ting
				data in Remarks or on		
Total Cover	140			Problematic Hydrophytic V	egetation' (Explai	in)
Voody Vine Stratum (0 x 15						4
4-1-				Indicators of hydric soil and w be present.	etland hydrology n	nust
				-		
Total Cover	r: <b>D</b>			Hydrophytic		
6 Bare Ground in Herb Stratum % Cove	r of Biotic C	rustC		Vegetation Present? Yes	No	
Remarks:	ALTERNATIVE					
wilding.						

W-13

Depth Matrix Redox Features			
(inches) Color (moist) % Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
D-16 2.54 5/4 100		SICL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup> Location: PL=Po	ore Lining, Ro	C=Root Chann	nel, M=Matrix.  for Problematic Hydric Soils³:
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			
Histosol (A1) Sandy Redox (S5)			fuck (A9) (LRR C) fuck (A10) (LRR B)
Histic Epipedon (A2)  Black Histic (A3)  Stripped Matrix (S6)  Loamy Mucky Mineral (F1)			ed Vertic (F18)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)			arent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)			Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)			
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)			
Thick Dark Surface (A12) Redox Depressions (F8)		4	
Sandy Mucky Mineral (S1) Vernal Pools (F9)			of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)		wetland	hydrology must be present.
Restrictive Layer (if present):  Type: Nove to 2011			
Type: Nue 10 20			V
D4b (b)		Undela Call	December Von No A
Depth (inches):  Remarks:  Several Small angular rock faggrand present in .  Construct a burn	tap 6"		May be all fill crong
Remarks: Several Small angular rock forgund present in constituted built	tap 6"	of soil.	May be old fill arong
Remarks: Several SMall angular rock fagginess present in constructal burn  YDROLOGY  Vetland Hydrology Indicators:	taP 6"	Secon	May be all fill argng dary Indicators (2 or more required)
Remarks:  Several SMG11 angular rock faggrand present in constructed burnt  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient)	top 6"	Secon	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)
Temarks:  Several SMAII angular rock forgrand present in construct a barro  (DROLOGY  Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Sulface Water (A1)  Salt Crust (B11)	top 6"	Secon W Secon	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
Temarks:  Several SMAII angular rock faggers present in construct a barror  (DROLOGY  Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1) High Water Table (A2)  Several SMAII angular rock faggers present in construct a barror  Surface Water (B11) Biotic Crust (B12)	top 6"	Secon W Secon Secon	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (ediment Deposits (B2) (Riverine) (rift Deposits (B3) (Riverine)
Remarks:  Several SMall argular rock faggers present in construct a burn  PROLOGY  Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)  Saturation (A3) Aquatic Invertebrates (B13)	10° 6"	Secon W So	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (addiment Deposits (B2) (Riverine) (rift Deposits (B3) (Riverine) (rainage Patterns (B10)
Remarks:  Several SMall angular rock fagures present in a construct of burns.  PROLOGY  Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Surface Water (B11)  Hydrogen Sulfide Odor (C1)		Secon W So D D	dary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  ry-Season Water Table (C2)
Remarks:  Several SMAII angular rock fagures present in Construct a barror  PROLOGY  Vetland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Marks (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Oxidized Rhizospheres along	Living Root	Secon W Si D D D D	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7)
Pemarks:  Scueral SMAII anyour rock forms from m  Construct a burn  Vetland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C)	J Living Root	Secon  Secon  Secon  D  D  S(C3)  TI  C	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8)
Remarks:  Scueral SMAII argular rock fagrests from M  Ontractal band  Ontracta	J Living Root	Secon W So D D D D D D C C C So S	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (additional decimal d
Permarks:  Scueral SMall argular rock faggers present in a construct of burns.  Settland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Construct of Augustic Inverted in a construction of the constructio	J Living Root	Secon  Secon  Secon  D  D  C  S(C3)  C  S(C3)	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B3) (Riverine) (addiment Deposits (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B
Temarks:  Several SMAII answer rock fagures present in a sufficient in a surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)	J Living Root	Secon  Secon  Secon  D  D  C  S(C3)  C  S(C3)	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (additional decimal d
Remarks:  Scueral SMall angular rock fagures promit in a contract of barrors  Formary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	J Living Root 4) wed Soils (C	Secon  Secon  Secon  D  D  C  S(C3)  C  S(C3)	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B3) (Riverine) (addiment Deposits (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B
Remarks:  Scueral SMAII angular rock fagures promit in a contract of barns.  PROLOGY  Vetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  urface Water Present?  Yes No Depth (inches):	J Living Root (4) wed Soils (C	Secon  Secon  Secon  D  D  C  S(C3)  C  S(C3)	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B3) (Riverine) (addiment Deposits (B1) (Riverine) (addiment Deposits (B2) (Riverine) (addiment Deposits (B
Remarks:  Scueral SMall angular rock fagers of resets in a construct of bards.  Formally Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Field Observations:  Formall Indicators (Indicators (Indicators))  Water Present?  Yes No	J Living Root 4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (aterial (B2)
PROLOGY  Vetland Hydrology Indicators: rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  eld Observations: urface Water Present?  Ves No	J Living Root 4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (ater Marks (B1) (Riverine) (ater Marks (B3) (Riverine) (ater Marks (B1) (Riverine) (ater Marks (B2) (Riverine) (ater Marks (B1) (Riv
Remarks:  Scueral SMAN angular rock former Present Present?  YDROLOGY  Vetland Hydrology Indicators:  Inimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  ield Observations:  urface Water Present?  Yes  No  Depth (inches):  aturation Present?  Yes  Presente of Reduced Iron (One)  Attention Present?  Yes  No  Depth (inches):  Attention Present?  Yes  Depth (inches):  Attention Present?	J Living Root 4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) later Marks (B1) (Riverine) later Marks (B3) (Riverine) later Marks (B3) (Riverine) later Marks (B3) (Riverine) later Marks (B3) (Riverine) later Marks (B1) (Riv
Remarks:  Scueral SMAN angular rock former Present Present?  YDROLOGY  Vetland Hydrology Indicators:  Inimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  ield Observations:  urface Water Present?  Yes  No  Depth (inches):  aturation Present?  Yes  Presente of Reduced Iron (One)  Attention Present?  Yes  No  Depth (inches):  Attention Present?  Yes  Depth (inches):  Attention Present?	J Living Root 4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (ater Marks (B1) (Riverine) (ater Marks (B3) (Riverine) (ater Marks (B1) (Riverine) (ater Marks (B2) (Riverine) (ater Marks (B1) (Riv
Remarks:  Scueral SMAII angular rock fagarity (Construct a) burns  Primary Indicators (any one indicator is sufficient)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water Table Present? Water Table Present? Water Table Present?  Yes No Depth (inches): Sediment Deposits (B9) Surface Soil Cracks (B9) Surface Soil Cracks (B9) Surface Water Present? Surface Water Present Pre	J Living Root (4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (aterial (B2)
Remarks:  Several SMAII angular rock fagarity (Construct of burn)  (Cons	J Living Root (4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) dater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) rainage Patterns (B10) ry-Season Water Table (C2) nin Muck Surface (C7) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
Temarks:  Several SMAII angular rock fagarity (Construct a) burns  Topology  Tetland Hydrology Indicators:  rimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  eld Observations:  Urface Water Present?  Yes  No  Depth (inches):  Jeturation Present?  Yes  Jeturation Present?  Yes  No  Depth (inches):  Jeturation Present?  Yes  Jetura	J Living Root (4) wed Soils (C	Secon  Se	dary Indicators (2 or more required) (ater Marks (B1) (Riverine) (ater Marks (B1) (Riverine) (ater Marks (B3) (Riverine) (ater Marks (B3) (Riverine) (ater Marks (B3) (Riverine) (ater Marks (B1) (Riverine) (ater Marks (B2) (Riverine) (ater Marks (B1) (Riv

Project/Site: Collins ville		c	City/County:	Solu	Samp	ling Date: 4-7	24
Applicant/Owner: LS Pour					State: CA Samp		
nvestigator(s): Victoria yet song	nolina, Morev	Buchs	Section, Tov	vnship, Rang	ge: SDQ T3N	RIE	
andform (hillslope, terrace, etc.): To-	estope		Local relief	(concave, co	onvex, none): Convex	Slope (%):	<u> </u>
Subregion (LRR):   RRC		Lat: 38	.0807	185	Long: -121.84044	7_ Datum: N	ESOF
Soil Map Unit Name: Diablo-Au	ar clays 12.	-9% SI	opes/	Tambu m	uy Clay NWI classification:	RYSBA	
Soil Map Unit Name: Diablo-Au	site typical for this	time of year	r? Yes _	No	(If no, explain in Remark	s.)	
Are Vegetation, Soil, or H					lormal Circumstances" present		
Are Vegetation, Soil, or H				(If nee	eded, explain any answers in R	emarks.)	
SUMMARY OF FINDINGS - At				point lo	cations, transects, imp	ortant feature	s, etc.
Hydrophytic Vegetation Present?	Yes_X_ No	,			.052		
Hydric Soil Present?	Yes No		1000000	e Sampled n a Wetlan	V	No	
Wetland Hydrology Present?	Yes No		With	ii a vvetiaii	100		
Remarks:							
/EGETATION							
	R=30		Dominant		Dominance Test workshee	t:	
<u>Tree Stratum</u> (Use scientific names.)			Species?		Number of Dominant Specie That Are OBL, FACW, or FA	s C.	(4)
1,					That Are OBL, FACVV, or FA	C	_ (A)
2					Total Number of Dominant	1	(B)
3					Species Across All Strata:	-	_ (D)
4	Total Cover	. 0			Percent of Dominant Specie That Are OBL, FACW, or FA	s C: \00	(A/B)
Sapling/Shrub Stratum V 15	Total Gover				That Ale Obl., FACVV, of FA	. <u>100</u>	_ (////)
1					Prevalence Index workshe		
2					Total % Cover of:		
3					OBL species		
4					FACW species		
5			_		FAC species		
Herb Stratum	Total Cover	·_£			UPL species		
1. Felstown Prychais		98	У	FAC	Column Totals:		
2. Distichlis spicato			N	FAL	Column Totals.	_ (^)	(5)
3. Salacointa Pacifina			N	066	Prevalence Index = E	3/A =	_
4. Frankenier Selina		-	N	FACW	Hydrophytic Vegetation In	ndicators:	
5.					X Dominance Test is >50		
6.					Prevalence Index is ≤3		
7					Morphological Adaptat data in Remarks or	ions <sup>1</sup> (Provide sup	porting
8					Problematic Hydrophyl		
	Total Cover	:119			Problematic Hydrophy	ic vegetation (Ex	piairi
Woody Vine Stratum					<sup>1</sup> Indicators of hydric soil an	d wetland hydrolog	v must
1					be present.	a wouldn't nyaroro	,,
2					Hydrophytic		
	Total Cover				Vegetation		
% Bare Ground in Herb Stratum	% Cover	of Biotic C	rust	)	Present? Yes _	X No	-
Remarks:							

0		
0	u	ᆫ

Depth	Matrix			Feature			- 20.	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Textur	e Remarks
0-12	6 Ly 1 N Z.5/	100					Sicu	
12-14.5	54 4/2	95	104/2 4/4	5		Μ	اعتد	-
14.5-22	2.57 4/1	63	54 7/1	35	a	M	U	
			104R 5/6	2	-	M	- 5	
	ncentration, D=Deple					e Lining,		
Hydric Soil In	ndicators: (Applicat	le to all	LRRs, unless otherv	wise not	ed.)		Indica	tors for Problematic Hydric Soils <sup>3</sup> :
Histosol (	(A1)		Sandy Redox	x (S5)			1	cm Muck (A9) (LRR C)
_ Histic Epi	pedon (A2)		Stripped Mat	rix (S6)			2	cm Muck (A10) (LRR B)
Black His	tic (A3)		Loamy Muck	y Minera	l (F1)		R	educed Vertic (F18)
	Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)		R	ed Parent Material (TF2)
_ Stratified	Layers (A5) (LRR C)		Depleted Ma	trix (F3)			0	ther (Explain in Remarks)
	k (A9) (LRR D)		Redox Dark		(F6)			
	Below Dark Surface (	(A11)	Depleted Da					
Thick Dar	k Surface (A12)		Redox Depre	essions (	F8)			
	icky Mineral (S1)		Vernal Pools	(F9)			3Indica	tors of hydrophytic vegetation and
	eyed Matrix (S4)						wet	tland hydrology must be present.
estrictive La	ayer (if present):						1	
Type: _ ∩ 0	ne to 24"							~
Type: _ 10	ne to 24"		_				Hydric	Soil Present? Yes No
Type: <u>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \</u>	ne 10 29"					м.	Hydric	Soil Present? Yes No No
Type:	res):	or is suffice)  e) verine)	_X Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	(B12) ertebrate sulfide On nizosphe f Reduce Reducti	dor (C1) res along ed Iron (Ca on in Plov	4)	oots (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	res):	or is suffice)  e) verine)	_X Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	(B12) ertebrate sulfide On nizosphe f Reduce Reducti	dor (C1) res along ed Iron (Ca on in Plov	4)	oots (C3)	lecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Type: Depth (inchesternates:  TOROLOG  Vetland Hydrorimary Indicates  Surface W High Wates Saturation Water Mar Sediment I Drift Depose Surface Soson Water-Staileld Observal	res):	or is suffice e) verine) e) gery (B7	∑ Salt Crust (I  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrate dulfide Or nizosphe f Reduce Reducti ain in Re	dor (C1) res along ed Iron (C- on in Plov emarks)	4) ved Soils	oots (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type: Depth (inchesternarks:  TOROLOG  Vetland Hydrorimary Indicate Surface W High Wate Saturation Water Mar Sediment I Drift Depose Inundation Water-Staileld Observaturface Water	res):	or is suffice e) verine) e) gery (B7	X Salt Crust (I  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrate sulfide On izosphe f Reduce Reducti ain in Re	dor (C1) res along ed Iron (C- on in Plov emarks)	4) ved Soils	oots (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	res):  rology Indicators:  tors (any one indicators)  rater (A1)  rater (A1)  rater (A2)  (A3)  rks (B1) (Nonriverine)  Deposits (B2) (Nonriverine)  Sits (B3) (Nonriverine)  oil Cracks (B6)  Visible on Aerial Imagined Leaves (B9)  tions:  Present?  Yes  resent?  Yes	or is suffice e) verine) e) gery (B7	X Salt Crust (I  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrate sulfide On izosphe f Reducti ain in Re nes): nes):	dor (C1) res along ed Iron (C- on in Plov emarks)	4) wed Soils	oots (C3)	Mecondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	res):  re	or is suffice  e) verine) e) gery (B7	Salt Crust (I  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrate fulfide On izosphe f Reduce Reducti ain in Re nes): nes):	dor (C1) res along ed Iron (C- on in Plov emarks)	4) ved Soils	oots (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	res):  rology Indicators:  tors (any one indicators)  rater (A1)  rater (A1)  rater (A2)  (A3)  rks (B1) (Nonriverine)  Deposits (B2) (Nonriverine)  Dil Cracks (B6)  Visible on Aerial Imagined Leaves (B9)  tions:  Present?  Yes  sent?  Yes  sent?  Yes	or is suffice  e) verine) e) gery (B7	Salt Crust (I  Biotic Crust  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Other (Expla	(B12) ertebrate fulfide On izosphe f Reduce Reducti ain in Re nes): nes):	dor (C1) res along ed Iron (C- on in Plov emarks)	4) ved Soils	oots (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	res):  rology Indicators:  tors (any one indicators)  rater (A1)  rater (A1)  rater (A2)  (A3)  res (B1) (Nonriverine)  Deposits (B2) (Nonriverine)  Dil Cracks (B6)  Visible on Aerial Imagined Leaves (B9)  tions:  Present? Yes  resent? Yes  resent? Yes  resent? Yes  ary fringe)  rded Data (stream ga	or is suffice e) verine) e) gery (B7	X Salt Crust (I  Biotic Crust  Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrate sulfide Or nizosphe f Reducti ain in Re nes): nes): notos, pr	dor (C1) res along ed Iron (C- on in Plov emarks)	wed Soils  Wet	oots (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

Project/Site: CONINSUILLE		City/Count	v. Saltai	Sampling Date: 6/7/24
Applicant/Owner: LS Power		on,, courn		State: CA Sampling Point: 5P-1
nvestigator(s): Kuren Back, Victoria Yetremoniu	AXA .			
andform (hillslope, terrace, etc.): 1001000				
Subregion (LRR):	Lat. 38	079	793	long: - 121 9799 67 Potum: 4/40 87
oil Map Unit Name: Tamba Mary Clay			1	NWI classification: RUSBA
re climatic / hydrologic conditions on the site typical for this				
re Vegetation, Soil, or Hydrology sig				Normal Circumstances" present? Yes No
re Vegetation, Soil, or Hydrology na	turally prol	blematic?	(If ne	eded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site map s	howing	sampli	ng point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wes No  Yes No  No  No  Yes No  No  No  No  No  No  No  No  No  No		10000	he Sampled hin a Wetlar	V
Remarks:				
FORTATION				
EGETATION	Absolute	Dominan	t Indicator	Dominance Test worksheet:
	% Cover		? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
				Total Number of Dominant Species Across All Strata: (B)
Total Cover:	_		-	Percent of Dominant Species That Are OBL, FACW, or FAC: \ OO (A/B
apling/Shrub Stratum F= b				That Ale OBE, I ACW, SI I AC.
		100		Prevalence Index worksheet:
				Total % Cover of: Multiply by:
				OBL species x 1 =
				FACW species x 2 =
				FAC species x 3 =
	0_			FACU species x 4 =
erb Stratum 7=5 Total Cover:	16	N	OBL	UPL species x 5 =
Salicornia Pacifice	15	-N		Column Totals: (A) (B
polypogon monspelensis	=	- 10	FACU	Prevalence Index = B/A =
Cotula coronopololia	-	- 1		Hydrophytic Vegetation Indicators:
cheropodiastrum murale	. 1	- 7	FACU	Dominance Test is >50%
Spergularia marina	90	-1	OBL	Prevalence Index is ≤3.0¹
				Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Total Cover:	113			
oody Vine Stratum				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
				be present.
Total Cover:			ô	Hydrophytic Vegetation Present?  Yes X No
Bare Ground in Herb Stratum % Cover o	of Biotic Cr	rust	<u> </u>	Present? Yes No No
marks:				

W-14

#### SOIL

	-
0-7.5 5/ 4/1 93 7.5 YR 4/6 7 C M/1 7.5-11 2.54 3/1 98 54/2 3/4 2 C M/1	Toyture
7.5-11 2.54 3/1 9B 54/2 3/4 2 C M/1	Texture Remarks  RC SiCL
	<u>u 3100</u>
	5/ 1//
11-18 104R 2/1 83 2.54 4/2 15 D M	rusick
10YR 3/6 2 C M	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup> Location: PL=Pore Lining	g, RC=Root Channel, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2) Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)	Other (Explain in Formatio)
Depleted Below Dark Surface (A11)  Depleted Dark Surface (F7)	
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Redox Depressions (F8)	
	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) *	wetland hydrology must be present.
Restrictive Layer (if present):	wettarid hydrology must be present.
Type: name to 22"	
Depth (inches):	Hydric Soil Present? Yes X No
Remarks:	
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
Primary Indicators (any one indicator is sufficient)	
	Water Marks (B1) (Riverine)
Surface Water (A1) Salt Crust (B11)	Sediment Deposits (B2) (Riverine)
High Water Table (A2) Biotic Crust (B12)	Drift Deposits (B3) (Riverine)
	Drainage Patterns (B10)
Saturation (A3) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)	프로그램 : 그 : 그 : 그 : 그리다 :
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)	
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine)	
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living I Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living if Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soil	Crayfish Burrows (C8) ils (C6) Saturation Visible on Aerial Imagery (C9)
<ul> <li>Water Marks (B1) (Nonriverine)</li> <li>Sediment Deposits (B2) (Nonriverine)</li> <li>Drift Deposits (B3) (Nonriverine)</li> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living In Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Plowed Soil Other (Explain in Remarks)</li> </ul>	Crayfish Burrows (C8)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soil Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9)	Crayfish Burrows (C8) ils (C6) Saturation Visible on Aerial Imagery (C9)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soi Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9) Field Observations:	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soil Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes No Depth (inches):	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soi Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9) Field Observations:	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soi Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes No Depth (inches):	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soi Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes No Depth (inches): Depth (inches):	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes X No
	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes X No
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living II Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soi Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes No Depth (inches): Depth (inches): Ves No Depth (inches):	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes X No
	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes X No
	Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes X No

#### WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Sites COUSE and I		_		(.21/ -	(00)		
Project/Site: CONTAINIL  Applicant/Owner: LS Pour		c			State: CA Sa		
		1					•
nvestigator(s): Kuren Bach, Victori							0
andform (hillslope, terrace, etc.): 100510							
Subregion (LRR): LPRC							
Soil Map Unit Name: Tamba Much	in cinn			/	NWI classificati	on: KYDDT	_
re climatic / hydrologic conditions on the site				N₀_	(If no, explain in Ren	narks.)	
re Vegetation, Soil, or Hydro					Iormal Circumstances" pre		No
re Vegetation, Soil, or Hydro	ology nat	turally prob	olematic?	(If nee	eded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attack	h site map s	howing	sampling	g point lo	cations, transects,	important featu	res, etc.
Hydrophytic Vegetation Present? Yes	es X No		le the	e Sampled	Area		
Hydric Soil Present? Ye	es X No		1000	n a Wetlan		No	
Wetland Hydrology Present? Ye	es X No		W.C.				
Remarks:							
EGETATION						William .	
		Absolute			Dominance Test works		
ree Stratum (Use scientific names.)			Species?	Status	Number of Dominant Sp That Are OBL, FACW, of		(A)
•							
					T-1-1 Nomber of Demin		
					Total Number of Domin		(B)
					Species Across All Stra		(B)
		_			Species Across All Stra  Percent of Dominant Sp	ta:	
·		_			Species Across All Stra	ta:	
apling/Shrub Stratum 「=5	Total Cover:			_	Species Across All Stra  Percent of Dominant Sp	pecies 60	
apling/Shrub Stratum (=5)	Total Cover:			_	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:	pecies or FAC: 60  ksheet: Multiply	(A/B)
apling/Shrub Stratum (=5)	Total Cover:				Percent of Dominant Sprat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species	pecies	(A/B)
apling/Shrub Stratum 「=5	Total Cover:			= =	Percent of Dominant Sprat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species	pecies or FAC:	(A/B)
apling/Shrub Stratum (55)	Total Cover:			= =	Percent of Dominant Sprat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species	pecies or FAC:	(A/B)
apling/Shrub Stratum (=5)	Total Cover:			= =	Percent of Dominant Sprat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species	ta:	(A/B)
apling/Shrub Stratum (=5)	Total Cover:				Percent of Dominant Sy That Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FAC species  FACU species  UPL species	ta:	(A/B)
apling/Shrub Stratum 「=5' erb Stratum 「=5'	Total Cover:			08L	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FAC species  FACU species	ta:	(A/B)
apling/Shrub Stratum 「=5' erb Stratum 「=5'	Total Cover:			0BL 0BL	Percent of Dominant SI That Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  FACU species  UPL species  Column Totals:	ta:	(A/B)
erb Stratum V=51  Suricornia pacifica  Spernovaria marina  COtura coronopotonia	Total Cover:			0BL 0BL 0BL	Percent of Dominant Sy That Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index	ta:	(A/B)
erb Stratum Y=5'  Suricornia pacifica  Spergularia marina	Total Cover:			0BL 0BL 0BL UPL	Percent of Dominant Sy That Are OBL, FACW,  Prevalence Index wor Total % Cover of: OBL species FACW species FACU species FACU species UPL species Column Totals:  Prevalence Index Hydrophytic Vegetar	ta:	(A/B)
ent Stratum (=5)  Suricornia pacifica  Spergularia marina  COtula coronopotonia  Bromus madrikusis	Total Cover:			0BL 0BL 0BL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Hydrophytic Vegetar  Dominance Test	ta:	(A/B)
erb Stratum (=5)  Schi cornia pucifica  Spergularia marina  Cotula coronopotolia  Bromus madrikusis  Polypoyan monsperiensis	Total Cover:			0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Hydrophytic Vegetar  Prevalence Index  Prevalence Index	ta:	(A/B)
ent Stratum (=5)  Suri cornia pucifica  Spergularia marina  Cotula coronopotolia  Bromus madrikusis  Polypogan monsperiensis	Total Cover:	Ø 2 8 1 5 7 7	27274	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Actions  Percent of Dominant Strate  Percent of Dominant Strate  Prevalence Index  Morphological Actions  Prevalence Index  Morphological Actions  Prevalence Index	ta:	(A/B)
erb Stratum (=5)  Schicornia puisica  Spergularia marina  Cotula coronopotonia  Bromus madrikusis  Polypogan mansperiensis	Total Cover:	Ø 2 8 1 5 7 7	27274	0BL 0BL 0BL UPL	Percent of Dominant Sy That Are OBL, FACW,  Prevalence Index wor Total % Cover of: OBL species FACW species FACU species UPL species Column Totals:  Prevalence Index Mydrophytic Vegetar Prevalence Index Morphological Active and Active Temps	ta:  Decies or FAC:    Multiply	(A/B)
erb Stratum (=5)  Solicornia parisica  Sperantaria marina  Cotua coronopotonia  Bromus madritusis  Polypoyan monsperiensis	Total Cover:	\$ 2 8 - 5 7	27274	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Actions  Percent of Dominant Strate  Percent of Dominant Strate  Prevalence Index  Morphological Actions  Percent of Dominant Strate  Percent of Dominant Strate  Prevalence Index  Morphological Actions  Percent of Dominant Strate  Prevalence Index  Morphological Actions  Percent of Dominant Strate  Prevalence Index  Morphological Actions  Percent of Dominant Strate  Total % Cover of:  Prevalence Index  Morphological Actions  Prevalence Index  Morphological Actions  Prevalence Index  Morphological Actions  Prevalence Index	ta:  Decies or FAC:    Multiply	(A/B)
erb Stratum (=5)  Schicornia parisica  Sperantaria marina  Cotha carangoforia  Bromus madritusis  Polypoyan mansperiensis	Total Cover:	\$ 2 8 - 5 7	27274	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Ard data in Remail	ta:  Decies or FAC:    Multiply	(A/B)
erb Stratum (=5)  Speraviaria parisica  Speraviaria marina  Cotua coronopotoria  Bromus madritasis  Polypoyan monsperiensis	Total Cover:	\$ 2 8 - 5 7	27274	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Addata in Rema  Problematic Hydics  1 Indicators of hydrics	ta:  Decies or FAC:    Multiply	(A/B)
Sepling/Shrub Stratum (=5)  Serb Stratum (=5)  Serb Stratum (=5)  Serb Stratum (=5)  Serb Stratum (=5)  Cotha (oxonopotonia  Bromus Madrikasis  Polypoyan Monspellansis  Coody Vine Stratum (=5)	Total Cover:	\$ 2 8 - 5 7	27274	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Ard data in Remail	ta:  Decies or FAC:    Multiply	(A/B)
Sapling/Shrub Stratum (=5)  Serb Stratum (=5)  Serb Stratum (=5)  Spera waria parisica  Spera waria marina  Cotua coronopotonia  Bromus madrikusis	Total Cover:	\$ 2 8 - 5 9 - 2	27274	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Action and an in Rema  Problematic Hydrophytic  1 Indicators of hydric species  Hydrophytic  Hydrophytic	ta:  Decies or FAC:    Multiply	(A/B)
erb Stratum (=5)  Serb Stratum (=5)  CO tha Coropotonia  Bromus Madrikasis  Polypoyan Monspellansis	Total Cover:  Total Cover:  Total Cover:	\$ 2 8 - 5 9 - 2	N 7 2 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0BL 0BL 0BL UPL	Percent of Dominant Strat Are OBL, FACW,  Prevalence Index wor  Total % Cover of:  OBL species  FACW species  FACU species  UPL species  Column Totals:  Prevalence Index  Morphological Action and Problematic Hydroles  1 Indicators of hydric sepresent.	ta:  Decies or FAC:  Multiply  x 1 = x 2 = x 3 = x 4 = x 5 = (A)  Ex = B/A = tion Indicators: is >50% or is ≤3.0¹ daptations¹ (Provide rks or on a separate rophytic Vegetation soil and wetland hydrogeness)	(A/B)

Profile Des					Feature				
(inches)	Matrix Color (moist)	%	Color	(moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	e Remarks
0-8	2.54 3/1	99	1071	2 3/6	1	_	_M_	Sic	!
		<u> </u>			_			(11	Dan Distort
8-16	2.54 4/1	48	7.5	7/4	_2			376	Robox distinct
Type: C=0	Concentration, D=Depl	etion. RM	=Reduced	Matrix.		  n: PL=Por	re Lining, F	RC=Root Cl	hannel, M=Matrix.
	Indicators: (Applica							Indicat	ors for Problematic Hydric Soils :
Histoso	ol (A1)		s	andy Redo	x (S5)				m Muck (A9) (LRR C)
	pipedon (A2)			tripped Mat					m Muck (A10) (LRR B) duced Vertic (F18)
	listic (A3)			oamy Muck					d Parent Material (TF2)
	en Sulfide (A4)	.,		oamy Gleye		(F2)			ner (Explain in Remarks)
	ed Layers (A5) (LRR C luck (A9) (LRR D)	,		epleted Ma edox Dark		(F6)		_ 00	
	ed Below Dark Surface	(A11)		epleted Da					
	Park Surface (A12)	(411)		edox Depre					
	Mucky Mineral (S1)			ernal Pools		,			ors of hydrophytic vegetation and
	Gleyed Matrix (S4)				3 3			wetla	and hydrology must be present.
Restrictive	Layer (if present):								
Туре:									\ <u>/</u>
Depth (ir	nches):							Hydric S	Soil Present? Yes No
	nches):		_					Hydric S	Soil Present? Yes No No
PROLO Vetland Hy rimary Indi Surface High Wa Saturati Water M Sedime Drift De Surface Inundati	drology Indicators: cators (any one indicators) Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivering the Deposits (B2) (Nonrivering posits (B3) (Nonrivering Soil Cracks (B6)	ne) ne) ne) ne)	¥ 5 — F — F	Salt Crust (I Biotic Crust Aquatic Inve Hydrogen S Dxidized Rh Presence of Recent Iron Other (Expla	(B12) ertebrates ulfide Od nizospher Reduces Reduction	dor (C1) res along d Iron (C4 on in Plow	1)	Se	econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
PROLO Vetland Hy rimary Indi Surface High Water M Sedime Drift De Surface Inundati Water-S	order of the control	ne) ne) ne) ne)	¥ 5 — F — F	Biotic Crust Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	(B12) ertebrates ulfide Od nizospher Reduces Reduction	dor (C1) res along d Iron (C4 on in Plow	1)	Se	econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
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YDROLO Vetland Hy Primary Indi Surface High Wi Saturati Water M Sedime Drift De Surface Inundati Water-Sield Obser urface Wat Vater Table aturation P ncludes cal escribe Re	drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivering) ater Table (B2) (Nonrivering) on (Nonrivering) soil Cracks (B6) on Visible on Aerial Instance Leaves (B9) vations: er Present? Present? Ye resent? Ye resent? Ye resent?	ne) riverine) nagery (B7	X   No	Biotic Crust Aquatic Inve Hydrogen S Dxidized Ri Presence of Recent Iron Other (Explain Depth (inch Depth (inch	(B12) ertebrates ulfide Oc nizospher Reduction ain in Res nes): nes):	dor (C1) res along d Iron (C4 on in Plow marks)	red Soils (	Se	econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
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POROLO Vetland Hy rimary Indi Surface High Water Manager Sedime Drift De Surface Inundati Water-Sield Obser urface Water Table atturation Pencludes callescribe Re	drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivering) ater Table (B2) (Nonrivering) on (Nonrivering) soil Cracks (B6) on Visible on Aerial Instance Leaves (B9) vations: er Present? Present? Ye resent? Ye resent? Ye resent?	ne) riverine) nagery (B7	X   No	Biotic Crust Aquatic Inve Hydrogen S Dxidized Ri Presence of Recent Iron Other (Explain Depth (inch Depth (inch	(B12) ertebrates ulfide Oc nizospher Reduction ain in Res nes): nes):	dor (C1) res along d Iron (C4 on in Plow marks)	red Soils (	Se	econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)
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YDROLO Vetland Hy rimary Indi Surface High Water M Saturati Water M Sedime Drift De Inundati Water-S ield Obser urface Water Table atturation P includes ca	drology Indicators: cators (any one indicators) water (A1) ater Table (A2) on (A3) Marks (B1) (Nonrivering) ater Table (B2) (Nonrivering) on (Nonrivering) soil Cracks (B6) on Visible on Aerial Instance Leaves (B9) vations: er Present? Present? Ye resent? Ye resent? Ye resent?	ne) riverine) nagery (B7	X   No	Biotic Crust Aquatic Inve Hydrogen S Dxidized Ri Presence of Recent Iron Other (Explain Depth (inch Depth (inch	(B12) ertebrates ulfide Oc nizospher Reduction ain in Res nes): nes):	dor (C1) res along d Iron (C4 on in Plow marks)	red Soils (	Se	econdary Indicators (2 or more required) Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Thin Muck Surface (C7) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3) FAC-Neutral Test (D5)

Applicant/Owner SOLD State Subject of the Stratum Section Present? Sold Subregion (LRR): LPC Subregion (LRR): LPC Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: 121.631122 Datum AMD State Subregion (LRR): LPC C Let 36, 079740 Long: L	Project/Site: CONMUNICAL		City/County	: Joice	no county Sampling Date: 6/7/2
Load relief (concave, convex, none): £(AT   Slope (%); O   Solbregion (LRR); ££££   Lat 36,079,740   Long; 121.8312   Datum And X   Solid Map Unit Name: £(AT   Solid Map	Applicant/Owner: W POWE				State: CA Sampling Point: SP-2
Local relief (concave, convex, cone): £(AT   Slope (%): O   Subregion (LRR): £££	Investigator(s): Kura Buch, Viction Ychraner	1000	Section, To	wnship, Ra	nge: SDO T3N R16
Soli Map Unit Name: Tanks Ancies Soli Map Unit Name: Tanks Ancies Are degetation Soli And Phydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks).  Are Vegetation Soli or Hydrology significantly disturbed?  Are Vegetation Soli or Hydrology research (If needed, explain any answers in Remarks).  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No Wetland Hydrology Present?	Landform (hillslope, terrace, etc.): +oenoec		Local relie	f (concave,	convex, none): FIGH Slope (%): C
Soil May Unit Name: Transa Ander Class 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 Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks) Are Negetation 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, etherally of the Supplementation of	Subregion (LRR): LPRC	Lat: 38	3.079	740	Long: -121.839122 Detum: 440
Are vegetation, Soil or Hydrology significantly disturbed? Are Normal Circumstances' present? Yes No (If no, explain in Remarks.)  Are Vegetation, Soil or Hydrology significantly disturbed? Are Normal Circumstances' present? Yes No	Soil Map Unit Name: Tamba Macus Class				
Are Normal Circumstances' present? Yes No Are Normal Circumstances' present? Yes No No Normal Circumstances' present? Yes No No Normal Circumstances' present? Yes No (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 Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No No X is the Sampled Area within a Wetland? Yes No X within a Wetland? Yes No X within a Wetland? Yes No X is the Sampled Area within a Wetland? Yes No X is the Sa	Are climatic / hydrologic conditions on the site typical for the	his time of ve	ar? Yes	X No	
Are Vegetation					
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Yes No Wetland Hydrology Present?  Yes No Wetland Hydrology Present?  Wes No Wetland Hydrology Present?  Remarks:  Stifful Hydrophytic Vegetation Fresh?  Remarks:  Stifful Hydrophytic Vegetation Fresh?  Yes No Wetland Hydrology Present?  Yes No Wetland Hydrol					
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Present? Yes No Within a Wetland? Yes No Within a Wetla					
Hydric Soil Present?  Ves No Within a Wetland?  Ves No Wetland Hydrology Present?  No Wetland Hydrology Present?  Ves No Wetland Hydrology Present Hydrology Present?  Ves No Wetland Hydrology P	- Attach site map	silowing	Sampin	g point i	ocations, transects, important features, e
#Wetland Hydrology Present? Yes No within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present. Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present Hydrology Present? Yes No Wetland Hydrology Present Hydrology Present? Yes No Wetland Hydr			ls ti	e Sampled	Area
Remarks: Slightly   hight (にいれた)   Grassy area   between   1   4   4   4   4   4   4   4   4   4	Hydric Soil Present? Yes	No			
Solithty   Night clearity Grasy area between   N-14 and   N-15					
Dominant Indicator Species?   Status	slightly hight elevation grassy area	bet wee	う W-1	y and h	J-12
Number of Dominant Species   Number of Dominant Species   Nature	EGETATION				
That Are OBL, FACW, or FAC:  A)  Total Number of Dominant Species Across All Strata:  Bapling/Shrub Stratum  Total Cover:  Total Cover:  Total % Cover of Multiply by:  OBL species  X 1 = FACW species  X 2 = FAC species  X 3 = FACU species  X 4 = UPL species  X 4 = UPL species  X 5 = Column Totals:  (A)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is \$3.0¹  Morphological Adaptations? (Provide supporting data in Remarks or on a separate sheet)  Total Cover:  Dody Vine Stratum  Total Cover:  Dominance Test is >50%  Prevalence Index is \$3.0¹  Morphological Adaptations? (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  **Indicators of hydric soil and wetland hydrology must be present.*  Yes No  **Indicators of hydric soil and wetland hydrology must be present.*  Yes No  **Indicators of hydric soil and wetland hydrology must be present.*  Yes No  **Indicators of hydric soil and wetland hydrology must be present.*  Yes No  **Indicators of hydric soil and wetland hydrology must be present.*  Yes No  **Indicators of hydric soil and wetland hydrology must be present.*  Yes No  **Indicators of hydric soil and wetland hydrology must be present.*	T Starten (1)				Dominance Test worksheet:
Total Number of Dominant Species Across All Strata:    Sapling/Shrub Stratum   Cels					Number of Dominant Species
Sepling/Shrub Stratum (SIS)  Total Cover: Description of Dominant Species That Are OBL, FACW, or FAC: 307. (A)  Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACW species x 4 = UPL species x 4 = UPL species x 5 = Column Totals: (A) (Column Totals: (A) (Colum					That Are OBL, FACW, or FAC: (A
Species Across All Strata: (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: 3D'/. (AV  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) (Column Totals:					
That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:					Species Across All Strata: (B
Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species	Total Cove	er: Ø			
Total % Cover of: Multiply by:  OBL species	Sapling/Shrub Stratum (=13	/			,
OBL species x1 = FACW species x2 = FAC species x3 = FACU species x3 = FACU species x4 = UPL species x5 = Column Totals: (A) (Brown) Madrikard GO Y FACU Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Dominance Test is >50%  The Axi kin's Total Cover: Dominance Test is >50%  Total Cover: Indicators of hydric soil and wetland hydrology must be present.  OBL species x2 = FACW species x3 = FACU species x4 = UPL species x5 = Column Totals: (A) (Prevalence Index = B/A = UPL species x5					
FACW species x2 = FAC species x3 = FACU species x3 = FACU species x4 = UPL species x5 = Column Totals: (A) (Brown) Madrika (A) (Brown) Madrika (A) (Br					
FAC species					
Total Cover: S  FACU species					
Serial Cover   Seri					
Column Totals: (A)   Column Totals: (B)   Column Totals: (Column Totals: (B)   Column Totals: (Column Totals:	erh Stratum (=5) Total Cove	r:_ <del>/</del> _			
Broms madriths	Futura Decenis	30	4	FAC	
Prevalence Index = B/A =   Hydrophytic Vegetation Indicators:   Dominance Test is >50%   Prevalence Index is ≥3:0¹   Dominance Test is >50%   Prevalence Index is ≥3:0¹   Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)   Problematic Hydrophytic Vegetation¹ (Explain)		45	4		Column Totals: (A)
Hydrophytic Vegetation Indicators:   Satisania quissa   N FACU   Dominance Test is >50%     Frequence Index is \$\leq \cdot 0^1     Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation (Explain)     Indicators of hydric soil and wetland hydrology must be present.     Bare Ground in Herb Stratum   Morphological Crust   Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation (Explain)     Indicators of hydric soil and wetland hydrology must be present.     Hydrophytic Vegetation   Yes   No   No   No   No   No   No   No   N			<b>-</b>		Prevalence Index = R/A =
Dominance Test is >50%   Prevalence Index is \$\leq 3.01     Morphological Adaptations		1	N		
Total Cover:  Total Cover:  Total Cover:  Bare Ground in Herb Stratum  Total Cover:	_	-	7		
Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  Problematic Hydrophytic Vegetation¹ (Explain)  Indicators of hydric soil and wetland hydrology must be present.  Bare Ground in Herb Stratum % Cover of Biotic Crust Present? Yes No Yes Yes No Yes Yes No Yes			1/		
data in Remarks or on a separate sheet)  — Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present.  Hydrophytic Vegetation  **Total Cover:		-		7100	
Total Cover: Problematic Hydrophytic Vegetation¹ (Explain)  1 Indicators of hydric soil and wetland hydrology must be present.  Bare Ground in Herb Stratum % Cover of Biotic Crust Problematic Hydrophytic Vegetation    1 Indicators of hydric soil and wetland hydrology must be present.  Hydrophytic Vegetation   Yes No    Problematic Hydrophytic Vegetation   Yes No					
Total Cover:					Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Total Cover:	ody Vine Stratum (= 15)	·——			
Bare Ground in Herb Stratum % Cover of Biotic Crust	The state of the s				<sup>1</sup> Indicators of hydric soil and wetland hydrology mu
Total Cover: Hydrophytic Vegetation Present? Yes No					
Bare Ground in Herb Stratum % Cover of Biotic Crust Vegetation Present? Yes No		6			Hydrophytic
	<b>a</b>	,	d		Vegetation
marks:	Bare Ground in Herb Stratum % Cover	of Biotic Cru	ust <u>Ø</u>		Present? Yes No
	narks:				

W-15/

#### SOIL

Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Shallow Aquitard (D3) Water-Stained Leaves (B9) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Surface Water Present?	Depth	Matrix			Feature				
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    1.	(inches)	Color (moist)	%	Color (moist)	%	Type¹	_Loc²	Texture	Remarks Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix. *\fraction: PL=Pore Lining, RC=Root Channel, M=Matrix. Indicators (Applicable to all LRRs, unless otherwise noted.)  Indicators for Problematic Hydric Soils*:  Indicators (Applicable to all LRRs, unless otherwise noted.)  Indicators (Applicable to all LRRs (B) and Reduced Vertic (F18)  Histosc (A1)  Indicator (Applicable (A)  Indicator (Applicab	0-9.5	2.5 y 3/1	99	7.5 YR 3/4	_1	C	Μ	SIC	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    *Location: PL=Pore Lining, RC=Root Channel, M=Matrix.   Indicators (Applicable to all LRRs, unless otherwise noted.)   Histosol (A1)	15-16	254 4/1	70	7.5 YD 3/4	S		<u>M</u>	SiC	
Vetland Hydrology Indicators:  Irimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Satt Crust (B12)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Dry-Season Water Table (C2)  Sediment Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Plowed Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Teld Observations:  Surface Water Present?  Ves  No  Depth (inches):	lydric Soil I Histosol Histic Ep Black His Hydroge Stratified 1 cm Mu Depleted Thick Da Sandy M	ndicators: (Application) (A1) stipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) (LRR Cock (A9) (LRR D) I Below Dark Surface ork Surface (A12) lucky Mineral (S1) steleyed Matrix (S4)	able to all	LRRs, unless other  Sandy Redo Stripped Mai Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr	wise no x (S5) trix (S6) xy Miner ed Matri atrix (F3) Surface ark Surfa essions	al (F1) x (F2) ) e (F6) ace (F7)	re Lining,	Indicate  1 cn 2 cn Red Red Oth	rs for Problematic Hydric Soils <sup>3</sup> :  n Muck (A9) (LRR C)  n Muck (A10) (LRR B)  luced Vertic (F18)  I Parent Material (TF2)  er (Explain in Remarks)  ors of hydrophytic vegetation and
Surface Water (A1)	Type: No Depth (inc	one to 2011						Hydric S	ioil Present? Yes No
Sield Observations: Surface Water Present? Yes NoX Depth (inches): Vater Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): Simplify fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Type: No Pepth (included in the control of the cont	ches):  GY  drology Indicators:		(ficient)					econdary Indicators (2 or more required)
ncludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Type:	GY drology Indicators: cators (any one indic Water (A1) drer Table (A2) on (A3) darks (B1) (Nonriver at Deposits (B2) (Noriver cosits (B3) (Nonriver Soil Cracks (B6)	ator is suf ine) nriverine) rine)	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Ire	st (B12) vertebra Sulfide Rhizosp of Redu	ates (B13) Odor (C1) heres alor uced Iron ( action in P	) ng Living I (C4) lowed Soi	Se	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
	Type: Depth (included in the content of the	ches):  GY  drology Indicators: cators (any one indic Water (A1) ther Table (A2) on (A3) arks (B1) (Nonriver th Deposits (B2) (Nonriver Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations: er Present?  Y Present?  Y	ine) nriverine) rine) magery (l	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Ind Other (Ex	st (B12) vertebra Sulfide Rhizosp of Redu on Redu plain in	ates (B13) Odor (C1) heres alor uced Iron ( action in P Remarks)	) ng Living I (C4) lowed Soi	Se S	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Remarks:	Primary Indication  Semarks:  YDROLOG  Vetland Hyde  Primary Indication  Surface  High Water Mater Mater  Drift Dep  Surface  Inundation  Water-Second Observices  Water Table  Saturation Princludes cap	ches):  GY  drology Indicators: cators (any one indicators) water (A1) on (A3) arks (B1) (Nonriver) on Deposits (B2) (Nonriver) on Visible on Aerial I tained Leaves (B9) vations: er Present? Present? Y resent? Y resent? Y resent? Y	ine) nriverine; rine) magery (l	Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized Presence Recent Ird Other (Ex	st (B12) vertebra Sulfide Rhizosp of Redu on Redu plain in nches):	ates (B13) Odor (C1) heres alor uced Iron ( action in P Remarks)	) ng Living I (C4) lowed Soi	Solution Science Science Science Science (C3)	econdary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

#### WETLAND DETERMINATION DATA FORM - Arid West Region

roject/Site:(ullin 5 VIHC	C	itv/County:	Julano		Sampling I	Date: 6/7	124
oplicant/Owner: L5 Porch		_		State: ( A	_ Sampling I	Point: Sp	-1
vestigator(s): north victorio	S	ection. Tow	nship. Rang	e: 523 T	3N RI	E	
andform (hillslope, terrace, etc.): +nestupe		ocal relief (	concave. co	nvex. none): Co	rave	Slope (%):	0
Ubregion (LRR): LFR C	Lat: 38	0876	93	ong: -121, 83	7654	Datum: N	A083
oil Map Unit Name: Tamba michy clay							
						10017	
e climatic / hydrologic conditions on the site typical for this				ormal Circumstance		/os 1- N	lo.
e Vegetation, Soil, or Hydrology si							
e Vegetation, Soil, or Hydrology not the MARY OF FINDINGS – Attach site map s				ded, explain any an			es etc
. /		Samping	, politicio	cations, transc	ots, import	ant icatar	00, 010.
		Is the	Sampled A	Area	$\checkmark$		
		withi	n a Wetland	Yes_	/ No.		
Netland Hydrology Present?  Yes No					•		
landra.							
	1						
EGETATION	Absolute	Dominant	Indicator	Dominance Test	worksheet:		
Tree Stratum (Use scientific names.)		Species?		Number of Domina		2	
				That Are OBL, FA		3_	(A)
				Total Number of D	Dominant	•	
				Species Across A			(B)
				Percent of Domina	ant Species		
Total Cove	r:_0			That Are OBL, FA		100	(A/B)
Sapling/Shrub Stratum				Prevalence Inde	x worksheet:		
			_		er of:	Multiply by	r.
				OBL species			
				FACW species _			
				FAC species			
/	r: <i>\(\phi\)</i>			FACU species			
Herb Stratum P 5				UPL species		x 5 =	
. Polytogen monspelchgis	_5_	_ N	FACW	Column Totals:		(A)	(B)
Spergelasia marine		<u> </u>	OBL	_			
. Junear banforins			FACW		Index = B/A		
Distichlis spicata	20	-4-	FAC	Hydrophytic Ve	A	cators:	
				_XDominance			
				Prevalence		-1 (Did	
		-		Morphologic	cai Adaptation Remarks or on	a separate s	heet)
				Problematic			
	er: <u>75</u>	- 1		_		n the second	
Voody Vine Stratum				<sup>1</sup> Indicators of hy	dric soil and v	vetland hydro	logy must
				be present.			
Total Cove	er: _ Ø			Hydrophytic			
			×	Vegetation		/	
% Bare Ground in Herb Stratum % Cove	er of Biotic (	Crust	2	Present?	YesV	No	_
Remarks:							

Sampling Point: 50-1

Type: C=Conc ydric Soil Inc Histosol (A Histic Epip Black Histic Hydrogen 3 Stratified L 1 cm Muck Depleted B	centration, D=Dedicators: (Appliant) edon (A2) c (A3) Sulfide (A4) ayers (A5) (LRR	3 100 pletion, RM=	Reduced Matr LRRs, unless Sandy	3/4 ix.			_M_			Concretion
Type: C=Conc ydric Soil Inc Histosol (A Histic Epip Black Histic Hydrogen S Stratified L 1 cm Muck Depleted B	centration, D=Dedicators: (Appliant) edon (A2) c (A3) Sulfide (A4) ayers (A5) (LRR	3 100 pletion, RM=	Reduced Matr LRRs, unless Sandy	ix.					relox	Concretion
ype: C=Conc ydric Soil Inc Histosol (A Histic Epip Black Histi Hydrogen S Stratified L 1 cm Muck Depleted B	centration, D=Dedicators: (Appliat) edon (A2) c (A3) Sulfide (A4) ayers (A5) (LRR	pletion, RM=	Reduced Matr LRRs, unless Sandy	ix.			_	<u>J: CI</u>		
rdric Soil Inc Histosol (A Histic Epip Black Histic Hydrogen S Stratified L 1 cm Muck Depleted B	dicators: (Appli 11) edon (A2) c (A3) Sulfide (A4) ayers (A5) (LRR		LRRs, unless Sandy		Location					
Sandy Mud Sandy Gleg strictive Lay Type: <u>YW</u>	Below Dark Surface (A12) Cky Mineral (S1) Lyed Matrix (S4) Lyer (if present): Lyer (S4) Lyer (S4) Lyer (S4) Lyer (S5)	ce (A11)	Loamy Loamy X Deplet Redox	Redox ed Mat y Muck y Gleye ted Ma c Dark ted Da c Depre	x (S5) trix (S6) try Mineral ed Matrix trix (F3) Surface ( rk Surfac essions (F	(F1) (F2) (F6) (F6)	e Lining, F	1 cm M 2 cm M Reduc Red P Other	for Problema fluck (A9) (LRF fluck (A10) (LRF ed Vertic (F18) arent Material (Explain in Rer of hydrophytic hydrology mus	(RRB) (TF2) (marks) vegetation and
DROLOG								0		(0,000,000,000,000,000,000,000,000,000,
	ology Indicators									s (2 or more required)
	ors (any one indi	cator is suffic							later Marks (B	
_ Surface Water	ater (A1) r Table (A2)			Crust	t (B12)			_ D	rift Deposits (E	
_ Saturation					ertebrate				rainage Patter	
_ Sediment [	ks (B1) (Nonrive Deposits (B2) (No	onriverine)	Oxidi	ized R		res along	Living Roo		ry-Season Wa hin Muck Surfa	
	sits (B3) (Nonrive	erine)				d Iron (C	The second second		rayfish Burrow	
	il Cracks (B6)						ved Soils (	7.		le on Aerial Imagery (C9
	Visible on Aerial	Imagery (B7	) Othe	r (Expl	ain in Re	emarks)			hallow Aquitar	
	ned Leaves (B9)							F	AC-Neutral Te	St (D5)
eld Observat			. v D	AL /:	h \.					
urface Water I			NoX_ Dep							
ater Table Pre			No <u></u> ✓ Dep				The second second	(a.a.d 11d.a.)	D	
aturation Pres icludes capilla		res r	No <u>×</u> Dep	tn (inc	nes):		_   wet	and Hydrolog	y Present?	Yes <u>×</u> No
escribe Recor	ded Data (strear	n gauge, mo	nitoring well, a	erial p	hotos, pr	evious in	spections),	if available:		
emarks:										
andria.										

Project/Site: _COIIかいん				2 1 -1 - 2
rejectione. Collin doil		City/Count	y: Solan	Sampling Date: 6/1/24
pplicant/Owner: LS POUL				State: Sampling Point:
ivestigator(s): Kacea Bach Victoria Veter	nnkova	Section, T	ownship, Ra	nge: 523 T3V RIE
andform (hillslope, terrace, etc.): Foots 1002		Local relie	of (concave,	convex, none): Slope (%):
ubregion (LRR): LPLC	Lat: 38	1.082	666	Long: -121, 837785 Datum: NADS.
oil Map Unit Name: Diaho-Ayac clay 2	-9 % SI	opes		NWI classification: NV   A
re climatic / hydrologic conditions on the site typical for the	his time of yea	ar? Yes_	∧ No	(If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology				"Normal Circumstances" present? Yes No
re Vegetation, Soil, or Hydrology				eeded, explain any answers in Remarks.)
				ocations, transects, important features, etc
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	No No	1.77	he Sampled hin a Wetla	
EGETATION  Tree Stratum (Use scientific names.) いない		Species'		Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
				111001110 00011111111111111111111111111
				Total Number of Dominant Species Across All Strata:  (B)
Total Cov	er:O			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E
Sapling/Shrub Stratum IOX 15				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
				OBL species x 1 =
				FACW species x 2 =
		-		FAC species x 3 =
Total Cov.	er: O			FACU species x 4 =
erb Stratum 7=5	-			UPL species x 5 =
Franklinia Salina	15	N	FACW	Column Totals: (A) (E
Junus baldicus	_ 25_	<del>/</del> _	FACW	
Distichio spicata	80	<del></del>	FAC UPL	Prevalence Index = B/A =
Bromo madritanis	5_	_N_	UPL	Hydrophytic Vegetation Indicators:
				Dominance Test is >50%
		_ (		Prevalence Index is ≤3.0¹
				Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation¹ (Explain)
/oody Vine Stratum 10 ¥ 15 Total Cove	er: <u>\25</u>			
oody vine Stratum				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		-	-	be present.
Total Cove				Hydrophytic
			_	Vegetation
Bare Ground in Herb Stratum % Cove	er of Biotic C	rust(		Present? Yes No
emarks:				

Sampling Point: 80-16

Depth Matrix (inches) Color (moist) %	Redox Features  Color (moist)  % Type <sup>1</sup>	Loc <sup>2</sup> Textu	re Remarks
	Color (moist) 70 1995		
D-3 10/12 3/1 100			
3-8.5 2.544/1 100		Sal	-0
8,5-16 2.5 y 3/1 voo		Sic	
Type: C=Concentration, D=Depletion, RM=R	reduced Matrix. <sup>2</sup> Location: PL=Pore I	Lining, RC=Root (	Channel, M=Matrix.
Hydric Soil Indicators: (Applicable to all Li	RRs, unless otherwise noted.)	Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)		cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)		cm Muck (A10) (LRR B)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)		Reduced Vertic (F18) Red Parent Material (TF2)
Stratified Layers (A5) (LRR C)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	_ ~	the (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)		
Sandy Mucky Mineral (S1)	Vernal Pools (F9)	3Indic	ators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)		we	tland hydrology must be present.
Restrictive Layer (if present):			
Туре:	_		<u></u>
Type: Depth (inches): Remarks:		Hydric	Soil Present? Yes No
Depth (inches):Remarks:		Hydric	Soil Present? Yes No
Depth (inches):			Soil Present? Yes No
Depth (inches):	ent)		
Depth (inches):	ent) Salt Crust (B11)		Secondary Indicators (2 or more required)
Depth (inches):	ent) Salt Crust (B11) Biotic Crust (B12)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Depth (inches):	ent)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)	<u>§</u>	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv	<u>§</u>	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4)	ving Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
Depth (inches):	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	ving Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)
Depth (inches):  Primary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4)	ving Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Print Depth (inches):  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient of the sufficient of t	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed	ving Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Primary Indicators (any one indicator is sufficient Sufface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)	ving Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Primary Indicators (any one indicator is sufficient Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present?  Yes No	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)	ving Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Print Depth (inches):  Primary Indicators (any one indicator is sufficient Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No Water Table Present? Yes No	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	ring Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Print Deposits (B2) (Nonriverine)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Ves No Staturation Present?  Yes No Includes capillary fringe)	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	ring Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Prince Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Surface Water Present? Yes No saturation Present? Yes No yes No yes No yes No yes No yes No	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	ring Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Print Deposits (B2) (Nonriverine)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Ves No Staturation Present?  Yes No Includes capillary fringe)	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	ring Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Property (inches):  Property Vetland Hydrology Indicators:  Primary Indicators (any one indicator is sufficient to Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes No vater Table Present? Yes No includes capillary fringe)  Describe Recorded Data (stream gauge, moniticated)	ent)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Plowed Other (Explain in Remarks)  Depth (inches): Depth (inches):	ring Roots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

roject/Site: _COII WVILE	С	ity/County:	Solui	0	Sampling Date: 6/7/24
pplicant/Owner: LS Power				State: CA S	Sampling Point: 59 -3
ovestigator(s): Karon Buch, Victoria ye	trem nualas	ection. Tow	nship, Ran	ge: S23 T3N	RIE
andform (hillslope, terrace, etc.): + DESTOPE					
					06 Datum: NAD8
oil Map Unit Name: Tamba muchy cli	ay			NWI classifica	tion: NIA
re climatic / hydrologic conditions on the site typical	for this time of year	? Yes _x	No	(If no, explain in Re	marks.)
re Vegetation, Soil, or Hydrology					esent? Yes 💹 No
re Vegetation, Soil, or Hydrology			(If nee	eded, explain any answers	s in Remarks.)
UMMARY OF FINDINGS - Attach site			point lo	ocations, transects,	important features, etc.
		Is the	e Sampled	Area	
Hydric Soil Present? Yes		100	n a Wetlan	V	No
Wetland Hydrology Present? Yes	No				
Verilains.					
FORTATION					
EGETATION	Abaaluta	Daminant	Indicator	Dominance Test work	choot:
Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	STATE OF STREET	Number of Dominant Sp	
l				That Are OBL, FACW,	
2				Total Number of Domin	ant
3				Species Across All Stra	ta: <u>3</u> (B)
4	al Cover:			Percent of Dominant Sp	
Sapling/Shrub Stratum 2 10 Tota	il Cover.			That Are OBL, FACW,	or FAC: 100 (A/B
1				Prevalence Index wor	
2				Total % Cover of:	
3.				FACW species	x 1 =
4 5.					x 2 = x 3 =
	al Cover:				x 4 =
Herb Stratum D					x 5 =
Distintes spicator		<del></del>	FAC	Column Totals:	(A) (B
Exstua Perennil			FAC	Describer of India	- D/A -
Bromus multitensis			FACW	Hydrophytic Vegetati	c = B/A =
5. Frankhia Sulha		1/	FACW	Dominance Test is	
			PHOW	Prevalence Index	
S					aptations <sup>1</sup> (Provide supporting
3.				data in Remark	(s or on a separate sheet)
Tota	I Cover: 91			Problematic Hydro	ophytic Vegetation <sup>1</sup> (Explain)
Noody Vine Stratum				10 00 00 00 00	
1				be present.	oil and wetland hydrology must
	al Cover: 11-1			Hydrophytic	
LOTA	il Cover 1 1 1			Vegetation	16
		A COLUMN TO THE TAX ASSESSMENT OF THE PARTY			
	6 Cover of Biotic C	rust 6		Present? Y	es No

Color (moist) % Color (moist) % Type Loc* Texture Remarks  Color (moist) % Type: Loc* Texture Remarks  Indicators (channel, M-Matrix  Indicators for Problematic Hydric Solis* (Indicators for Problematic Hydric Solis* (Indicators (problematic Hydric Solis*)  Indicators (problematic Hydric Solis*)  Indicators for Problematic Hydric Solis* (Indicators (problematic Hydric Solis*)  Indicators (problematic Hydric Solis*)  Reduced Vertic (F18)  Reduced Vertic (F18)	Depth	Matrix		pth needed to doc Re	dox Feature	es			
Composition						_Type <sup>1</sup>	_Loc <sup>2</sup> _	Text	ure Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    To Muck (A1)	0-6	2.54 3/	97	7.542 3/4	7 3	C	M	SIL	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    Sandy Redox (S5)	6-15					U	M		
Histosol (A1)		2.54 3/	_ 67	101/2 3/4	3		<u></u>	<u>S: c</u>	
Histic Epipedon (A2)  Black Histic (A3)  Brack Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack Brack  Brack  Brack Brack  Brack	Hydric Soil	Indicators: (App		I LRRs, unless oth	nerwise not		e Lining, F	Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Sandy Mucky Mineral (S1)	Histic E Black H Hydrogo Stratifie 1 cm M Deplete	Epipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) (LR) uck (A9) (LRR D) ed Below Dark Surf		Stripped I Loamy M Loamy Gl Depleted Redox Da Depleted	Matrix (S6) ucky Minera leyed Matrix Matrix (F3) ark Surface Dark Surfac	(F2) (F6) ce (F7)		2 F	2 cm Muck (A10) ( <b>LRR B</b> ) Reduced Vertic (F18) Red Parent Material (TF2)
Type:	_ Sandy (	Mucky Mineral (S1 Gleyed Matrix (S4)							그런 경기 전에 되면 하다면 되면 시작하면 그렇게 한다고 하는데 되었다.
Vertand Hydrology Indicators:   Secondary Indicators (2 or more requirement)   Water Marks (B1) (Riverine)		Layer (ii present)							
Trimary Indicators (any one indicator is sufficient)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Aquatic Invertebrates (B13)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B3) (Riverine)  Presence (B13)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B3) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B3) (Nonriverine)  Fresence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Water-Stained Leaves (B9)  FAC-Neutral Test (D5)  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Dry-Season Water Table (C2)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (B7)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No	Depth (in	iches):						Hydric	Soil Present? Yes No No
Surface Water (A1)	Depth (in Remarks:							Hydric	Soil Present? Yes No No
High Water Table (A2)	Depth (in Remarks:	oGY							Soil Present? Yes No No Secondary Indicators (2 or more required)
Water Marks (B1) (Nonriverine)	Depth (in Remarks: YDROLO Vetland Hy	GY drology Indicator	s:						Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Drift Deposits (B3) (Nonriverine)	Depth (in Remarks: YDROLO Vetland Hy Primary India Surface	OGY drology Indicator cators (any one ind Water (A1)	s:	Salt Crus	100000000000000000000000000000000000000				Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
	Depth (in Remarks:  YDROLO  Vetland Hy Primary India Surface High Wa Saturatia Water M	drology Indicator cators (any one inc Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriv	s: dicator is suf	≿ Salt Crus Biotic Cr Aquatic I Hydroge	rust (B12) Invertebrate n Sulfide Od	dor (C1)	iving Roo	\$	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
urface Water Present? Yes No Depth (inches):  //ater Table Present? Yes No Depth (inches):  aturation Present? Yes No Depth (inches):  micludes capillary fringe)  escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Popth (in Remarks:  POPOLO  Population of the po	drology Indicator cators (any one inc Water (A1) ater Table (A2) on (A3) Marks (B1) (Nonriv int Deposits (B2) (Nonriv posits (B3) (Nonriv Soil Cracks (B6)	s: licator is suf erine) lonriverine)	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent In	rust (B12) Invertebrate In Sulfide Oci Rhizosphe In Reduce In Reduction	dor (C1) res along L ed Iron (C4 on in Plow	)	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C
Atter Table Present?  Yes No Depth (inches): aturation Present? Yes No Depth (inches): Includes capillary fringe)  escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (in Remarks:  POROLO  Vetland Hy rimary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati	drology Indicator cators (any one inc Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriv nt Deposits (B2) (Nonriv Soil Cracks (B6) on Visible on Aeria	s: dicator is suf erine) donriverine) verine)	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent In	rust (B12) Invertebrate In Sulfide Oci Rhizosphe In Reduce In Reduction	dor (C1) res along L ed Iron (C4 on in Plow	)	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth (in Remarks:  POROLO  Vetland Hy rimary India  Surface  High Wa  Saturati  Water M  Sedimer  Drift Depth (in North Column)  Surface  Inundati  Water-S	drology Indicator cators (any one inc Water (A1) ater Table (A2) on (A3) flarks (B1) (Nonriv nt Deposits (B2) (Nonriv Soil Cracks (B6) on Visible on Aeria	s: dicator is suf erine) donriverine) verine)	X Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent Ii Other (Ex	ust (B12) Invertebrate n Sulfide Od Rhizosphe e of Reduce ron Reducti xplain in Re	dor (C1) res along L d Iron (C4 on in Plow marks)	) ed Soils (0	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)
	Pepth (in Remarks:  YDROLO  Vetland Hy  Irimary India  Surface  High Wa  Saturatia  Water M  Sedimer  Drift Depter  Inundatia  Water-Sield Observariace Water Water Water Water Water Surface Water-Surface Water-Su	drology Indicator cators (any one inc Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriv nt Deposits (B2) (Nonriv Soil Cracks (B6) on Visible on Aeria trained Leaves (B9) vations: er Present?	s: licator is suf erine) lonriverine) verine) I Imagery (B	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent Ir Other (Ex	rust (B12) Invertebrate in Sulfide Od Rhizosphe e of Reduce ron Reducti explain in Re	dor (C1) res along L d Iron (C4 on in Plowe marks)	ed Soils (C	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)
emarks:	Depth (in Remarks:  YDROLO  Vetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Depth Surface Inundatia Water-Sield Observation Pencludes cap	drology Indicator cators (any one incomposition (A1) ater Table (A2) on (A3) flarks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Deposits (B6) on Visible on Aerial trained Leaves (B9) vations:  er Present?  Present?  resent?  pillary fringe)	s:  dicator is sufferine)  lonriverine)  rerine)  I Imagery (B )  Yes  Yes	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Other (E:  No Depth (i	rust (B12) Invertebrate in Sulfide Or Rhizosphe e of Reduce ron Reducti explain in Re inches): inches)	dor (C1) res along L d Iron (C4 on in Plow marks)	ed Soils (C	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	Depth (in Remarks:  YDROLO  Vetland Hy Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water Table Saturation Princludes cap	drology Indicator cators (any one incomposition (A1) ater Table (A2) on (A3) flarks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Deposits (B6) on Visible on Aerial trained Leaves (B9) vations:  er Present?  Present?  resent?  pillary fringe)	s:  dicator is sufferine)  lonriverine)  rerine)  I Imagery (B )  Yes  Yes	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Other (E:  No Depth (i	rust (B12) Invertebrate in Sulfide Or Rhizosphe e of Reduce ron Reducti explain in Re inches): inches)	dor (C1) res along L d Iron (C4 on in Plow marks)	ed Soils (C	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	Depth (in Remarks:  YDROLO Wetland Hy Primary India Surface High Wa Saturatia Water N Sedimer Drift Dep Surface Inundati Water-S Field Obser Surface Water Vater Table Saturation Princludes cap Describe Res	drology Indicator cators (any one incomposition (A1) ater Table (A2) on (A3) flarks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Deposits (B6) on Visible on Aerial trained Leaves (B9) vations:  er Present?  Present?  resent?  pillary fringe)	s:  dicator is sufferine)  lonriverine)  rerine)  I Imagery (B )  Yes  Yes	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Other (E:  No Depth (i	rust (B12) Invertebrate in Sulfide Or Rhizosphe e of Reduce ron Reducti explain in Re inches): inches)	dor (C1) res along L d Iron (C4 on in Plowe marks)	ed Soils (C	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
	Depth (in Remarks:  YDROLO  Vetland Hy Primary India Surface High Wa Saturatio Water N Sedimer Drift Depty Surface Inundati Water-Sirield Observator Auter Table Saturation Pencludes cap Pescribe Residents	drology Indicator cators (any one incomposition (A1) ater Table (A2) on (A3) flarks (B1) (Nonrivent Deposits (B2) (Nonrivent Deposits (B3) (Nonrivent Deposits (B6) on Visible on Aerial trained Leaves (B9) vations:  er Present?  Present?  resent?  pillary fringe)	s:  dicator is sufferine)  lonriverine)  rerine)  I Imagery (B )  Yes  Yes	Salt Crus Biotic Cr Aquatic I Hydroge Oxidized Presence Recent II Other (E:  No Depth (i	rust (B12) Invertebrate in Sulfide Or Rhizosphe e of Reduce ron Reducti explain in Re inches): inches)	dor (C1) res along L d Iron (C4 on in Plowe marks)	ed Soils (C	ots (C3)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Thin Muck Surface (C7)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

## WETLAND DETERMINATION DATA FORM - Arid West Region

N-17

			- Aria west Regio	
Project/Site: Collinsyille	City/	County Sola	no	_ Sampling Date: DO-24-
Applicant/Owner: 15 Power			State: CA	Sampling Point:
nvestigator(s): Christina Rodriguez, Sidn	ell Wells sect	ion, Township, Ra	inge 3N IE Z	-6
andform (hillslope, terrace, etc.): Flot	Loc	al relief (concave,	convex, none): None	Slope (%): _O
Subregion (LRR):	Lat. 38.	079777	Long: -121.83	3901 Datum: NAV 19
Soil Map Unit Name: DIASLO -AYAR CLAYS	2 to 9 % slopes	,	NWI classi	fication: NONE
are climatic / hydrologic conditions on the site typical for		A1	(If no, explain in	
Are Vegetation, Soil, or Hydrology		7.	"Normal Circumstances"	\/
Are Vegetation, Soil, or Hydrology			eeded, explain any answ	1
SUMMARY OF FINDINGS – Attach site ma				
Hydrophytic Vegetation Present? Yes	No No	Is the Sampled within a Wetlan	i Area	No
Remarks:				
/ECETATION . Has asignified names of n	lanta			
/EGETATION – Use scientific names of p		minant Indicator	Dominance Test wo	rksheet:
Tree Stratum (Plot size:)		ecies? Status	Number of Dominant	Species
1			That Are OBL, FACW	
2			Total Number of Dom	inant 2
3			Species Across All St	rata: (B)
4	d		Percent of Dominant	
Sapling/Shrub Stratum (Plot size:)	= 10	otal Cover	That Are OBL, FACW	, or FAC:1002(A/B)
1			Prevalence Index wo	orksheet:
2.			Total % Cover of:	Multiply by:
3			The second secon	x 1 =
4				x 2 =
5				x3 =
Herb Stratum (Plot size: 5 sq. fret)	= To	otal Cover		x 4 =
1. DISTICHLIS SPICATA	5 1	FAC		x5=
2 RUMEX CRISPUS	25	Y FAC	Column Totals:	(A) (B)
3. FRANKENIA SALINA	35	Y FACW	Prevalence Inde	ex = B/A =
4.			Hydrophytic Vegetat	
5,			X Dominance Test	is >50%
5			Prevalence Index	
7			Morphological Ad	daptations¹ (Provide supporting rks or on a separate sheet)
B			2007	rophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	65 = To	otal Cover		- Colonial (exhibiting)
1			<sup>1</sup> Indicators of hydric s	oil and wetland hydrology must
2.				sturbed or problematic.
	= To	otal Cover	Hydrophytic Vegetation Present? Y	res_X No
Remarks:	or blotte ordat	-	. reaction 1	
Nelliains.				

0	-	٠	
-	1		



Depth (inches)	Color (moist)	%	Redo	x Feature:	Type	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 3/2	85	SYRALO	15	C	M	CALL	Romano
	101.7		711-14			14.	VI	
0-11	7.5 YR 4/1	97	SYR 4/6	3	C	M	U.	
11-15	7.5YX 3/1	100			_		U	
Type: C=C	oncentration, D=Dep	eletion, RM=	Reduced Matrix, C	S=Covered	d or Coate	ed Sand G	rains. <sup>2</sup> Loo	cation: PL=Pore Lining, M=Matrix.
	Indicators: (Applic							for Problematic Hydric Soils <sup>3</sup> :
_ Histosol	, ,		Sandy Red	ox (S5)			1 cm N	Muck (A9) (LRR C)
	oipedon (A2)		Stripped M					fluck (A10) (LRR B)
Black His			Loamy Muc					ed Vertic (F18)
	n Sulfide (A4)	<b>C</b> \	Loamy Gle		(F2)			arent Material (TF2)
	d Layers (A5) (LRR olick (A9) (LRR D)	٥)	Depleted M Redox Dari		(E6)		Other	(Explain in Remarks)
	Below Dark Surfac	e (A11)	Depleted D	Charles and the second of				
	ark Surface (A12)	(,,,,)	Redox Dep				3Indicators	of hydrophytic vegetation and
	lucky Mineral (S1)		Vernal Poo		,			hydrology must be present,
	Bleyed Matrix (S4)		_	, -,				isturbed or problematic.
	ayer (if present):		-			6	1	-
Type:						9		150
Donth (in	ches):						13. 5.7 24.5.	Descent? Van No
Compelia	logic oone	NHO Ex	heneral Str dark layer	um/	River		Hydric Soll	Present? Yes 7 No
Remarks	logic oome	NHO Ex	heneral Str dark layer	som /	Piver		Hydric Soll	Present? Yes 7 No
Remarks Suydur YUUVX	logic oome		heneral Str dark layer	um 1	Piver		Hydric Soll	Present? Yes / No
YDROLO	logic ooure concentrations				Piver			
YDROLOG Wetland Hyd	logic source concentrations GY drology Indicators:		f; check all that appl	(y)	Piver		Secon	ndary Indicators (2 or more required)
YDROLOG Vetland Hyd Surface	Correntations  GY  drology Indicators:		f; check all that appl	(B11)	River		Secon	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine)
YDROLOG Vetland Hyd Surface	GY  drology Indicators: cators (minimum of co Water (A1) iter Table (A2)		d; check all that appl Salt Crust Biotic Crus	(B11) st (B12)			<u>Secor</u> W S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
YDROLO  Wetland Hyd  Surface  High Wa  Saturatio	GY  drology Indicators: cators (minimum of co Water (A1) iter Table (A2)	ne required	f; check all that appl Salt Crust Biotic Crust Aquatic In	(B11) st (B12) vertebrate:	s (B13)		<u>Secon</u> W S D	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)
YDROLO  Wetland Hyd  Surface  High Wa  Saturatio  Water Mi	GY  drology Indicators: eators (minimum of of Water (A1) on (A3)	ne required	d; check all that appl Salt Crust Biotic Crust Aquatic In	(B11) st (B12) vertebrate: Sulfide Oc	s (B13) dor (C1)		Secon W S D D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) inft Deposits (B3) (Riverine) trainage Patterns (B10)
YDROLOG Wetland Hyde Surface High Wa Saturation Water Mi Sedimen	GY  drology Indicators: eators (minimum of or Water (A1) iter Table (A2) on (A3) arks (B1) (Nonriver	ne required	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	(B11) st (B12) vertebrate: Sulfide Oc Rhizosphei	s (B13) dor (C1) res along	Living Ro	Secor  — W — S — D ots (C3) _ D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) irift Deposits (B3) (Riverine) iranage Patterns (B10) iry-Season Water Table (C2)
YDROLOG Wetland Hyd Surface High Wa Saturatio Water Ma Sedimen Drift Dep X Surface	GY drology Indicators: eators (minimum of of the control of the co	ine) nriverine)	Salt Crust Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce	s (B13) dor (C1) res along d Iron (C	Living Ro	Secor  — W — S — D ots (C3) — D	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine) irrainage Patterns (B10) irry-Season Water Table (C2) irrayfish Burrows (C8)
YDROLOG Wetland Hyd Surface High Wa Saturatio Water Ma Sedimen Drift Dep X Surface	GY drology Indicators: cators (minimum of o Water (A1) on (A3) arks (B1) (Nonriver at Deposits (B2) (No	ine) nriverine)	Salt Crust Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C on in Tille	Living Ro	Secor  W S D D ots (C3) D C6) S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C8)
YDROLOG Vetland Hyd Surface High Wa Saturatio Water M. Sedimen Drift Dep Surface S Inundation	GY drology Indicators: eators (minimum of of the control of the co	ine) nriverine)	Salt Crust Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) st (B12) vertebrate: Sulfide Oc Rhizosphei of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C on in Tille C7)	Living Ro	Secor  — W — S — D — D ots (C3) — D — C 6) — S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) inft Deposits (B3) (Riverine) irainage Patterns (B10) iry-Season Water Table (C2) irayfish Burrows (C8) aturation Visible on Aerial Imagery (Cshallow Aquitard (D3)
YDROLO  Wetland Hyd  Surface  High Wa  Saturatio  Water M  Sedimen  Drift Dep  X Surface S  Inundatio  Water-St	drology Indicators: cators (minimum of comments (Managements (Manageme	ine) nriverine)	Salt Crust Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Irc	(B11) st (B12) vertebrate: Sulfide Oc Rhizosphei of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C on in Tille C7)	Living Ro	Secor  — W — S — D — D ots (C3) — D — C 6) — S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C8)
YDROLOG Wetland Hyd Surface High Wa Saturation Water Ma Sedimen Drift Dep X Surface Inundation Water-St Field Observ	GY  drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) arks (B1) (Nonriver at Deposits (B2) (No cosits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial I tained Leaves (B9) vations:	ine) nriverine) rine) magery (B7	Salt Crust Salt Crust Biotic Cru Aquatic In Hydrogen Oxidized F Presence Recent Irc	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction surface (colorate)	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro 4) ad Soils (C	Secor  — W — S — D — D ots (C3) — D — C 6) — S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) inft Deposits (B3) (Riverine) irainage Patterns (B10) iry-Season Water Table (C2) irayfish Burrows (C8) aturation Visible on Aerial Imagery (Cshallow Aquitard (D3)
YDROLOG Wetland Hyd Surface High Wa Saturatio Water M Sedimen Drift Dep X Surface Inundatio Water-St Surface Water	GY drology Indicators: cators (minimum of o Water (A1) on (A3) arks (B1) (Nonriver at Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) on Visible on Aerial stained Leaves (B9) vations: er Present?	ine) nriverine) magery (B7	Salt Crust Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Ex	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction c Surface (c plain in Re	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro 4) ad Soils (C	Secor  — W — S — D — D ots (C3) — D — C 6) — S	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) inft Deposits (B3) (Riverine) irainage Patterns (B10) iry-Season Water Table (C2) irayfish Burrows (C8) aturation Visible on Aerial Imagery (Cshallow Aquitard (D3)
YDROLOG  Vetland Hyd  Surface  High Wa  Saturatio  Water M:  Sedimen  Drift Dep  X Surface S  Inundatio  Water-St  Field Observ  Surface Water  Vater Table I  Saturation Pressure S  Saturation Pressure S  Saturation Pressure S  Saturation Pressure S  Surface Water  Surface Water  Saturation Pressure S  Surface Water  Surface Water	GY  drology Indicators: cators (minimum of community of c	ine) nriverine) rine) magery (B7	d; check all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized Is Presence Recent Iro Thin Muck	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction Surface (continuous reduction) ches):	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Rod 4) ad Soils (Co	Secor  — W — S — D — D ots (C3) — D — C 6) — S	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C5) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOG Wetland Hyd Surface Water May Surface Surface Surface Water-St Field Observing Surface Water Table Includes cap	GY  drology Indicators: cators (minimum of community of c	ine) nriverine) magery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction s Surface ( plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro	Secor	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C5) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOG Wetland Hyd Primary Indic Surface Water May Sedimen Drift Dep X Surface Surface Water-St Field Observing Surface Water Table In Sediment Princludes cap	GY  drology Indicators: eators (minimum of	ine) nriverine) magery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction s Surface ( plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro	Secor	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C5) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLOG Wetland Hyd Crimary Indic Surface Water May Sedimen Drift Dep X Surface Surface Water-St Field Observing Surface Water Table Institutes cap	GY  drology Indicators: eators (minimum of	ine) nriverine) magery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction s Surface ( plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro	Secor	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C5) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLO  Wetland Hyd  Surface Mater Mater Sedimen  Drift Dep  X Surface Surface Surface Water-St  Sield Observer Surface Water Table of Saturation Proceedings of Secribe Recommendation and the Secribe Recommendation of Secribe Recommendation Procedures cap Secr	GY  drology Indicators: eators (minimum of	ine) nriverine) magery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction s Surface ( plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro	Secor	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C5) hallow Aquitard (D3) AC-Neutral Test (D5)
YDROLO  Wetland Hyd  Surface Mater Mater Sedimen  Drift Dep  X Surface Surface Surface Water-St  Sield Observer Surface Water Table of Saturation Proceedings of Secribe Recommendation and the Secribe Recommendation of Secribe Recommendation Procedures cap Secr	GY  drology Indicators: eators (minimum of	ine) nriverine) magery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Irc Thin Muck Other (Exp	(B11) st (B12) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction s Surface ( plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C on in Tille C7) marks)	Living Ro	Secor	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) prift Deposits (B3) (Riverine) prainage Patterns (B10) pry-Season Water Table (C2) prayfish Burrows (C8) aturation Visible on Aerial Imagery (C5) hallow Aquitard (D3) AC-Neutral Test (D5)

#### WETLAND DETERMINATION DATA FORM - Arid West Region

	1-
1/1/-	1
A A	1 /

vestigator(s): Sidney Wells, Cl					
andform (hillslope, terrace, etc.): Flat	Lesight M	villstope 1	Local relief (concave,	convex, none): NONE	
ubregion (LRR):					1 16
oil Map Unit Name: DINGLO - ATE				NWI classification:	NONE
e climatic / hydrologic conditions on the	site typical for	this time of year	r? Yes No_	(If no, explain in Remarks	i.) (/
e Vegetation, Soil, or Hyd	drology	_ significantly d	listurbed? Are	"Normal Circumstances" present	Yes No
e Vegetation, Soil, or Hyd	drology	_ naturally prob	olematic? (If ne	eeded, explain any answers in Re	emarks.)
UMMARY OF FINDINGS - Atta	ch site ma	ap showing	sampling point I	ocations, transects, imp	ortant features, et
	\/				1
Hydrophytic Vegetation Present?	Yes	No V	Is the Sampled		X
Hydric Soil Present?  Wetland Hydrology Present?	Yes		within a Wetlan	nd? Yes N	10
Remarks:	165	NO			
EGETATION – Use scientific na	ames of pl	ants.			
			Dominant Indicator	Dominance Test worksheet:	
ree Stratum (Plot size:			Species? Status	Number of Dominant Species	(A)
				That Are OBL, FACW, or FAC	(^)
				Total Number of Dominant	(B)
			,,	Species Across All Strata:	(B)
		7	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC	100% (A/B
Sapling/Shrub Stratum (Plot size:	)	-/-	70.0.	That Are OBL, FACVV, or FAC	100/ (NB
				Prevalence Index worksheet	
				Total % Cover of:	
·				OBL species	
•				FACW species	
				FAC species	
lerb Stratum (Plot size: 500. P.	)		= Total Cover	FACU species	
Polypodon monospelle	MSS	100	Y FACW	Column Totals:	
Distibulis spicata		20	N FAC	Column Totals.	(^)(0)
,				Prevalence Index = B/A	=
				Hydrophytic Vegetation Indi	cators:
				✓ Dominance Test is >50%	
				Prevalence Index is ≤3.01	
				Morphological Adaptations data in Remarks or on	s1 (Provide supporting
				Problematic Hydrophytic \	
Voody Vine Stratum (Plot size:	,	120	= Total Cover	r robicinado r rydropriyac v	regetation (Explain)
				<sup>1</sup> Indicators of hydric soil and w	etland hydrology must
				be present, unless disturbed o	r problematic.
		_ X	= Total Cover	Hydrophytic	
A Bara Cround in U. S	0/ 0		0	Vegetation	
6 Bare Ground in Herb Stratum	% Co	over of Biotic Cr	ust	Present? Yes	← No
Remarks:					

S/ 111	

Profile Description: (Describe to the depth		or or confirm	in the absence of in	dicators.,
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type	Loc <sup>2</sup>	Texture	Remarks
0-9 5V 8/2 100	Ocioi (moist) /0 Type		Salo	romano
54.012 100 -				
9-13 104F 3/2 (60)			Sale	
				,
13-19 104R 3/1 160			Jan _	, 1
Type: C=Concentration, D=Depletion, RM=R	educed Matrix, CS=Covered or Co	ated Sand Gr	rains. <sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LF	RRs, unless otherwise noted.)		Indicators for F	roblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)		1 cm Muck	(A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)		2 cm Muck	(A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)		Reduced Ve	ertic (F18)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Red Parent	Material (TF2)
_ Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)		Other (Expl	ain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)			
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)			
_ Thick Dark Surface (A12)	Redox Depressions (F8)		3Indicators of hy	drophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools (F9)		wetland hydro	logy must be present,
Sandy Gleyed Matrix (S4)			unless disturb	ed or problematic.
Restrictive Layer (if present):	-			
Type:		_		. /
Depth (inches):	54		Hudrig Sail Bros	ent? Yes No_X
	_		Hyuric Son Fres	entr res No
NHD Ephemeral Stream/	/ Kiren			
NHO Ephemeral Stream/	Niver			
NHO Ephemeral Stream/ YDROLOGY Vetland Hydrology Indicators:	*		Secondary	Indicators (2 or more required)
VDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one required; co	heck all that apply)			Indicators (2 or more required)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required; c _ Surface Water (A1)	heck all that apply) Salt Crust (B11)		Water	Marks (B1) (Riverine)
VDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one required; co	heck all that apply) Salt Crust (B11) Biotic Crust (B12)		Water	Marks (B1) (Riverine) ent Deposits (B2) (Riverine)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one required; co Surface Water (A1) High Water Table (A2) Saturation (A3)	heck all that apply) Salt Crust (B11)		Water	Marks (B1) (Riverine)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one required; co Surface Water (A1) High Water Table (A2)	heck all that apply) Salt Crust (B11) Biotic Crust (B12)		Water   Sedime	Marks (B1) (Riverine) ent Deposits (B2) (Riverine)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one required; co Surface Water (A1) High Water Table (A2) Saturation (A3)	heck all that apply)  Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)	)	Water   Sedime Drift De	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine)
VDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one required; c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1	) ng Living Roo	Water   Sedime Drift De Drainag ts (C3) Dry-Se	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) ason Water Table (C2)
VDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one required; co Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor	) ng Living Roo C4)	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B10) ason Water Table (C2) and Burrows (C8)
Verland Hydrology Indicators: rimary Indicators (minimum of one required; compared water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti	) ng Living Roo C4)	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ) Satural	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) aposits (B10) ason Water Table (C2) and Burrows (C8) and Visible on Aerial Imagery (C9)
Verland Hydrology Indicators: rimary Indicators (minimum of one required; compared water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7)	) ng Living Roo C4)	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ) Satural Shallow	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) apo Patterns (B10) ason Water Table (C2) and Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3)
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Vetland Hydrology Indicators:  Inimary Indicators (minimum of one required; of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  ield Observations:  urface Water Present? Yes No laturation Present? Yes No acturation Present? Yes No includes capillary fringe)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	ng Living Roo C4) Illed Soils (C6	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ] Satural Shallov FAC-No	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) aposits (B10) ason Water Table (C2) an Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3) autral Test (D5)
Primary Indicators (minimum of one required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes No	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	ng Living Roo C4) Illed Soils (C6	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ] Satural Shallov FAC-No	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) apo Patterns (B10) ason Water Table (C2) an Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3) autral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  ield Observations:  urface Water Present? Yes No acturation Present? Yes No includes capillary fringe)  escribe Recorded Data (stream gauge, monitor)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	ng Living Roo C4) Illed Soils (C6	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ] Satural Shallov FAC-No	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) apo Patterns (B10) ason Water Table (C2) an Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3) autral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  ield Observations:  urface Water Present? Yes No acturation Present? Yes No includes capillary fringe)  escribe Recorded Data (stream gauge, monitor)	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	ng Living Roo C4) Illed Soils (C6	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ] Satural Shallov FAC-No	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) aposits (B10) ason Water Table (C2) an Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3) autral Test (D5)
VPROLOGY  Vetland Hydrology Indicators:  Irimary Indicators (minimum of one required; of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  ield Observations:  urface Water Present? Yes No later Table Present? Yes	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	ng Living Roo C4) Illed Soils (C6	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ] Satural Shallov FAC-No	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) aposits (B10) ason Water Table (C2) an Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3) autral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; of the control of the con	heck all that apply)  Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron ( Recent Iron Reduction in Ti Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): Depth (inches):	ng Living Roo C4) Illed Soils (C6	Water   Sedime Drift De Drainag ts (C3) Dry-Se Crayfis ] Satural Shallov FAC-No	Marks (B1) (Riverine) ant Deposits (B2) (Riverine) aposits (B3) (Riverine) aposits (B3) (Riverine) aposits (B10) ason Water Table (C2) an Burrows (C8) and Visible on Aerial Imagery (C9) and Aquitard (D3) autral Test (D5)

## WETLAND DETERMINATION DATA FORM - Arid West Region

W-18

Project/Site: Collinstille	City/	County Jolan	10	Sampling Date: 06 - 24 -2
Applicant/Owner: US POWEY			C4.	Sampling Point: SP-1
nvestigator(s) Christina Rodniquez, Sid	MAIN MP IS SOUT	ion Toumakin Da	State: 00	Sampling Folit.
rvesingator(s) The state of the	Section Section	ion, Township, Ra	nge: 00 5 N	10
andform (hillslope, terrace, etc.):	100	Tellef (concave,	convex, none): N	Slope (%):
ubregion (LRR):	Lat: 1	78613	Long: -121.83	55 +6 Datum: NAO 1
oll Map Unit Name: Valdezsilt loam, d	Pained, Olu Z	askapeo MI	MA 16 NWI classifi	ication: FRESHWATER EM
re climatic / hydrologic conditions on the site typical for	r this time of year?	Yes No _	(If no, explain in I	Remarks.) WET4
re Vegetation, Soil, or Hydrology			"Normal Circumstances"	\','
re Vegetation, Soil, or Hydrology	naturally problem		eeded, explain any answ	
SUMMARY OF FINDINGS – Attach site m	ap showing sar			
V				
Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes	No	Is the Sampled		2.2
Wetland Hydrology Present? Yes		within a Wetlan	nd? Yes	No_X_
Remarks:	140			
EGETATION – Use scientific names of p	lante			-
EGETATION - Use scientific flames of p				
Tree Stratum (Plot size:)		minant Indicator ecies? Status	Dominance Test wor	
1			Number of Dominant S That Are OBL, FACW	
3.			Total Number of Domi Species Across All Str	
1.			Species Across All Str	ata (b)
Sapling/Shrub Stratum (Plot size:)		otal Cover	Percent of Dominant S That Are OBL, FACW	
1			Prevalence Index wo	rksheet:
2			Total % Cover of:	Multiply by:
3			OBL species	x 1 =
1			FACW species	x 2 =
5			FAC species	x 3 =
Herb Stratum (Plot size: 5 sq. H.)	= To	otal Cover	FACU species	x 4 =
	(0)	I VAC	UPL species	x 5 =
Distichlis spicata	100	Y FAC	Column Totals:	(A) (B)
Centainea solstitialis		V _ Ø		
				x = B/A =
•			Hydrophytic Vegetat	
			Dominance Test i	
			Prevalence Index	
				aptations <sup>1</sup> (Provide supporting ks or on a separate sheet)
S	. 7 -		. /	ophytic Vegetation <sup>1</sup> (Explain)
Noody Vine Stratum (Plot size:)	135_= T	otal Cover		
			Indicators of hydric so	oil and wetland hydrology must
			be present, unless dis	turbed or problematic.
2		-1-10	Hudeophytic	
n		otal Cover	Hydrophytic Vegetation	$\checkmark$
% Bare Ground in Herb Stratum % C	over of Biotic Crust	0	Present? Y	es No
Remarks:				

W-18

Depth	Matrix	- 01	Red	lox Feature	95	1 2	Touture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc		Remarks
0-3.5	104R2/1	100					SAND	
3.5-9	7.5 YR 3/3	100		_			SAND	
-	1							
9-15.5	7.54R3/2	95	10 YR 5/6	5%	C	Μ	SAND	
Type: C=Cor	ncentration, D=Depl	etion, RM=	Reduced Matrix, (	CS=Covere	d or Coate	ed Sand G	Grains. <sup>2</sup> Loca	tion: PL=Pore Lining, M=Matrix.
	dicators: (Applica						Indicators for	or Problematic Hydric Soils <sup>3</sup> :
Histosol (/			Sandy Re					ick (A9) (LRR C)
Histic Epip				Matrix (S6)				ick (A10) (LRR B)
Black Hist			Loamy Mu					d Vertic (F18) ent Material (TF2)
Hydrogen	Sumde (A4) Layers (A5) (LRR C		Loamy Gl					xplain in Remarks)
	k (A9) (LRR D)	.)		Matrix (F3) rk Surface			04101 (2	xpiair in remains,
	Below Dark Surface	(A11)		Dark Surface				
	k Surface (A12)	· (· · · · )		pressions (			3Indicators of	hydrophytic vegetation and
	icky Mineral (S1)		Vernal Po					drology must be present,
_ Sandy Gle	eyed Matrix (S4)						unless dist	turbed or problematic.
Postrictivo I a	ayer (if present):							
VESTILLIVE LO	ayer (ii present).							
	yer (ii present).		_					<b>×</b>
Type: Depth (inch			_				Hydric Soil P	resent? Yes No X
Type: Depth (inch Remarks:	nes):						Hydric Soil P	resent? Yes No X
Type:	nes):						Hydric Soil P	resent? Yes No X
Type:	nes):	ř.		oly)				ary Indicators (2 or more required)
Type:	es):	ř.	check all that app	t (B11)			Seconda Wat	ary Indicators (2 or more required) ter Marks (B1) (Riverine)
Type: Depth (inchested in the content of the	es):	ř.	check all that app	t (B11)			Seconda Wat	ary Indicators (2 or more required)
Type: Depth (inchested in the content of the	ology Indicators: tors (minimum of ondater (A1) er Table (A2)	ř.	check all that app Salt Crus Biotic Cru	t (B11) ust (B12) nvertebrate			Seconda Wa Sec	ary Indicators (2 or more required) ter Marks (B1) (Riverine)
Type:	ology Indicators: tors (minimum of ondater (A1) er Table (A2)	ne required:	check all that app Salt Crus Biotic Cru	t (B11) ust (B12) nvertebrate			Seconda Wa Sec Drif	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine)
Type: Depth (inchested in the property of the property o	ology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3)	ne required	check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe	dor (C1) res along l		Seconda  War Seconda  Drift Drift Draft	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine)
Type: Depth (inchested in the property of the property	ology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir	ne required:	check all that app Salt Crus Biotic Cru Aquatic II	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe	dor (C1) res along l		Second:  Wai Sec Drif Dra ots (C3)	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10)
Type:	ology Indicators: tors (minimum of on /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverir Deposits (B2) (Non	ne required:	check all that appropriate the control of the contr	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe	dor (C1) res along l ed Iron (C4	)	Seconda  Wat Seconda  Drift Drift Dra  ots (C3) Cra	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) hyfish Burrows (C8)
Type:	ology Indicators: tors (minimum of one later (A1) er Table (A2) (A3) rks (B1) (Nonriverin Deposits (B2) (Nonsists (B3) (Nonriverin	ne required; ne) riverine) ne)	check all that approximate the control of the contr	t (B11) ust (B12) nvertebrate n Sulfide Od Rhizosphe of Reduce	dor (C1) res along l ed Iron (C4 on in Tilled	)	Seconda Wai Sec Drif Dra ots (C3) Dry Cra 6) Sat	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) hyfish Burrows (C8)
Type:	rology Indicators: tors (minimum of one vater (A1) er Table (A2) (A3) rks (B1) (Nonriverin Deposits (B2) (Nonriverin bil Cracks (B6)	ne required; ne) riverine) ne)	check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrate n Sulfide Oc Rhizosphe of Reduce on Reduction	dor (C1) res along led Iron (C4 on in Tilled C7)	)	Second:  — Wa — Sec — Drif — Dra ots (C3) — Dry — Cra 6) — Sat — Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) dinage Patterns (B10) -Season Water Table (C2) dyfish Burrows (C8) uration Visible on Aerial Imagery (CS)
Type:	ology Indicators: tors (minimum of one vater (A1) or Table (A2) (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering Dil Cracks (B6) Visible on Aerial Impired Leaves (B9)	ne required; ne) riverine) ne)	check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir Thin Muc	t (B11) ust (B12) nvertebrate n Sulfide On Rhizosphe of Reduce on Reducti k Surface ( plain in Re	dor (C1) res along I ed Iron (C4 on in Tilled C7) emarks)	) I Soils (C	Second:  — Wa — Sec — Drif — Dra ots (C3) — Dry — Cra 6) — Sat — Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) lyfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3)
Type:	rology Indicators: tors (minimum of one later (A1) re Table (A2) (A3) rks (B1) (Nonrivering Deposits (B2) (Nonrivering Cracks (B6) Visible on Aerial Immined Leaves (B9)	ne required; ne) riverine) ne)	check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir Thin Muc	t (B11) ust (B12) nvertebrate n Sulfide Or Rhizosphe of Reduce on Reduction k Surface (	dor (C1) res along I ed Iron (C4 on in Tilled C7) emarks)	) I Soils (C	Second:  — Wa — Sec — Drif — Dra ots (C3) — Dry — Cra 6) — Sat — Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) lyfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3)
Type:	rology Indicators: tors (minimum of one vater (A1) er Table (A2) (A3) resset (B1) (Nonrivering Deposits (B2) (Nonrivering Cracks (B6) Visible on Aerial Immined Leaves (B9) etions: Present? Yes	ne required: ne) riverine) ne) nagery (B7)	check all that app Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent Ir Thin Muc	t (B11) ust (B12) nvertebrate n Sulfide On Rhizosphe of Reduce on Reduction k Surface ( plain in Re	dor (C1) res along l ed Iron (C4 on in Tilled C7) emarks)	) I Soils (C	Second:  — Wa — Sec — Drif — Dra ots (C3) — Dry — Cra 6) — Sat — Sha	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) lyfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3)
Type:	ology Indicators: tors (minimum of one later (A1) er Table (A2) (A3) erks (B1) (Nonriverin Deposits (B2) (Nonriverin Dil Cracks (B6) Visible on Aerial Imined Leaves (B9) itions: Present? Yesent? Yesent? Yesent?	ne required: ne) riverine) ne) nagery (B7)	check all that approximate and the control of the c	t (B11) ust (B12) nvertebrate n Sulfide Or Rhizosphe of Reduce on Reduction k Surface ( plain in Re nches):	dor (C1) res along I ed Iron (C4 on in Tilled C7) emarks)	) I Soils (C	Seconda  War Seconda  Drif  Drif  Dra  ots (C3)  Cra  6)  Sat  FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) inage Patterns (B10) -Season Water Table (C2) lyfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3)
Type: Depth (inch Remarks:  YDROLOG  Netland Hydri Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai  Field Observa Surface Water Water Table Presincludes capill	ology Indicators: tors (minimum of one later (A1) er Table (A2) (A3) erks (B1) (Nonriverin Deposits (B2) (Nonriverin Dil Cracks (B6) Visible on Aerial Imined Leaves (B9) itions: Present? Yesent? Yesent? Yesent?	ne required: ne) riverine) nagery (B7) s No.	check all that approximate and the control of the c	t (B11) ust (B12) nvertebrate n Sulfide Oc Rhizosphe of Reduce on Reduction k Surface ( plain in Re aches): aches):	dor (C1) res along I res along I d Iron (C4 on in Tilled C7) marks)	) d Soils (Co	Seconda  Wai Seconda  Seconda  Drif  Drif  Dra  ots (C3) Dry  Cra  6) Sat  FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) dinage Patterns (B10) -Season Water Table (C2) dyfish Burrows (C8) uration Visible on Aerial Imagery (C9 dallow Aquitard (D3) C-Neutral Test (D5)
Type: Depth (inch Remarks:  YDROLOG Wetland Hydre Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Presincludes capill	rology Indicators: tors (minimum of one vater (A1) er Table (A2) (A3) Ches (B1) (Nonrivering Deposits (B2) (Nonrivering Cracks (B6) Visible on Aerial Immined Leaves (B9) tions: Present? Present? Yesent?	ne required: ne) riverine) nagery (B7) s No.	check all that approximate and the control of the c	t (B11) ust (B12) nvertebrate n Sulfide Oc Rhizosphe of Reduce on Reduction k Surface ( plain in Re aches): aches):	dor (C1) res along I res along I d Iron (C4 on in Tilled C7) marks)	) d Soils (Co	Seconda  Wai Seconda  Seconda  Drif  Drif  Dra  ots (C3) Dry  Cra  6) Sat  FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) diment Deposits (B2) (Riverine) t Deposits (B3) (Riverine) dinage Patterns (B10) -Season Water Table (C2) dyfish Burrows (C8) uration Visible on Aerial Imagery (C9 dallow Aquitard (D3) C-Neutral Test (D5)
Type:	rology Indicators: tors (minimum of one vater (A1) er Table (A2) (A3) Ches (B1) (Nonrivering Deposits (B2) (Nonrivering Cracks (B6) Visible on Aerial Immined Leaves (B9) tions: Present? Present? Yesent?	ne required: ne) riverine) nagery (B7) s No.	check all that approximate and the control of the c	t (B11) ust (B12) nvertebrate n Sulfide Oc Rhizosphe of Reduce on Reduction k Surface ( plain in Re aches): aches):	dor (C1) res along I res along I d Iron (C4 on in Tilled C7) marks)	) d Soils (Co	Seconda  Wai Seconda  Seconda  Drif  Drif  Dra  ots (C3) Dry  Cra  6) Sat  FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) tinage Patterns (B10) -Season Water Table (C2) tyfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5)
Type:	rology Indicators: tors (minimum of one vater (A1) er Table (A2) (A3) Ches (B1) (Nonrivering Deposits (B2) (Nonrivering Cracks (B6) Visible on Aerial Immined Leaves (B9) tions: Present? Present? Yesent?	ne required: ne) riverine) nagery (B7) s No.	check all that approximate and the control of the c	t (B11) ust (B12) nvertebrate n Sulfide Oc Rhizosphe of Reduce on Reduction k Surface ( plain in Re aches): aches):	dor (C1) res along I res along I d Iron (C4 on in Tilled C7) marks)	) d Soils (Co	Seconda  Wai Seconda  Seconda  Drif  Drif  Dra  ots (C3) Dry  Cra  6) Sat  FAC	ary Indicators (2 or more required) ter Marks (B1) (Riverine) timent Deposits (B2) (Riverine) t Deposits (B3) (Riverine) tinage Patterns (B10) -Season Water Table (C2) tyfish Burrows (C8) uration Visible on Aerial Imagery (C9 allow Aquitard (D3) C-Neutral Test (D5)



# U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-08-28: the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 06/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

roject/Site: COLLINGVILLE	City/County: S	Sampling Date: 6-25
pplicant/Owner: LS-POWER		State: A Sampling Point: SP-2
ivestigator(s). SIDNEY WELLS + CY RODRIG	AEZ Section, Township, F	Range: 00 3N 1E
		nvex, none): Slope (%): O
ubregion (LRR): C Lat: 38,07882	8 Long:	-121.835184 Datum: NAO 1
oil Map Unit Name: Valdez Silt Loan, drained	Oto 7 Malones, Mi	RA 16 NWI classification: FRESHWATER E
re climatic / hydrologic conditions on the site typical for this time		No (If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significan		
		explain any answers in Remarks.)
re Vegetation, Soil, or Hydrologynaturally of Hydrologynaturally of FINDINGS – Attach site map show		
Hydrophytic Vegetation Present? Yes No	Is the Sampled within a Wetlan	Area
Remarks:		
icinal ks.		
EGETATION – Use scientific names of plants.		
Absolut		
ree Stratum (Plot size:) % Cove	er Species? Status	Dominance Test worksheet:
		Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
	/	Total Number of Dominant Species Across All Strata: (B)
	=Total Cover	Percent of Dominant Species That
apling/Shrub Stratum (Plot size: )	=Total Cover	Percent of Dominant Species That
apling/Shrub Stratum (Plot size:)	=Total Cover	Percent of Dominant Species That
apling/Shrub Stratum (Plot size:)	=Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
	=Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:
	_=Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  OBL species  x 1 =
		Percent of Dominant Species That Are OBL, FACW, or FAC:         1002(A/E)           Prevalence Index worksheet:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =
	=Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:         IDOZAME           Prevalence Index worksheet:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =
erb Stratum (Plot size: Sen (A))		Percent of Dominant Species That Are OBL, FACW, or FAC:           Prevalence Index worksheet:           Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =           FACU species         x 4 =
rb Stratum (Plot size:		Percent of Dominant Species That Are OBL, FACW, or FAC:         IDOZA/6           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 =
Plot size: Sou ft) Rumax Orispus Vistic this collecta 100		Percent of Dominant Species That Are OBL, FACW, or FAC:         IDOZAME           Prevalence Index worksheet:         Multiply by:           Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =           FACU species         x 4 =
Rumey Orispus  Distictlis spicata  Brassica 3, 50 (higha?)		Percent of Dominant Species That Are OBL, FACW, or FAC:         JOOZA/E           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)
Rumey onspus  Plot size:	Z=Total Cover  FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:         JOOZA/E           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)
Rumex Orispus  Plot size: Son fil)  Rumex Orispus  Plotic flis collecta 100  Brassica? Sp. Chiga?  Centarrea Solstitialis (dual) 5  Lolium penenne	D=Total Cover  FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:         IDOZ(A/E)           Prevalence Index worksheet:         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)           Prevalence Index = B/A =
Rumer Orispus  Plot size: Son fil)  Rumer Orispus  Plotictlis coloata 100  Brassica? Sp. Chiga?  Centaurea Solstitialis (dual) 5  Lolium penenne 1  Horderm manum 2	Z=Total Cover  FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:
Rumex Orispus  Plot size: Son fil)  Rumex Orispus  Plotic flis collecta 100  Brassica? Sp. Chiga?  Centarrea Solstitialis (dual) 5  Lolium penenne	Total Cover  FAC  FAC  FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:
Rumex orispus  Plot size: Son fil)  Rumex orispus  Plotic flis coloata 100  Brassica? So. Chiga?)  Centavea Solstitialis duals  Lolium penenne 1  Horderm manunm 2	Total Cover  FAC  FAC  FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Document
Plot size: Say A)  Rumey Orispus  Distictlis spicata  Brassica? sp. Chiga?.)  Centairea Solstitialis and IS  Lolium penenne Horderm maninum  Tuncus sp. (Johlino?)  12	Z=Total Cover  FAC FAC FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:
Plot size:	Z=Total Cover  FAC FAC FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:
erb Stratum (Plot size:	Total Cover  FAC FAC FAC FAC FAC FAC FAC FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:
erb Stratum (Plot size: Say A)  Rumey crispus  Pistic + lis cricata  Brassica? sp. Chig(a?)  Centaurea Solstitialis (and) 15  Lolium prenenne  Horderm manimum  Tuncus sp. (Johlino?)  12	Z=Total Cover  FAC FAC FAC FAC	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:
erb Stratum (Plot size:	Total Cover  FAC  FAC  FAC  FAC  FAC  FAC  FAC  FA	Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:

TW-18

SOIL

	i lieeded to document the man	confirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	TOAIGIE
0-3.5 78482/1		Losa_
3.5-85 1871034 9/2	DVE 9/4 W OPL M	Sa
-10 to 10 -		
8.5-165 TXR4/6 93	TG YRYG 7 C M	Cal
D.5 100 18K 4/6 9/8	T.6 1846 T	50
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Iron-Manganese Masses (F12) (LRR D)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Reduced Vertic (F18)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Red Parent Material (F21)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)	Very Shallow Dark Surface (F22)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	
Sandy Mucky Mineral (S1)	<del>-</del>	
Sandy Gleyed Matrix (S4) <sup>3</sup> Indicators	s of hydrophytic vegetation and wetland h	ydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:		. /
Depth (inches):	77	Hydric Soil Present? Yes No
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
7.100.400.400.400.400.400.400.400.400.400	d, check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	d; check all that apply) Salt Crust (B11)	Secondary Indicators (minimum of two required) Water Marks (B1) (Riverine)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is require Surface Water (A1)	Salt Crust (B11)	Water Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is require  Surface Water (A1)  High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stalned Leaves (B9)	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stalned Leaves (B9)  Field Observations:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soi  Thin Muck Surface (C7)  Other (Explain in Remarks)  No X  Depth (inches):  No Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)  No X Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soi  Thin Muck Surface (C7)  Other (Explain in Remarks)  No	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soi  Thin Muck Surface (C7)  Other (Explain in Remarks)  No	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, mon	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soi  Thin Muck Surface (C7)  Other (Explain in Remarks)  No	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soi  Thin Muck Surface (C7)  Other (Explain in Remarks)  No	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, mon	Salt Crust (B11)  Biotic Crust (B12)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soi  Thin Muck Surface (C7)  Other (Explain in Remarks)  No	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No



## U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region

OMB Control #: 0710-0024, Exp: 06/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: COLLINS VILLE City/County: 56 U	
	ANO Sampling Date: 6-25-2
Applicant/Owner: 1 5 Vo. N.C.	State: Sampling Point: St
nvestigator(s): S val(1) ( ) CVA p() R1(suf 7. Section, Township, R	ange: 00 3N IE
andform (hillside, terrace, etc.): Qt. Local relief (concave, con	vex, none): Slope (%): 6
Subpagion (LDD): C 10 079413 Long:	-111 835468 Datum: NAVIT
oil Map Unit Name: VALDEZ SIH LOAM, drained, Oto 2 No Aboque, MURA)	L NWI classification, 190317
re climatic / hydrologic conditions on the site typical for this time of year?  Yes	No (If no, explain in Remarks.)
re Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal	Circumstances" present? Yes No
re Vegetation, Soil, or Hydrology naturally problematic? (If needed, e	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled A within a Wetland	Area d? YesNo
Wetland Hydrology Present? Yes No No	.11
Remarks: Revented to look for Dydrology 07-08-24. none	offered.
EGETATION – Use scientific names of plants.	
Absolute Dominant Indicator	
ree Stratum (Plot size:) % Cover Species? Status	Dominance Test worksheet:  Number of Dominant Species That
	Are OBL, FACW, or FAC:
	Total Number of Dominant Species Across All Strata: (B)
=Total Cover	Propert of Deminent Species That
Sapling/Shrub Stratum (Plot size:)	Are OBL, FACW, or FAC:
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
	OBL species x 1 =
	FACW species x 2 =
	FAC species x 3 =
( =Total Cover	TAC species
ero Stratum (Plot size: 554.4.)	
SCHOKNOPIKATUS GALIFORNICUS 15 N DBL	FACU species x 4 = UPL species x 5 =
SCHOKNOPIKATUS GALIFORNICUS 15 N DBL	FACU species x 4 = UPL species x 5 =
FRANKENA SALINA HENOTHORIAM CURASSAVICAM  FACT  FACT  FRANKENA SALINA  HENOTHORIAM CURASSAVICAM  5. N FACT	FACU species
FRANKENIA SALINA  HEND TROPIL M CURASSAVICUM  JANTHIMM STRUMA RIUM  FAC  FACT	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
FRANKENIA SALINA  FORM CHARSANICUM  FRANKENIA SALINA  FRANKENIA SALINA  FRANKENIA SALINA  FRANKENIA SALINA  FRANKENIA SALINA  FRANKENIA SALINA  FRANKENIA STRUMA RIUM  FRAC  PSEUDO CNAPHALIUM STRAMINEUM  FRAC  FRAC	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
FRANKENIA SALINA  FORM STRUM (Plot size: 559.H.)  FRANKENIA SALINA  FRANKENIA SALINA  FRANKENIA SALINA  FACU  FACU	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.01
FRANKENIA SALINA  FACTORINA SALINA  HELIO TROPILLA CARASSAVICAM  FACTORINA  F	FACU species
FRANKENIA SALINA  FORMER SALINA  FRANKENIA STRUMA RIUM  FRAC  FRANKENIA STRUMA RIUM  FRAC	FACU species
FRANKENIA SALINA  FRANKENIA SA	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting)
Hero Stratum (Plot size: 554.4.)  SCHOKNOPLECTMS GALIFORMICMS  FRANKENIA SALINA  HEMO TROPILL M CHRASSAVICUM  SANTHIUM STRUMA RIUM  PSEUDO CNAPHALIUM STAAMINEUM  DISTICHUS SPICATA  15  FAC  VANTHUS SPICATA  15  FAC  FAC  PAC  PAC  PAC  PAC  PAC  PAC	FACU species
Hero Stratum (Plot size: 554.4.)  SCHOKNOPLECTMS GALINGRATICMS  FRANKENIA SALINA  HENO TROPILL M CURASSAVICUM  SALINA  FACU  FACU  FACU  PSEUDO CNAPHALIUM STAAMINEUM  DISTICHUS SPICATTA  15  FAC  FAC  FAC  FAC  FAC  PSEUDO CNAPHALIUM STAAMINEUM  DISTICHUS SPICATTA	FACU species
Hero Stratum (Plot size: 554.H.)  SCHOKNOPLECTMS GALINGRATICMS  FRANKENIA SALINA  HENO TROPILLAM CURASSAVICUM  SANTHIMM STRUMA RIUM  PSENDO GNAPHALIUM STAAMINEUM  DISTICHUS SPICATA  15  VAC  VAC  PAC  PAC  PAC  PAC  PAC  PAC	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology mus
Hero Stratum (Plot size: SS4.H.)  SCHOKNOPLECTIVS CALIFORNICUS  FRANKENDA SALINA  HENO TROPILLAM CURASSAVICUM  ANTHINM STRUMA RIUM  PSEUDO CNAPHALIUM STAAMINEUM  OISTICHUS SPICATTA  Voody Vine Stratum  (Plot size: )	FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  Dominance Test is >50%  Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.

Remarks: Oridized Phisophers in the first lave me observed on tiny filmer roots but limited and hand to see once with Pulled a second contribute to look for more + again, land to tell if, note were alive & not 2000, only a few.

Depth (inches):

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

Saturation Present?

(includes capillary fringe)

Yes

Wetland Hydrology Present?

Note:
This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic Resources Delineation Report for more detail.

#### U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Arid West Region See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 06/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: City/County: Www	Sampling Date: 10-25-21
Applicant/Owner:	State: Sampling Point:
Investigator(s): Status Wells Clause Council Well Section, Township, Ra	nge: 3N 1E 23
Landform (hillside, terrace, etc.): Flot Local relief (concave, converge)	~
	-121. 837352 Datum: NAO 19
Soil Map Unit Name: DIABLO - AYAR CLAYS 7to 9 % slopes	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	No (If no, explain in Remarks.)
	ircumstances" present? Yes No
	plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point loc	cations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Yo No Is the Sampled A	100 BDF7 5 F73 LL
Hydric Soil Present? Yes No Within a Wetland?	Yes No No
Wetland Hydrology Present? Yes No No	+0 10 10 -0
Remarks: Strong indicators of Hydrophytic Vegetation and Landscape Sposition. Problematic Shydric sol like	by! Secondly ponded ood.
VEGETATION – Use scientific names of plants.	
Absolute Dominant Indicator	B. i. T. Association
Tree Stratum (Plot size:) % Cover Species? Status	Dominance Test worksheet:  Number of Dominant Species That
2,0	Are OBL, FACW, or FAC:
3,	Total Number of Dominant Species Across All Strata: (B)
4	Bound of Bouland Consider That
Sapling/Shrub Stratum (Plot size:)	Are OBL, FACW, or FAC:
1	Prevalence Index worksheet:
3.	Total % Cover of: Multiply by:
4.	OBL species x 1 =
5.	FACW species x 2 =
=Total Cover	FAC species x 3 =
Herb Stratum (Plot size: 5 67 17)	FACU species x4 =
1. CENTROMADIA PUNGENS 25 Y FACEN	UPL species x5 = (A)
2. DISTICHLIS SOIGATA 35 Y FAC	Column Totals: (A) (B)  Prevalence Index = B/A =
3. LOLIMM PERENNE S N FAC	Prevalence index - B/A -
5.	Hydrophytic Vegetation Indicators:
6	X Dominance Test is >50%
7.	Prevalence Index is ≤3.0 <sup>1</sup>
8.	Morphological Adaptations <sup>1</sup> (Provide supporting
(05 =Total Cover	data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size:)	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
16	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
	Hydrophytic Vegetation
% Bare Ground in Herb Stratum 32% % Cover of Biotic Crust 3%	Present? Yes No No
% Bare Ground in Herb Stratum 32 % Cover of Biotic Crust 3%  Remarks: Centromodon pungeno Spp. pungeno = FAC, C. por	my = FACW-> ! both FAC.

Profile Description: (Describe to the deposition Depth Matrix	oth needed to document the indicator of Redox Features	or confirm the absence of in	ndicators.)
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc	Texture	Remarks
0 111 -0 10 0	71		
0-14 248 211 100			
	0.0		
<del></del>	28	<del>-:                                    </del>	
		<del>-</del> (	
Type: C=Concentration, D=Depletion, RM Hydric Soil Indicators: (Applicable to all			n: PL=Pore Lining, M=Matrix.  or Problematic Hydric Soils <sup>3</sup> :
			<u>-</u>
Histosol (A1)	Sandy Redox (S5)		ck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)		ck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)		nganese Masses (F12) (LRR D)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Vertic (F18)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)		ent Material (F21)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)		allow Dark Surface (F22)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (E	xplain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	6	
Sandy Mucky Mineral (S1)			
Sandy Gleyed Matrix (S4) Indicat	ors of hydrophytic vegetation and wetland	hydrology must be present,	unless disturbed or problematic.
Restrictive Layer (if observed):			
Type: CLAY			\/
Depth (inches): O-14		Hydric Soil Present?	Yes No
ponded soil due to	estrutive day tays	Adled Soil. Ital	ly prasonally
HYDROLOGY			
Vetland Hydrology Indicators:			
Primary Indicators (minimum of one is requ	ired; check all that apply)	Secondary Ir	dicators (minimum of two required
Surface Water (A1)	Salt Crust (B11)	Water M	arks (B1) <b>(Riverine)</b>
High Water Table (A2)	Biotic Crust (B12)	Sedimer	t Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Dep	oosits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	— Drainage	e Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres on Living	Roots (C3) Dry-Sea	son Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)		Burrows (C8)
X Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled S		on Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B	7) Thin Muck Surface (C7)	Shallow	Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)		utral Test (D5)
ield Observations:			
Surface Water Present? Yes	No X Depth (inches):		
Vater Table Present? Yes	No Depth (inches):	<del>-</del>	11
Saturation Present? Yes	No Depth (inches):	─	Present? Yes No
(includes capillary fringe)		_	<del>(</del> -
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous insp	pections), if available:	
Remarks: Destre crust polygon	shaped up character	este exturned.	edges + darker
suface layer.	±°		81

Note:
This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic Resources Delineation Report for more detail.

#### U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Arid West Region See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 06/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

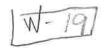
Gee ENDO/EE TIX 66 20, the properter	Ragono, io ozovi oori	
Project/Site: Collinguille	City/County:	am 0 Sampling Date: <u>676-26-24</u>
Applicant/Owner: US PIWEV		State: Sampling Point: &p-2
Investigator(s): Sidney wells, Christina P	odviaue 4 Section, Township, Ra	ange: 3N 1E Z3
Landform (hillside, terrace, etc.):		vex, none): Slope (%):
Subregion (LRR): Lat: 38.08	2532 Long:	-121.837631 Datum: NAO 1983
Soil Map Unit Name: TAMBA MUCKY CL	AY, MURA 16	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 Hydrologysig	gnificantly disturbed? Are "Normal C	Circumstances" present? Yes No
Are Vegetation, Soil , or Hydrology na	aturally problematic? (If needed, ex	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point lo	cations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Al within a Wetland?	
	ophytu Vegetation + 1 tre lydric soil likel	without hydrology as well or
VEGETATION – Use scientific names of pla	ants.	
Market Salari (AUD) 55	Absolute Dominant Indicator	B
Tree Stratum (Plot size:)	% Cover Species? Status	Dominance Test worksheet:
2.		Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
3.		Total Number of Dominant Species
4,		Across All Strata:
Sapling/Shrub Stratum (Plot size:)	=Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
1		Prevalence Index worksheet:
3.		Total % Cover of: Multiply by:
4.		OBL species x 1 =
5.		FACW species x 2 =
( ) C+ .	=Total Cover	FAC species x 3 =
1. Centro madia punaer	60 Y FACW)	FACU species x 4 = UPL species x 5 =
2. Distichlis spicata		Column Totals: (A) (B)
3. Hordem sp.	1 N FACCO)	Prevalence Index = B/A =
4.		
5		Hydrophytic Vegetation Indicators:
6		Dominance Test is >50%
7		Prevalence Index is ≤3.0¹  Morphological Adaptations¹ (Provide supporting
8	=Total Cover	data in Remarks or on a separate sheet)
Woody Vine Stratum (Plot size: )	-Total Gover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1		¹Indicators of hydric soil and wetland hydrology must
2.		be present, unless disturbed or problematic.
_	=Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % Co	over of Biotic Crust 2	Vegetation Present? Yes No
Marinem Set 10 Reature of	marinum CFAC) marinam, to	winum (FACU), likely marine

[W-19]

SOIL

Profile Description: (Describe to the depth	needed to document the indicator or	confirm the absence of in	dicators.)
Depth Matrix	Redox Features		
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-5 2.54 3/2 99 2	5 YR 5/8 1 C PUI	v Cl	
5-14 2.54 4/2		<u> </u>	
<del>-   -   -   -   -   -   -   -   -   -</del>			
	<del></del>	· · · · · · · · · · · · · · · · · · ·	
		( ) <u> </u>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=R	educed Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location	PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LR	Rs, unless otherwise noted.)	Indicators fo	r Problematic Hydric Soils³:
Histosol (A1)	Sandy Redox (S5)		k (A9) (LRR C)
Histic Epipedon (A2)	Stripped Matrix (S6)		k (A10) <b>(LRR B)</b>
Black Histic (A3)	Loamy Mucky Mineral (F1)	lron-Mang	ganese Masses (F12) (LRR D)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Reduced	Vertic (F18)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)		nt Material (F21)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)		low Dark Surface (F22)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	<u></u> ✓ Other (Ex	plain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)		
Sandy Mucky Mineral (S1)			
Sandy Gleyed Matrix (S4) <sup>3</sup> Indicators	of hydrophytic vegetation and wetland h	ydrology must be present, u	inless disturbed or problematic.
Restrictive Layer (if observed):			
Type: CLAY ,	_		\ /
Depth (inches):		Hydric Soil Present?	YesNoX
Hemarks: May be a recently poride position generally slopes	developed Wetland or is of sold due to restrict on 'downhill' along	time day lai	
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required	d; check all that apply)	Secondary Inc	dicators (minimum of two required)
Surface Water (A1)	Salt Crust (B11)	Water Ma	rks (B1) (Riverine)
High Water Table (A2)	Biotic Crust (B12)	Sediment	Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift Depo	osits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	Hydrogen Sulfide Odor (C1)	Drainage	Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres on Living F	Roots (C3) Dry-Seas	on Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfish E	Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled So	` ' —	No Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)		quitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-Neu	tral Test (D5)
Field Observations:	V		
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes	No Depth (inches):		<b>\</b> /
Saturation Present? Yes	No Depth (inches):	Wetland Hydrology Pr	resent? Yes No No
(includes capillary fringe)		1	
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspe	ctions), if available:	
Pamarke: M. + + A. A.	+ 1 2 22 2342	10m l: 1 1 1 1	- + · · · · ·
Remarks: operate aphemoral shoped by characteristic	yeturnal edges + de	The suface	layer tolygn

**Note:** This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic Resources Delineation Report for more detail.



### U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Arid West Region See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 06/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: COLLINS VILLE City/County: SUIS	UN CITY/SOLANOSampling Date: 6-26-
Applicant/Owner: L5 POWER	State: A Sampling Point: 5P-3
Investigator(s): 5. WELLS + C.Y. ROOKI GUE 7 Section, Township, Ra	nge: 00 3N 1E
Landform (hillside, terrace, etc.): Local relief (concave, conv	ex, none):NONE Slope (%):
Subregion (LRR): Lat: 38,082512 Long:	-121. 838496 Datum:
The state of the s	NWI classification: RIVERINE
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 Hydrologysignificantly disturbed? Are "Normal C	ircumstances" present? Yes X No
	plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point loc	cations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled All Hydric Soil Present? Yes No X within a Wetland?  Wetland Hydrology Present? Yes No No X	analysistem VIII to our to the
Remarks: Strong industry of Hydrophylic vegetation a	M. Janes J. Janes J. Janes J.
as landscope position. Proflematic lydic soil like	ely: Seosmally bonded soil.
VEGETATION – Use scientific names of plants.	7
Absolute Dominant Indicator  Tree Stratum (Plot size: ) % Cover Species? Status	Dominance Test worksheet:
1	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3.	Total Number of Dominant Species
4	Across All Strata:(B)
Sapling/Shrub Stratum (Plot size:) =Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
4.	OBL species x 1 =
5.	FACW species x 2 =
=Total Cover	FAC species x 3 =
Herb Stratum (Plot size: Dea H.)	FACU species x 4 =
1. JALICORNIA PARIFICA DU 20% Y OBL	UPL species x 5 = Column Totals: (A) (B)
2,	Column Totals: (A) (B)  Prevalence Index = B/A =
4.	
5.	Hydrophytic Vegetation Indicators:
6,	Dominance Test is >50%
7,	Prevalence Index is ≤3.0¹
8	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
Usedu Vine Stratum (Diet eize:	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum         (Plot size:)           1	¹Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
=Total Cover	Hydrophytic
2 of	Vegetation
% Bare Ground in Herb Stratum 🔏 🕦 "	Present? Yes No No
8 Bare Ground in Herb Stratum 80% % Cover of Biotic Crust 8 Remarks: Salicomia pacifica con hundle sulm con	detions.



Sampling Point: <u>\frac{5\rac{7}{3}}</u>

Profile Desc	ription: (Describe	to the dep	th needed to docu	ıment tl	he indica	tor or c	onfirm the absence o	of indicators.)
Depth	Matrix		Redo	x Featu				
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-16.5	7.5 YR 3/L	90	54R 4/10		C	M	CLAY	
<u> </u>								
								7
		: <del></del> 08				-		
					·/·	<del>10 31</del>		2.
<sup>1</sup> Type: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, C	S=Cove	ered or C	oated Sa		ation: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applica	ble to all	LRRs, unless othe	erwise n	oted.)		Indicator	s for Problematic Hydric Soils <sup>3</sup> :
Histosol	<u>(</u> A1)		Sandy Red	dox (S5)	)			Muck (A9) (LRR C)
Histic Ep	pedon (A2)		Stripped M	latrix (S	6)		2 cm	Muck (A10) (LRR B)
Black His	tic (A3)		Loamy Mu	cky Min	eral (F1)		Iron-l	Manganese Masses (F12) (LRR D)
Hydroger	Sulfide (A4)		Loamy Gle	eyed Ma	trix (F2)		Redu	iced Vertic (F18)
Stratified	Layers (A5) (LRR C	;)	Depleted N	Лatrix (F	-3)		Red	Parent Material (F21)
1 cm Mu	ck (A9) (LRR D)		Redox Dar	rk Surfa	ce (F6)		Very	Shallow Dark Surface (F22)
Depleted	Below Dark Surface	e (A11)	Depleted D	Dark Sur	rface (F7)	)	X Othe	r (Explain in Remarks)
Thick Da	rk Surface (A12)		Redox Dep	oression	is (F8)			
	ucky Mineral (S1)				, ,			
	eyed Matrix (S4)	<sup>3</sup> Indicate	ors of hydrophytic v	egetatio	n and we	tland hy	drology must be prese	ent, unless disturbed or problematic.
Restrictive L	ayer (if observed):							
Type:	CIAY					- 1		\/
Depth (in	ches):	16.5					Hydric Soil Present	? Yes No
Seems to have b	faint or "	y for	a time.	Seaso	mally	for	ded Soil. I due to restru	hely seasonally pondistive day layer.
HYDROLO(	GY		V					
Interview Control Co.	rology Indicators:		harmonia (17.10 m. Andromo antiquidos Chorolos I. al Chianne (1 al Chianne	000 to 100 to			40.00000-0004U	
Primary Indic	ators (minimum of o	ne is requi		-77				ry Indicators (minimum of two required)
Surface \	Vater (A1)		X Salt Crust					er Marks (B1) (Riverine)
High Wat	er Table (A2)		Biotic Crus					ment Deposits (B2) (Riverine)
Saturatio	` '		Aquatic Inv					Deposits (B3) (Riverine)
	arks (B1) <b>(Nonriveri</b>		Hydrogen				—	nage Patterns (B10)
	: Deposits (B2) (Nor	•	Oxidized R					Season Water Table (C2)
	osits (B3) (Nonriver	ine)	Presence of					fish Burrows (C8)
$\rightarrow$	Soil Cracks (B6)		Recent Iro			lled Soil		ration Visible on Aerial Imagery (C9)
Inundatio	n Visible on Aerial II	magery (B						ow Aquitard (D3)
Water-St	ained Leaves (B9)		Other (Exp	olain in F	Remarks)		FAC-	Neutral Test (D5)
Field Observ			V					
Surface Water	r Present? Ye	s			inches): _			
Water Table I	Present? Ye	s	<del></del>		inches):_			· · · · · · · · · · · · · · · · · · ·
Saturation Pr		s	No X	Depth (i	inches): _		Wetland Hydrolog	gy Present? Yes 📈 No
(includes cap								
Describe Rec	orded Data (stream	gauge, mo	onitoring well, aeria	i photos	, previous	s inspec	tions), if available:	
Remarks: \			y a		1( )	1.1. 0	Le N-I	to han comenting
(	nu betweek	1WV 9,	refine me	J.	Hard	/Brit	the out on	st from ivagoration Salicomia pocifica
		$\mathcal{O}$		0				7 - 7 - 3

This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic WETLAND DETER Resources Delineation Report for more detail.	ERMINATION DATA FORM	I – Arid West Region
•	City/County: Suis	SUNCITY/SOUND Sampling Date: 6-26-26
Applicant/Owner: \S POWEN		State: Sampling Point: S
Investigator(s): CY ROVRIGHEZ + S. W	JELLS Section, Township, R	Range: 23 3N IE
Landform (hillslope, terrace, etc.):	Local relief (concave	e, convex, none):Slope (%):
Subregion (LRR):	Lat: <u>38.082023</u> 7	817Long: -121,83828953/batum: <u>NAD 19</u>
Soil Map Unit Name: TAMBA MUCKY CUP	14	NWI classification:
Are climatic / hydrologic conditions on the site typical for t	this time of year? Yes <u></u> No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	_ significantly disturbed? Are	e "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	p showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wes  Yes  Wetland Hydrology Present?  Yes	No Is the Sample within a Wetl	ed Area and? Yes No X No X No X
Remarks: 5 Trans and entry of August	ronhistic, veretation	+ likely a without periodically y SEASON Proflematic lydin Soil
Ladang magness of welland	t 10 site to the	# # #
111	` \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	the withouts originate as will as
VEGETATION – Use scientific names of pla		
Tree Stratum (Plot size:) 1.	Absolute Dominant Indicator % Cover Species? Status	
2		Total Number of Dominant
3		Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
3.		OBL species x 1 =
4.		FACW species x 2 =
5		FAC species x 3 =
_ XX	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: Str. H.)	35 Y FAC	UPL species x 5 =
1. Distictlis spicator 2. Frankenia Salina	T N FACT	→ I Column Totals: (A) (D) I
3. Hordem Marining	- 90 Y FAE	Prevalence Index = B/A =
4. Colivos peverine	T N FAC	Hydrophytic Vegetation Indicators:
5		Prevalence Index is ≤3.0 <sup>1</sup>
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)
	127 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1 2		be present, unless disturbed or problematic.
W.D. 0	= Total Cover	Hydrophytic Vegetation Present? Yes No
% Darre Ground in Herb Stratum 9 % Co	in Cho of an in	Malara lalam Gura a a a la /
Species identified through for	miliarity; also possibly	broken blown away on all Specimens y Hardern muinum. The Durtifulis
Attiplies p. next to aren to be Sinch.	y W-20 salt on le	this + sand of an ordinaries

Sampling Point: 80 - 4

OIL									-
Profile Descrip	tion: (Describe t	o the dept	th needed to docu	ment the inc	dicator o	r confirm	the absence of i	ndicators.)	547
Depth	Matrix	0/		ox Features	Type1	Loc²	Texture	Remarks	
inches)	Color (moist)		Color (moist)		Type'	LOC		Remarks	
-0.5	54 3/1	99	OVR 5/6		<u> </u>	<u>M</u>			
	2:21								
3.5-10 /	1.54 P/2	loo					<u> </u>		
	*								
m171	10 YR 4/2	100					Call		
10.10	1012	100							
	7 - 5 11 1						A. A.		
2-15	2.574/2	100					614_		
	<u></u>						-		
ype: C=Conc	entration, D=Deple	etion, RM=	Reduced Matrix, C	S=Covered	or Coated	Sand Gr		n: PL=Pore Lining, M=Ma	
	icators: (Applica						Indicators for	Problematic Hydric Soils	3:
_ Histosol (A <sup>2</sup>	1)		Sandy Red				-	(A9) (LRR C)	
_ Histic Epipe	• •		Stripped M					(A10) (LRR B)	
Black Histic	` '			cky Mineral (			Reduced V	, ,	-100
Hydrogen S		`	Loamy Gle	eyed Matrix (F	-2) 1 au No	Lex.	Red Paren	t Material (TF2)	1. 32.0
	ayers (A5) ( <b>LRR C</b> ) (A9) ( <b>LRR D</b> )	)	Depleted in	rk Surface (F	6) 4	newtrole	Chher (Exp	iain in Remarks)	
	elow Dark Surface	(A11)		Dark Surface					- 1 Y S
	Surface (A12)	(/////	Redox Dep			when	<sup>3</sup> Indicators of hy	drophytic vegetation and	17 (PA)
Sandy Muc	ky Mineral (S1)	gen and the	Vernal Poo		11/2	,,,,,,	wetland hydr	ology must be present,	1143/2
Sandy Gley	ved Matrix (S4)	2					unless distur	bed or problematic.	
-	er (if present):								
Туре:	CLAY								
			<del></del> ;						
o marka:	s): <u>D-10</u>		nded soil	due to	restr	utive	Hydric Soil Pre	sent? Yes No	<u> </u>
emarks:	ely pravonal		nded soil	due to	restr	utive			<u> </u>
emarks:	es): 0-10		nded soil	due to	restr	utive			<u> </u>
DROLOGY etland Hydro	es): 0-10	ly po	- A 21 AA06	8 R ==	restr	utive	day lay	w.	
DROLOGY etland Hydro	es): 0-10	ly po	; check all that app		restr	utive	clay lay	v Indicators (2 or more req	
DROLOGY etland Hydro mary Indicato Surface Wa	ology Indicators: ors (minimum of onater (A1)	ly po	; check all that app	t (B11)	restr	utive	lay lay  Secondary  Water	v Indicators (2 or more req Marks (B1) (Riverine)	uired)
DROLOGY etland Hydro mary Indicate Surface Wa High Water	ology Indicators: ors (minimum of on ater (A1) Table (A2)	ly po	; check all that app Salt Crus Biotic Cru	t (B11)		utive	Secondan  — Water  — Sedin	/ Indicators (2 or more req Marks (B1) (Riverine) nent Deposits (B2) (Riverin	uired)
DROLOGY etland Hydro mary Indicate Surface Wa High Water Saturation (	ology Indicators: ors (minimum of on tater (A1) Table (A2) (A3)	lly po	; check all that app Salt Crus Biotic Cru Aquatic Ir	t (B11) ust (B12) nvertebrates	(B13)	utive	Secondary  — Water  — Sedin  — Drift E	v Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine)	uired)
DROLOGY etland Hydro mary Indicate Surface Wa High Water Saturation ( Water Mark	riogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (S (B1) (Nonriverir	ne required	; check all that app Salt Crus Biotic Cru Aquatic II Hydroger	t (B11) ust (B12) nvertebrates n Sulfide Odo	(B13) r (C1)		Secondary  — Water  — Sedin  — Drift D  — Drain	v Indicators (2 or more req Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) age Patterns (B10)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D	Alogy Indicators:  Ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A6) (A6) (A6) (A6) (A7) (A7) (A8) (A8) (A8) (A9) (A9) (A9) (A9) (A9) (A9) (A9) (A9	ne)	; check all that apr Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized	t (B11) ist (B12) invertebrates in Sulfide Odo Rhizosphere	(B13) r (C1) s along L	iving Roo	Secondary Water Sedim Drift E Draina	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) deposits (B10) deason Water Table (C2)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D	logy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	ne)	; check all that apr Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere	(B13) r (C1) s along L Iron (C4)	iving Roo	Secondary Water Sedim Drift E Draina	v Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) dege Patterns (B10) deason Water Table (C2) sh Burrows (C8)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi	ology Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	ne)	; check all that apr Salt Crus Biotic Crus Aquatic II Hydroger Oxidized Presence Recent Ir	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reduction	(B13) r (C1) s along L Iron (C4) ı in Tilled	iving Roo	Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Crayfi Satura	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) deposits (B10) deason Water Table (C2)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi	ology Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (S (B1) (Nonriverir (Deposits (B2) (Nonriverir (Deposits (B3) (Nonriverir (Deposits (B3) (Nonriverir (Deposits (B6) (Nonriverir (Deposits (Deposits (B6) (Nonriverir (Deposits	ne)	check all that approximate and selection of the content of the con	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere of Reduced on Reduction k Surface (C	(B13) r (C1) s along L Iron (C4) ı in Tilled 7)	iving Roo	Secondary  Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Satura Shallo	v Indicators (2 or more requirement Deposits (B2) (Riverine) deposits (B3) (Riverine) deposits (B3) (Riverine) deposits (B10) deason Water Table (C2) description Visible on Aerial Images	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stain	Ilogy Indicators: Description of one of the control	ne)	check all that approximate and selection of the content of the con	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reduction	(B13) r (C1) s along L Iron (C4) ı in Tilled 7)	iving Roo	Secondary  Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Satura Shallo	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) deposits (B3) (Riverine) deposits (B10) deason Water Table (C2) design of Market (C8) detion Visible on Aerial Image was Aquitard (D3)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stain	logy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Siotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc	t (B11) post (B12) pos	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	iving Roo	Secondary  Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Satura Shallo	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) deposits (B3) (Riverine) deposits (B10) deason Water Table (C2) design of Market (C8) detion Visible on Aerial Image was Aquitard (D3)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation V Water-Stain	Iss): O - 10  Is	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Siotic Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reductior k Surface (Complain in Remember):	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	iving Roo	Secondary  Water Sedin Drift E Draina ts (C3) Dry-S Crayfi Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) dege Patterns (B10) deason Water Table (C2) sh Burrows (C8) dation Visible on Aerial Image ow Aquitard (D3) Neutral Test (D5)	uired)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation V Water-Stain eld Observati	Ilogy Indicators:  ors (minimum of on atter (A1)  Table (A2) (A3) (A3) (S (B1) (Nonriverir (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	ne) riverine) nagery (B7	Salt Crus Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere of Reduced on Reductior k Surface (Ci cplain in Rem	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	iving Roo Soils (C6	Secondan  Water Sedim Drift D Draina ts (C3) Dry-S Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) ment Deposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Water Table (C2) meason Water Table (C3) meason Wisible on Aerial Image may Aquitard (D3) meason Water Test (D5)	uired)ne)
DROLOGY etland Hydro imary Indicate Surface Wa High Water Saturation ( Water Mark Sediment D Drift Deposi Surface Soi Inundation V Water-Stain eld Observati	Ilogy Indicators:	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Siotic Crus Aquatic In Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reductior k Surface (Complain in Remember):	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	iving Roo Soils (C6	Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Crayfi Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) deposits (B3) (Riverine) dege Patterns (B10) deason Water Table (C2) sh Burrows (C8) dation Visible on Aerial Image ow Aquitard (D3) Neutral Test (D5)	uired)ne)
PROLOGY  etland Hydro imary Indicate Surface Water Mark Sediment D Drift Deposi Surface Soi Inundation Water-Stain eld Observati urface Water F ater Table Presence Indudes capilla	Ilogy Indicators: ors (minimum of on ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Siotic Crus Aquatic In Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reductior k Surface (Complain in Remember):	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	iving Roo Soils (C6	Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Crayfi Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) ment Deposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Water Table (C2) meason Water Table (C3) meason Wisible on Aerial Image may Aquitard (D3) meason Water Test (D5)	uired)ne)
Processing of the presence of	Ilogy Indicators:	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Siotic Crus Aquatic In Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reductior k Surface (Complain in Remember):	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	iving Roo Soils (C6	Secondary  Water Sedim Drift D Draina ts (C3) Dry-S Crayfi Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) ment Deposits (B3) (Riverine) mage Patterns (B10) meason Water Table (C2) meason Water Table (C2) meason Water Table (C3) meason Wisible on Aerial Image may Aquitard (D3) meason Water Test (D5)	uired)ne)
Processor of the control of the cont	Ilogy Indicators:  ors (minimum of on ater (A1) Table (A2) (A3) Its (B1) (Nonriverir Deposits (B2) (Nonriverir Il Cracks (B6) Visible on Aerial Indicated Leaves (B9) Ilons: Present? Yellors: P	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Siotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11)  st (B12)  nvertebrates  n Sulfide Odo  Rhizosphere  of Reduced  on Reduction  k Surface (C  xplain in Rem  nches):  nches):  photos, prev	(B13) r (C1) s along L Iron (C4) n in Tilled 7) arks)	iving Roo Soils (C6 Wetla ections),	Secondary Water Sedim Drift E Draina ts (C3) Dry-S Satura Shalla FAC-I	Indicators (2 or more required Marks (B1) (Riverine) Inent Deposits (B2) (Riverine) Inent Deposits (B3) (Riverine) Inent Deposits (B10) Inequality (B10) Inequa	gery (C9)
Processor of the control of the cont	Ilogy Indicators:  ors (minimum of on ater (A1) Table (A2) (A3) Its (B1) (Nonriverir Deposits (B2) (Nonriverir Il Cracks (B6) Visible on Aerial Indicated Leaves (B9) Ilons: Present? Yellors: P	ne) riverine) nagery (B7	Salt Crus Salt Crus Biotic Cru Aquatic Ir Hydroger Oxidized Presence Recent Ir Thin Muc Other (Ex	t (B11) ust (B12) nivertebrates n Sulfide Odo Rhizosphere of Reduced on Reduction k Surface (Coplain in Rem nches): nches): photos, prev	(B13) r (C1) s along L Iron (C4) n in Tilled 7) arks)	iving Roo Soils (C6 Wetla ections),	Secondan  Water Sedim Drift D Drains ts (C3) Dry-S Crayfi Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) Inent Deposits (B2) (Riverine) Inent Deposits (B3) (Riverine) Inent Deposits (B10) Inent Deposits (B10) Inequality (B10) In	gery (C9)
Processor of the control of the cont	Ilogy Indicators:  ors (minimum of on ater (A1)  Table (A2)  (A3)  is (B1) (Nonrivering opposits (B2) (Nonrivering of on Aerial Interest (B3) (Nonrivering opposits (B4))  ions:  Present? Ye ent? Ye	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Solt Solt Crus Solt Solt Crus Solt Solt Solt Crus Solt Solt Solt Solt Solt Solt Solt Solt	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reduction k Surface (C cplain in Rem nches):	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	wetlate ections),	Secondary  Water Sedim Drift E Draina ts (C3) Dry-S Crayfi Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) ment Deposits (B2) (Riverine) ment Deposits (B3) (Riverine) ment Deposits (B10) meason Water Table (C2) meason Water Table (C2) meason Water Table (C2) meason Water Table (C3) meason Water Table (C5) meason Water Table (C6) meason Water Tabl	o X
Processing of the control of the con	Ilogy Indicators:  ors (minimum of on ater (A1) Table (A2) (A3) Its (B1) (Nonriverir Deposits (B2) (Nonriverir Il Cracks (B6) Visible on Aerial Indicated Leaves (B9) Ilons: Present? Yellors: P	ne) riverine) nagery (B7	Salt Crus Salt Crus Salt Crus Solt Solt Crus Solt Solt Crus Solt Solt Solt Crus Solt Solt Solt Solt Solt Solt Solt Solt	t (B11) ust (B12) nvertebrates n Sulfide Odo Rhizosphere e of Reduced on Reduction k Surface (C cplain in Rem nches):	(B13) r (C1) s along L Iron (C4) i in Tilled 7) arks)	wetlate ections),	Secondary  Water Sedim Drift E Draina ts (C3) Dry-S Crayfi Satura Shallo FAC-I	Indicators (2 or more required Marks (B1) (Riverine) Inent Deposits (B2) (Riverine) Inent Deposits (B3) (Riverine) Inent Deposits (B10) Inent Deposits (B10) Inequality (B10) In	o X

Note: This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic Resources Delineation Report for more detail.	ATA FORM – Arid West Region
Project/Site: City/Cou	unty: Swism City/Solano Sampling Date: 6-76-76
Applicant/Owner: V5 Power	State: CA Sampling Point: SP-5
Investigator(s): Status Walls Minth Ridger Section.	Township, Range: 3N IE Z3
Landform (hillslope, terrace, etc.):	
Subregion (LRR):	
Soil Map Unit Name: TAMBA MUCKY CLAY MILLA 16	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed	/
Are Vegetation, Soil, or Hydrology naturally problematic	
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Hydric Soil Present?  Wetland Hydrology Present?  Yes No  Yes No	s the Sampled Area within a Wetland?  Yes  No
Remarks: Strong indicators of hydrophytic Veo	etation and without bydrology as
well so loudsupe porten Proflemate	Leydin soil likely; scagonally
ponde	d soil.
VEGETATION – Use scientific names of plants.	
Absolute Domin	ant Indicator   Dominance Test worksheet:
Tree Stratum (Plot size:)	Status Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2,	Total Number of Dominant
3	Species Across All Strata: (B)
4	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	That Are OBL, FACW, or FAC: (A/B)
1	Prevalence Index worksheet:
2	
3,	OBL species x 1 = FACW species x 2 =
4	FAC species x 3 =
5	Cover FACU species x 4 =
Herb Stratum (Plot size: 559,FT.)	LIDI epocios y 5 =
1. Distriblis spicata	FAC   Column Totals: (A) (B)
2. Polypogon monospoliensis 5 Y	<u>raew</u>
3,	Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:
4	Dominance Test is >50%
5	Prevalence Index is ≤3.0¹
6	Morphological Adaptations <sup>1</sup> (Provide supporting
8.	data in Remarks or on a separate sheet)
$\mathcal{V}$ = Total	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1	be present, unless disturbed or problematic.
2	Cover Hydrophytic
	Vagatation
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Present? Yes X No
Remarks:	
V V	9

	_

Sampling Point: 51-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			Features				
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
							8B	
0-10	2,54 3/1	100					Clan	
'-				-			0	
			-					
l								6.1.0
10-15.2	25 104R3/2	100					Clay	Slight horizon of sand
							U	0 0
							)·———) ·	
							·	
r								
	Concentration, D=Depl					Sand G		ation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all LF	RRs, unless other	wise noted.	)		Indicators f	for Problematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Redo	x (S5)			1 cm M	uck (A9) (LRR C)
Histic E	Epipedon (A2)		Stripped Ma	trix (S6)			2 cm M	uck (A10) (LRR B)
Black F	Histic (A3)		Loamy Mucl	ky Mineral (F	1)		Reduce	d Vertic (F18)
	en Sulfide (A4)		Loamy Gley	ed Matrix (F	2)			rent Material (TF2)
	ed Layers (A5) (LRR C	;)	Depleted Ma				Other (E	Explain in Remarks)
	luck (A9) ( <b>LRR D</b> )		Redox Dark	•	•		,	
	ed Below Dark Surface	e (A11)	Depleted Da	,			2	
	ark Surface (A12)		Redox Depr					of hydrophytic vegetation and
	Mucky Mineral (S1)		Vernal Pools	s (F9)				ydrology must be present,
	Gleyed Matrix (S4)						unless dis	sturbed or problematic.
	Layer (if present):							
	CLAY		_					$\checkmark$
Depth (ir	nches):O - ] (	5.25					Hydric Soil F	Present? Yes No X
Remarks:	Thely seaso	00	1 1 '0	e . ==	-4	-1	. 0 .	9
	Likely seaso	nally 10	nded soil	due 4	5 res	men	m vay	sayer.
	)	Ο,					V	9
HYDROLC	OGY							
Wetland Hy	drology Indicators:							
large and	icators (minimum of or	ne required: o	check all that apply	1			Second	dary Indicators (2 or more required)
	e Water (A1)	TO TO GOT TO	X Salt Crust	7				ater Marks (B1) (Riverine)
			Biotic Crus					ediment Deposits (B2) (Riverine)
	ater Table (A2)			ertebrates (l	212)			ift Deposits (B3) (Riverine)
	ion (A3)	\						
	Marks (B1) (Nonriveri			Sulfide Odor		dan Dae		ainage Patterns (B10)
	ent Deposits (B2) (Non	-		hizospheres		ving Roc		y-Season Water Table (C2)
l . /	eposits (B3) (Nonriver	ine)		f Reduced I	, ,	2-11-701		ayfish Burrows (C8)
	e Soil Cracks (B6)			Reduction		Soils (Ct		turation Visible on Aerial Imagery (C9)
Inundat	tion Visible on Aerial Ir	magery (B7)		Surface (C7	•			nallow Aquitard (D3)
Water-S	Stained Leaves (B9)		Other (Exp	lain in Rema	ırks)		FA	C-Neutral Test (D5)
Field Obser	rvations:		. /	-	`			
Surface Wa	ter Present? Ye	esNo	Depth (inc	hes):	)			/
Water Table	e Present? Ye	es No	Depth (inc	hes):	)			$\checkmark$
Saturation F		es No	V /	1	)	Wetl	and Hydrology	Present? Yes No
	pillary fringe)			/;			,	10
	ecorded Data (stream	gauge, moni	toring well, aerial p	hotos, previ	ous inspe	ections),	if available:	
								s IVo
Remarks:		. 0	0 1	-1-	4	<b>t</b> -	- N	l m
	Brothe count i	is bookings	in should in	2 char	nema	anc.	yourned	leages anven
MAN	Aure laner	v. 9200	1 / Shittle.	golf cu	not 1	LAM	maprio	tion of soline
1	1	Post	/	2		//		11
	IV. ALALL	A N V I	VI 2-			V		V
SW	file waln.	1WN	Reverence			V	-	tion of soline

Note:
This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic Resources Delineation Report for more detail.

WETLAND DETERMINATION DATA FORM — Arid West Region

	_			
6	,	1	0	
λ.	W	-/-	4	V
~		4	-	-)

Project/Site: Collinsville	City/Cou	ntv: Suisun	City/Solanos	ampling Date: 07-07-24
Applicant/Owner: US Power				ampling Point: 5P-6
Investigator(s): Sidvley Wells, Christina Rodin	AVEZ Section.	Township, Range:	3N IE	23
Landform (hillslope, terrace, etc.):				Slope (%):
Subregion (LRR):	Lat: 38.08			312 Datum: NAW 198
Soil Map Unit Name: TAMBA MUCKY CLA				
Are climatic / hydrologic conditions on the site typical for this t		14		
Are Vegetation, Soil, or Hydrology sig				sent? Yes No
Are Vegetation, Soil, or Hydrology nat			d, explain any answers i	
SUMMARY OF FINDINGS – Attach site map si		•		
V				SW
	Is	the Sampled Are	a	V 11/25/24
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	w	ithin a Wetland?	Yes	No_X 11/25/24
Remarks:				
Tomano.				
VEGETATION – Use scientific names of plants				
	Absolute Domina % Cover Specie	0.1.1	ominance Test workshounder of Dominant Spec	
1,		INU	at Are OBL, FACW, or F	
3			tal Number of Dominant ecies Across All Strata:	1
4		Po	rcent of Dominant Spec	ies
Sapling/Shrub Stratum (Plot size:)	= Total		at Are OBL, FACW, or F	
1.		Pro	evalence Index worksh	neet:
2,			Total % Cover of:	Multiply by:
3				x 1 =
4				x 2 =
5				x 3 =
Herb Stratum (Plot size: 554.ft.)	= Total		-	x 4 = x 5 =
1. Rumen crispus	15 N	t-Ac		X3 (B)
2. Disticulis soicata	80 4	FAC	Juliii Totals.	
3. Brassica nigra	5 N			B/A =
4. Lepiaium latifolium	NN	100 D100000	drophytic Vegetation	
5			Dominance Test is >5	
6,			Prevalence Index is ≤	
7.			_ Morpnologicai Adapta data in Remarks oi	tions <sup>1</sup> (Provide supporting r on a separate sheet)
8	101		_ Problematic Hydrophy	rtic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	Total	Cover		
1				nd wetland hydrology must
2		be	present, unless disturbe	ed or problematic.
	= Total		drophytic getation	
% Bare Ground in Herb Stratum % Cover of		Pr	esent? Yes_	
seems alive. The dead forms a s would be due to wind based on	racly dead	aznotimo	tely 5 % AA	solute cover
reams alive. The dead lams a s	men In Ro	mat some	L to at L	exection, which.
well be due to wind based on	West out	totler al	ants	C-00/0/40 - 0/4000
When are once	2 30)	1-0	West of Table 18	

$\sim$	_	ш	
•	<i>1</i> 1		

Profile Description: (Describe to the de	pth needed to docum	ent the indicator	or confirm	the absence of	indicators.)	
Depth Matrix		Features				
(inches) Color (moist) %	Color (moist)	%Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-6 25/3/1 99	104R3/3		PU_	Clars		
0 0 213 17 11	<u> </u>			()		
	·					<del></del>
6-15.5 IDYR 4/2 939	75YR4/K	720 C	MPL	. CA		
0 1510 1011 12	1621	<u> </u>	- 11-			
<sup>1</sup> Type: C=Concentration, D=Depletion, RN	A-Dodugod Matrix CS:	-Covered or Cost	od Sand Gr	rains <sup>2</sup> l ocati	ion: PL=Pore Lining, M=Ma	atrix
Hydric Soil Indicators: (Applicable to al	I I PRe unless others	vise noted )	ed Sand Oi		r Problematic Hydric Soil	
			×		•	
Histosol (A1)	Sandy Redox				ck (A9) ( <b>LRR C</b> ) ck (A10) ( <b>LRR B</b> )	
Histic Epipedon (A2)	Stripped Mat			_		
Black Histic (A3)		y Mineral (F1)			Vertic (F18)	
Hydrogen Sulfide (A4)		ed Matrix (F2)			ent Material (TF2)	
Stratified Layers (A5) (LRR C)	Depleted Ma			Other (E)	xplain in Remarks)	
1 cm Muck (A9) (LRR D)	Redox Dark					
Depleted Below Dark Surface (A11)		rk Surface (F7)		31	hydrophytic vegetation and	
Thick Dark Surface (A12)	Redox Depre				drology must be present,	
Sandy Mucky Mineral (S1)	Vernal Pools	(F9)			urbed or problematic.	
Sandy Gleyed Matrix (S4)				uniess disti	urbed of problematic.	
Restrictive Layer (if present):						
Type:					✓	
Depth (inches): 0 0-15.5				Hydric Soil Pr	resent? Yes N	°
Remarks:					/	
[						
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one require	nd: check all that annly	\ <u></u>		Seconda	ary Indicators (2 or more rec	quired)
					er Marks (B1) (Riverine)	
Surface Water (A1)	Salt Crust (					inal
High Water Table (A2)	Biotic Crust				iment Deposits (B2) (River	ine)
Saturation (A3)		ertebrates (B13)			Deposits (B3) (Riverine)	
Water Marks (B1) (Nonriverine)		Sulfide Odor (C1)			inage Patterns (B10)	
Sediment Deposits (B2) (Nonriverine)	) Oxidized RI	nizospheres along	Living Roc	ots (C3) Dry-	-Season Water Table (C2)	
Drift Deposits (B3) (Nonriverine)	Presence o	f Reduced Iron (C	(4)	Cray	yfish Burrows (C8)	
Surface Soil Cracks (B6)	Recent Iron	Reduction in Tille	ed Soils (C6	6) Satu	uration Visible on Aerial Ima	agery (C9)
Inundation Visible on Aerial Imagery (I	37) ) Thin Muck :	Surface (C7)		Sha	llow Aquitard (D3)	
Water-Stained Leaves (B9)		ain in Remarks)		FAC	C-Neutral Test (D5)	
Field Observations:				4	-	1 4-
	No X Depth (inc	hes). O'		B60	· B7 not shony	melieus
		100.00				1 Aug
	No Depth (inc				2	X yey
	No Depth (inc	hes):	Weti	and Hydrology F	Present? Yes N	lo K Sarson
(includes capillary fringe)  Describe Recorded Data (stream gauge, m	nonitoring well, aerial n	hotos, previous in	spections).	if available:		
Bossibo (Goordon Bata (Stream gauge, II	.ctorning mon, donar p		1			
Remarks:	for cracks un	der dense	vesitati	no but low	hs to be possible	cont
men crusty + had potential	0. 1 ++	3.5 (3.55) NA	400kg	4.0	the some con p	
testprints causing lots of	indeniming of	CHANGE - 47WA	4	a data	a likel duana	RAIN Season
with Landrige prostion	indicate was	surface in	Jeves -	1	· and	makilli Siriki
	Toroted on the		without	& level	4 restrictive las	yen
ARL B NOTHWO MILLS CONSTITUTION	Cho or all little	T IV				

W-22)

## WETLAND DETERMINATION DATA FORM - Arid West Region

WEILAND DE		And Vest region
Project/Site: COLINS VILLE	City/County: S41	SUNCTY SOLAND Sampling Date: JULY 1, 2
		State: CA Sampling Point: 3P- I
Investigator(s): SWELLS + CYROLRIGUEZ	Section, Township	, Range: 3N IE 23
Landform (hillsland torrace ata):	Local relief (conca	ave convex none): MML Slone (%): Ø
Subregion (LRR):	Lat: 38.08247°	1 Long: -121.838864 Datum: NAD 1
Soil Man Unit Name: TAMBA MUCKY C	LAY MLIAIL	NWI classification: FRESHWATEREM
Are climatic / hydrologic conditions on the site typical fo	. 1	1 1 7 6 4 11
Are Veresteine Seil or Hydrology	eignificantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		(If needed, explain any answers in Remarks.)
		nt locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	- Is the Sam	A PRODUCT CONTROL OF THE CONTROL OF
Hydric Soil Present? Yes Wetland Hydrology Present? Yes		etland? Yes No
Remarks:	1 - <del>1</del> - 1	1:0
form/lever.	gher was ourse	nding area - maybe a
VEGETATION – Use scientific names of p	olants.	
	Absolute Dominant Indica	SHAND THE PROPERTY OF THE PROPERTY AND STREET AND STREE
<u>Tree Stratum</u> (Plot size:) 1	% Cover Species? Statu	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		── Total Number of Dominant \
3		Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1.		Prevalence Index worksheet:
2.		Total % Cover of: Multiply by:
3.		OBL species x 1 =
4.		FACW species x 2 =
5		FAC species x 3 =
<b>U</b> +	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: S meta)	1500 N	UPL species x 5 =
1. toenialum vulgare 2. Lepidium latifolium	2 % N +A	Column Totals: (A) (B)
3. Juneus Spp. (baltimo?)	90% V FAC	Prevalence Index = B/A =
4.		Hydrophytic Vegetation Indicators:
5		✓ Dominance Test is >50%
6		Prevalence Index is ≤3.0 <sup>1</sup>
7		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)		1
1		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum % 0	Cover of Biotic Crust	Vegetation Present? Yes No
Remarks: 1/2 tolonger found to 1 il	MUS SON OSTATIO	W. T Lot.
and on the botanial surveyo	completed for the pro	lly J. baltions or J. mexicanus
, , ,		

mpling Point: SP-1

Define the Control of			Sampling Point: SP
Profile Description: (Describe to the dept		confirm the absence	of indicators.)
Depth Matrix (inches) Color (moist) %	Redox Features	T	2
11/	Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture	Remarks
D-45 JOVE 2/1 100		losa_	<del>97 - 11</del>
4.5-15 2.5 4R3/2 100			
2/30 10 100		Sa	·
	· · · · · · · · · · · · · · · · · · ·		
			4.5
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=	Reduced Matrix CS=Covered or Coated S	Sand Grains 21 occ	ation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all I			or Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	The state of the s		
Histic Epipedon (A2)	Sandy Redox (S5)		uck (A9) (LRR C)
N. S.	Stripped Matrix (S6)		uck (A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)		d Vertic (F18)
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C)	Loamy Gleyed Matrix (F2)		rent Material (TF2)
1 cm Muck (A9) (LRR D)	Depleted Matrix (F3)	Other (E	Explain in Remarks)
Depleted Below Dark Surface (A11)	<ul><li>Redox Dark Surface (F6)</li><li>Depleted Dark Surface (F7)</li></ul>		
Thick Dark Surface (A12)		3,,,	
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		f hydrophytic vegetation and
Sandy Gleyed Matrix (S4)	Vernal Pools (F9)		ydrology must be present,
Restrictive Layer (if present):		uniess dis	turbed or problematic.
175 N W N			
Type:	,		$\checkmark$
Depth (inches):		Hydric Soil F	Present? Yes No
Remarks:	0 h 0 has /	0 - 0	+
Lanasage pour	looks to be a berm/	while result	or of surround
area.			J
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required;	check all that apply)	Sacand	ary Indicators (2 or more required)
		- Control	
Surface Water (A1)	Salt Crust (B11)		ter Marks (B1) (Riverine)
High Water Table (A2)	Biotic Crust (B12)		diment Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Dri	ft Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	— Hydrogen Sulfide Odor (C1)	Dra	inage Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Livi	ng Roots (C3) Dry	-Season Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Cra	yfish Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled So	oils (C6) Sat	uration Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)	The state of the s		allow Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)		C-Neutral Test (D5)
Field Observations:			
	o Depth (inches):		
MATERIAL CONTROL OF THE PROPERTY OF THE PROPER			. /
Water Table Present? Yes N		2002	X
	o Depth (inches):	Wetland Hydrology	Present? Yes No /
(includes capillary fringe)  Describe Recorded Data (stream gauge, mon	·	tions) if available:	
		nonsi, ii avalladie	
besome recorded bata (stream gauge, mon	itoring well, aerial photos, previous inspec	,	
	3		
	3		ما م
	3		under + mo signs
	3		under + no signs
	3		under + no signs

## WETLAND DETERMINATION DATA FORM - Arid West Region

[W22

VIETERIO DETERMINATION DATATORM	The Control of the Co
	IN CITY /SOLANO Sampling Date: 07-01-24
Applicant/Owner: US POWEY	State: Sampling Point:
Investigator(s): Sidvely Wells Christina Rodri quez Section, Township, Ra	ange: 3N 1E 23
Landform (hillslope, terrace, etc.): Flot Local relief (concave,	convex, none): None Slope (%):
Subregion (LRR): C Lat: 38.082455	Long: -121.839133 Datum: NAO198
Soil Map Unit Name: TAMBA MUCKY CLAY, MLRA 16	
Are climatic / hydrologic conditions on the site typical for this time of year? YesNo _	VACE TAIL
	"Normal Circumstances" present? Yes No
	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	
Hydrophytic Vegetation Present? Yes No Is the Sample	prints of
Hydric Soil Present?	×
Wetland Hydrology Present? Yes No within a Wetla	nd? Yes No
Remarks: Nedox and olidized Mugospheres along livers both put fauly 28 - therefore not strong undic	stors for both soil + hydrology.
VEGETATION – Use scientific names of plants.	¢b= ·
Absolute Dominant Indicator Tree Stratum (Plot size:)	Dominance Test worksheet:
1	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	Total Number of Dominant
3	Species Across All Strata: (B)
6 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 50 % (A/B)
Sapling/Shrub Stratum (Plot size:)  1	Prevalence Index worksheet:
2.	Total % Cover of: Multiply by:
3	OBL species x 1 =
4	FACW species x 2 =
5	FAC species x 3 =
	FACU species x 4 =
Herb Stratum (Plot size: SSQFT)  1. Lepidium latifilium 20 N FAC	UPL species x 5 =
1. lepidium latifilium 20 IV FAC 2. Heliotropium curassavicum 60 Y FACU	Column Totals: (A) (B)
3. Schoenoplectus americanus 25 V OBL	Prevalence Index = B/A =
4. dead sticks (maybe BrassicacEAE) 7	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50%
6	Prevalence Index is ≤3.0 <sup>1</sup>
7	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:	
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 = Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Present? Yes No No
Remarks: Heliotropium curassavicum very dense and S. In this ynothand area L. latifolium nonoculti potential area, may indicate invasion in s	americanus just starting.
In this y without area L. latifolder monoculti	ue nearby in the larger
potential area, may indicate invasion in 3	easonally spended march of

2011

ampling Boints < P-2

Color (moist) % Color (moist) % Texture Remarks  A CLO OKGANIC matter Visual  SACLO OKGANIC matter Visual  (Pg 7)  (Pg	rofile Description: (Describe to the de Depth Matrix		Features	.outor C		are absence	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Yest				Γ <u>γpe<sup>1</sup></u>	Loc <sup>2</sup>	Texture	
// Jacobiom. De-Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### Cocation: PL=Pore Lining, M=Matrix.  ### dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  ### Histo Epipedon (A2)  ### Bisack (H3)  ### Listo Epipedon (A2)  ### Sandy Redox (S5)  ### Listo Epipedon (A2)  ### Stratified Layers (A5) (LRR C)  ### Depleted Matrix (F3)  ### Depleted Gelew Dark Surface (A11)  ### Depleted Below Dark Surface (A11)  ### Depleted Dark Surface (F7)  ### Thick Dark Surface (A12)  ### Redox Depressions (F8)  ### Sandy Metoy Mineral (S1)  ### Sandy Metoy Mineral (S1)  ### Sandy Redox Matrix (S2)  ### Sandy Redox Matrix (S2)  ### Sandy Redox Matrix (S2)  ### Sandy Redox Matrix (S3)  ### Sandy Redox Matrix (S4)  ### Sandy Matrix Matrix (S4)  ### Sandy Redox Matrix (S4)  ### Sandy Redox Matrix (S4)  ### Sandy Redox Matrix (S4)  ### Sandy Matrix Matrix (S4)  ### Sandy	)-5 754R2.5/ 100			-		SACLLO	Organic motter visuals
Histoso (A1) Histoso (A2) Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogon Sulfide (A4) Loamy Mucky Mineral (F2) Stratified Layers (A5) (LRR C) Loamy Mucky Mineral (F1) Hydrogon Sulfide (A4) Loamy Gleyed Matrix (F2) Loamy Gleyed Matrix (F2) To minuck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Derk Surface (A11) Depleted Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)  Wernal Pools (F9)  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Surface Water (A1) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Hydrosoits (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inudes Capillary Present? Yes No Depth (inches):  Depth (inches):  Secondary Indicators (B10) Drift Deposits (B2) (Nonriverine) Presence of Reduced Iron (C4) Sufficion Saturation Visible on Aerial Imagery (C9) Inudes Capillary Present? Yes No Depth (inches):  Depth (inches):  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Depth (inches):  Wetland H	-10 IONE 4/1 95	7.5483/4	5	<u>C</u>	M	SAND	C/off masses 7 such s
Indicators (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A1) Histosol (A1) Histosol (A2) Black Histic (A3) Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Redox Dark Surface (F8) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Hydric Soil Present? Depth (inches):							widehoutles
Histosoi (An) Histosoi (An) Histosoi (An) Sandy Redox (S5) Histosoi (An) Sandy Redox (S5) Black Histic (An) Black Histic (An) Histosoi (An) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Moleral (F1) How Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S2) Sandy Mucky	Double Composition De Doubling Ph	- ————————————————————————————————————		r Coate		rains <sup>2</sup> l or	eation: PI =Pore Lining M=Matrix
Histosol (A1)  Sandy Redox (S5)  White Epipedon (A2)  Histo Epipedon (A2)  Stripped Matrix (S8)  Straitifed Layers (A5) (LRR B)  Reduced Vertic (F18)  Hydrogen Sulfide (A4)  Loamy Mucky (Mineral (F1)  Redox Dark Surface (F2)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Redox Dark Surface (F3)  Depleted Below Dark Surface (A11)  Pedox Dark Surface (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Hydric Soil Present?  Proper  Hydric Soil Present?  Water Sandy And Surface (A12)  Redox Dark Surface (F3)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Redox Dark Surface (F8)  Popht (inches):  Bark Surface (A12)  Secondary Indicators (2 or more required)  Secondary Indicators (2 or more required)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Yes Surface (A12)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C8)  Saturation Visible on Aerial Imagery (C9)  Inundation Visible on Aerial Imagery (C9)  Inundation Visible on Aerial Imagery (C9)  Inundation Visible on Aerial Imagery (C9)  Thin Muck Surface (T)  Wettand Hydrology Present?  Yes No Depth (inches):  Diversion Present?  Yes No Depth (inches):  Wettand Hydrology Present?  Yes No Depth (inches):  Wettand Hydrology Present?  Yes No Depth (inches):  Over Table Present?  Yes No Depth (inches):  Presence of Reduced Iron (C4)  Wettand Hydrology Present?  Yes No Depth (inches):  No Depth (inc					J Gariu G		
Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Repair Material (TF2) Depleted Matrix (F3) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9 (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9 (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9 (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9 (LRR C) Depleted Dark Surface (F6) Depleted Below Dark Surface (A12) Redox Depressions (F8) 1 sandy Mucky Mineral (S1) Vernal Pools (F9) Wetland hydrology must be present, unless disturbed or problematic. 1 strictive Layer (if present): 1		. /			200	1 cm N	Muck (A9) (LRR C)
Hydrogen Sulfide (A4)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F2)  Depleted Matrix (F2)  Depleted Matrix (F2)  Depleted Matrix (F2)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (A12)  Redox Dark Surface (F7)  Thick Dark Surface (A12)  Redox Dark Surface (F7)  Redox Dark Surface (A12)  Redox Dark Surface (A12)  Redox Daressions (F8)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sartifictive Layer (if present):  Type:  Depth (inches):  Secondary Indicators (2 or more required)  Secondary Indicators (2 or more required)  Secondary Indicators (B3) (Riverine)  Depth (Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Water Marks (B1) (Nonriverine)  Presence of Reduced Iron (C4)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Think Muck Under Present?  Yes No Depth (inches):  Depth (inches):  Redox Dark Surface (F7)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Hydric Soil Present?  Yes No Depth (inches):  No Depth (inches):  Redox Darks (F8)  Redox Darks (F8)  Section of hydrophytic vegetation and wetland hydrology Present? Pes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  No D	The state of the s						
Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks)  1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Bellow Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Sandy Mucky Matrix (S4) Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if present): Type: Depth (inches):  marks:  marks:  Matrix Answar of Z and Last 2th Matrix (F2) And Answar An	Black Histic (A3)	Loamy Muck	ky Mineral (F	1)		Reduc	ed Vertic (F18)
Cern Muck (A9) (LRR D)				2)			
Depleted Below Dark Surface (A11)						Other	(Explain in Remarks)
Thick Dark Surface (A12)	7. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.						
Sandy Mucky Mineral (S1)						31-4:	of hudernhutic variation and
Sandy Gleyed Matrix (S4)  unless disturbed or problematic.  tricitive Layer (if present):  [Pype:		The second secon					
trictive Layer (if present):  Type:  Depth (inches):  Dep		vernal Pools	s (F9)				그래마 그로 아무리 아이들 아내는 이 바이다.
Type:	The state of the s					1 11000 0	
marks: Matrix chroma of 2 and listed to the commentation of the co		<del></del>					201 12010
tland Hydrology Indicators:  mary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Salt Crust (B12)  Saturation (A3)  Water Marks (B1) (Riverine)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Riverine)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Depth (inches):  Surface Water Present?  Yes  No  Depth (inches):  Depth (inches):  Surface Wetland Hydrology Present?  Wetland Hydrology Present?  Yes  No  Depth (inches):  Surface (Sr evaluations), if available:							
Secondary Indicators:    Mary Indicators (minimum of one required: check all that apply)   Secondary Indicators (2 or more required)		Zor les.	+ 2% 1	udex	ance		
Secondary Indicators (2 or more required)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Sediment Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Water Marks (B1) (Nonriverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B3) (Riverine)  Sediment Deposits (B3) (Riverine)  Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B3) (Nonriverine)  Fresence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Depth (inches):  Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drainage Patterns (B10)  Drainage Patterns (B10)  Drainage Patterns (B10)  Drainage Patterns (B10)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves  No  Depth (inches):  Depth (inches	marks: Mature chroma of more than 20% - en visually soil texture	Z or less.	+ 2% 1 redox ~(p.29).	when wind not d	uner		ani water at ourful
Sulface Water (A1) Salt Crust (B11) Water Marks (B1) (Riverine)  High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine)  Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Voidzed Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)  Drift Deposits (B3) (Nonriverine)	marks: Matrix chroma of more than 20% - en visually-soil texture DROLOGY	Z or less.	÷ 2% 1 redox ~(p.29).	when wind not d	uner		ani water at ourfue
High Water Table (A2)  Saturation (A3)  Mater Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Mater Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Sediment Deposits (B3) (Nonriverine)  Mater Marks (B1) (Nonriverine)  Sediment Deposits (B3) (Nonriverine)  Mater Marks (B1) (Nonriverine)  Presence of Reduced Iron (C4)  Presence of Reduced Iron (C4)  Sediment Deposits (B3) (Riverine)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Mater-Stained Leaves (B9)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Wetland Hydrology Present?  Yes  No  No  No  No  No  No  No  No  No  N	marks: Matrix chroma of more than 20% - en visually soil tyture DROLOGY tland Hydrology Indicators:			vision d	ine	ntrations Itigh or due to CI	some mot much game motter at ourface Lo often incorclusions sorty 50,15 And w
Saturation (A3)	narks: Matrix chroma of more than 2000 - len Visually soil type.  DROLOGY tland Hydrology Indicators:  nary Indicators (minimum of one require	ed; check all that apply	y)	viol not d	the.	ntrations Itigh or due to CI	sony soils  Sony soils  Sony soils  And w
Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Depth (inches):  Depth (inches):  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves No Depth (inches):  Depth (inches):  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves No Depth (inches):  Depth (inches):  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Ves No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Agriculture Test (D5)  No Depth (inches):  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Agriculture Test (D5)  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Agriculture Test (D5)  Dry Ordination Visible on Aerial Imagery (C9)  Shallow Agriculture Test (D5)  Dry Ordination Visible on Aerial Imagery (C9)  Dry Ordination Visible on Aerial Imagery (C9)  Dry Ordination Visible on Aerial Imagery (C9)  Dry Ordination Visible on Aer	DROLOGY tland Hydrology Indicators: nary Indicators (minimum of one require Surface Water (A1)	ed; check all that apply	(B11)	viol not d	une.	ntrations Itigh and due to CI  Secon	though not much game watter at our free LO often incorclusive Santy 50,15 And w
Sediment Deposits (B2) (Nonriverine)  Diff Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Id Observations:  face Water Present?  Test Water Table Present?  Yes No Depth (inches):  Dep	DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2)	ed; check all that apply Salt Crust ( Biotic Crus	(B11) t (B12)		une	Itigh or CI  Secon	though not much game watter at our face.  Somy 5015  Somy 5015  And w  And w  And w  And w  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4)	DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3)	ed; check all that apply  Salt Crust ( Biotic Crus  Aquatic Inv	(B11) t (B12) rertebrates (I	B13)	ine	Itigh or due to CI  Secon  Secon  Secon  D	though not much gone with at ourface  somy 50/15  Samy 50/15  And w  Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  rediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)
Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Id Observations: face Water Present? Yes No Depth (inches): Depth (inches): Depth (inches): Uration Present? Yes No Depth (inches): U	DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	ed; check all that apply  Salt Crust ( Biotic Crus  Aquatic Inv	(B11) t (B12) vertebrates (I Sulfide Odor	B13) (C1)		Itigh or CI  Secon  Secon  D  D	and mot much of our free with at our free with at our free with a tour fre
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3)  Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Id Observations:  face Water Present? Yes No Depth (inches): Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Yes No No Yes No Yes No	DROLOGY  tland Hydrology Indicators: nary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R	(B11) t (B12) rertebrates (I Sulfide Odor hizospheres	B13) (C1) a along L	iving Roc	Itigh or CI  Secon  Secon  Secon  Dots (C3)  Dots (C3)	and Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rainage Patterns (B10)  rry-Season Water Table (C2)
Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  Id Observations:  face Water Present?  Yes No Depth (inches):  Outher (Explain in Remarks)  Outher (Explain in	DROLOGY  tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of	(B11) t (B12) rertebrates (I Sulfide Odor hizospheres of Reduced I	B13) (C1) along L ron (C4	Living Roo	Secondary CI  Se	and watter at our fue.  Somy Soil S  And w  Indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  wrift Deposits (B3) (Riverine)  rainage Patterns (B10)  ray-Season Water Table (C2)  trayfish Burrows (C8)
Id Observations:  face Water Present? Yes No Depth (inches):	DROLOGY tland Hydrology Indicators: mary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co	(B11) t (B12) rertebrates (I Sulfide Odor hizospheres of Reduced II n Reduction	B13) (C1) along L ron (C4 in Tilled	Living Roo	Secondary CI  Se	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  varinage Patterns (B10)  ory-Season Water Table (C2)  crayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)
face Water Present? Yes No Depth (inches): Wet Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Yes No Depth (inches): Yes No No Depth (inches): Wetland Hydrology Present? Yes No	DROLOGY  tland Hydrology Indicators: nary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Thin Muck	(B11) t (B12) vertebrates (I Sulfide Odor hizospheres of Reduced In n Reduction Surface (C7	B13) (C1) along L ron (C4 in Tilled	Living Roo	Secondary CI  Se	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  rediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rianage Patterns (B10)  ry-Season Water Table (C2)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
ter Table Present? Yes No Depth (inches):	DROLOGY  tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E) Water-Stained Leaves (B9)	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Thin Muck	(B11) t (B12) vertebrates (I Sulfide Odor hizospheres of Reduced In n Reduction Surface (C7	B13) (C1) along L ron (C4 in Tilled	Living Roo	Secondary CI  Se	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  rediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rianage Patterns (B10)  ry-Season Water Table (C2)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
uration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	DROLOGY  tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9)	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Thin Muck Other (Exp	(B11) t (B12) ertebrates (I Sulfide Odor hizospheres of Reduced II n Reduction Surface (C7 lain in Rema	B13) (C1) along L ron (C4 in Tilled	Living Roo	Secondary CI  Se	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  rediment Deposits (B2) (Riverine)  rift Deposits (B3) (Riverine)  rianage Patterns (B10)  ry-Season Water Table (C2)  rayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)
scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOGY  tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E) Water-Stained Leaves (B9) Id Observations: face Water Present?  Yes	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) It (B12) Pertebrates (If Sulfide Odor hizospheres of Reduced In Reduction Surface (C7 lain in Remaches):	B13) (C1) along L ron (C4 in Tilled	Living Roo	Secondary CI  Se	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  irrit Deposits (B3) (Riverine)  irritage Patterns (B10)  irry-Season Water Table (C2)  irrayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)
marks: observed along living vroots, but very low percentage overall	DROLOGY  tland Hydrology Indicators: mary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Water-Stained Leaves (B9)  Id Observations: face Water Present?  ter Table Present?  yes  uration Present?  Yes  uration Present?  Yes	ed; check all that apply  Salt Crust ( Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Thin Muck Other (Exp	(B11) t (B12) rertebrates (I Sulfide Odor hizospheres of Reduced In Reduction Surface (C7 lain in Rema	B13) (C1) along L ron (C4 in Tilled	Living Roo Soils (Co	Secondary CI  Se	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  irrith Deposits (B3) (Riverine)  irrainage Patterns (B10)  irry-Season Water Table (C2)  irrayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)
	DROLOGY  Italiand Hydrology Indicators:  mary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bay Water-Stained Leaves (B9)  Ind Observations:  Iface Water Present?  Inter Table Present?  Iter Table Present?	ed; check all that apply  Salt Crust ( Biotic Crus  Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Thin Muck Other (Exp	(B11) It (B12) Pertebrates (If Sulfide Odor hizospheres of Reduced In Reduction Surface (C7 lain in Remaithes):	B13) (C1) s along L ron (C4 in Tilled ) arks)	Living Roo ) SAVEL   Soils (Co	Secondary Colors (C3)	indary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  ediment Deposits (B2) (Riverine)  irrith Deposits (B3) (Riverine)  irrainage Patterns (B10)  irry-Season Water Table (C2)  irrayfish Burrows (C8)  aturation Visible on Aerial Imagery (C9)  hallow Aquitard (D3)  AC-Neutral Test (D5)

W-22

Project/Site: COLLINS VILLE	City/County: 54154	W CITY /SOLANO Sampling Date: JULY 1 2024
Applicant/Owner: LS POWER		State: CA Sampling Point: SP - 3
Investigator(s): S.WELLS + CY. POPRIGO		
Landform (hillslope, terrace, etc.):		
		Long: _121.8399 4Z Datum: NAV 198
	V- 10	
		NWI classification: THE HUMTER EMERCH
Are climatic / hydrologic conditions on the site typical for the	nis 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 ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point I	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sampled	I Area
Hydric Soil Present? Yes	No within a Wetlan	nd? Yes No
	NO	400
Remarks: Strong undicators of he problematic degline soil libilly se	asorally pooled.	an & without hydrology.
VEGETATION – Use scientific names of pla	nts.	
	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
1		Prevalence Index worksheet:
2.		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
_	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: SSAFT)  1. Schoe no plectus acutus	45 X OBL	UPL species x 5 =
2. Polypagan monspeliensis	70 V Fac w	Column Totals: (A) (B)
3. Heliotropium cupassaviam	5 N FACY	Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
4 5		Dominance Test is >50%
6.		Prevalence Index is ≤3.0¹
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8.		data in Remarks or on a separate sheet)
	70 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)		/
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
% Bare Ground in Herb Stratum	= Total Cover	Hydrophytic Vegetation Present? Yes No
Remarks:	· · · · · · · · · · · · · · · · · · ·	
	¥ II	
	in Comment	

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SOIL			Sampling Point:
Profile Description: (Describe to the depth needed to docu		onfirm the absence of in	dicators.)
Depth         Matrix         Red           (inches)         Color (moist)         %         Color (moist)	ox Features %Type <sup>1</sup> L	oc² Texture	Remarks
0-4 7.54RZ5/1 100		SANDY CLAY	
4-14 10YR 3/1 100		SAND	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, C	S=Covered or Coated S	and Grains. <sup>2</sup> Location	ı: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to all LRRs, unless other			Problematic Hydric Soils <sup>3</sup> :
Hydrogen Sulfide (A4)  Stratified Layers (A5) (LRR C)  1 cm Muck (A9) (LRR D)  Depleted Below Dark Surface (A11)  Loamy Gle  Depleted M  Redox Dar  Depleted D	latrix (S6) cky Mineral (F1) byed Matrix (F2) Matrix (F3) ck Surface (F6) Dark Surface (F7) bressions (F8)	2 cm Muck Reduced Ve Red Parent Other (Expl	(A9) (LRR C) (A10) (LRR B) ertic (F18) Material (TF2) ain in Remarks) drophytic vegetation and blogy must be present,
Sandy Gleyed Matrix (S4)	<b>V</b>		ped or problematic.
Restrictive Layer (if present):			,
Type: SANDY CLAY			. /
Depth (inches):		Hydric Soil Pres	ent? Yes No_X
parley require aufore layer = randometric Company for Seagmally  YDROLOGY	y day > do I Ponded pro	g could present bydin	e soil.
Vetland Hydrology Indicators:			
rimary Indicators (minimum of one required; check all that app	ls/)	Secondary	Indicators (2 or more required)
Surface Water (A1) Salt Crus High Water Table (A2) Biotic Cru Saturation (A3) Aquatic Ir Water Marks (B1) (Nonriverine) Hydroger Sediment Deposits (B2) (Nonriverine) Oxidized Drift Deposits (B3) (Nonriverine) Presence Surface Soil Cracks (B6) Recent In Inundation Visible on Aerial Imagery (B7) Thin Muc Water-Stained Leaves (B9) Other (Ex	t (B11)	Water Sedim Drift Do Draina ng Roots (C3) Dry-Se Crayfis sils (C6) Satura Shallon	Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10) eason Water Table (C2) th Burrows (C8) tion Visible on Aerial Imagery (C9) w Aquitard (D3) eutral Test (D5)
Field Observations:	- X		
rurface Water Present?  Yes No _X Depth (in No _X No _X Depth (in No _X No _X			
Saturation Present? Yes No Depth (in cludes capillary fringe)		51 (250497)	sent? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	* · · · · · · · · · · · · · · · · · · ·		cline print and
similar vegetation, just mor	e Sacutus	and for	grownd.

## WETLAND DETERMINATION DATA FORM - Arid West Region

W-2Z)

Project/Site: COLUINS VILLE City/County: S4154	W CITY/SOLAND Sampling Date: 7-9-24
Applicant/Owner: LS POWER	State: Sampling Point: SP - 4
Investigator(s): CY RODRIGUEZ + 5 WELLS Section, Township, Rai	
	,
Landform (hillslope, terrace, etc.):	-17   PU > 7 5 10pe (%):
Subregion (LRR):	
Soil Map Unit Name: TAMBA MUCKY CLAY, MURGA 16	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	2/
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point le	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Yes X No Is the Sampled	
is the Sampled	
Wetland Hydrology Present? Yes No within a Wetlan	nd? Yes NoX
Remarks: In the larger sotential without area, Les	military milotible miles
monoculture may be Manging the buydrology &	can be associated up slightly
Super areas of Elevation!	
VEGETATION – Use scientific names of plants.	
Absolute Dominant Indicator Tree Stratum (Plot size:)	Dominance Test worksheet:
	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
1	mat Ale OBE, I AOW, OI I AO(A)
3	Total Number of Dominant Species Across All Strata: (B)
4.	
= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum (Plot size:)	Prevalence Index worksheet:
1	Total % Cover of: Multiply by:
3	OBL species x1 =
4.	FACW species x 2 =
5.	FAC species x 3 =
= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: SSRFT.)	UPL species x 5 =
1. LEPIDIUM LATIFOLIUM 80 FAC	Column Totals: (A) (B)
2. POLYPOGON MONOSPELIENSIS 10 N FACEW	
3. DISTICHLIS SPICATA 35 Y FAC	Prevalence Index = B/A =
4	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50% Prevalence Index is ≤3.0¹
6	Morphological Adaptations <sup>1</sup> (Provide supporting
7	data in Remarks or on a separate sheet)
8	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Hydrophytic Vegetation Present? Yes No
agridum dauforum invaria area / w	
and likely & slightly light alevation I bridging	over up hydrology (potential
without area).	,

-	-	
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SOIL	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator	or confirm the absence of indicators.)
Depth Matrix Redox Features	N *
(inches) Color (moist) % Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
	tull of note + plant material
0-3.5 64 2.5/1	SA CL
3515 54 3/1 99 7.54R 4/8 1 C	M SAND
2 15 5 7 7 1 1 2:0 1/10 1 5	- I Shar
<del></del>	
	· ·
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coate	ed Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2) Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	
Depleted Below Dark Surface (A11) Bepleted Dark Surface (A12) Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Restrictive Layer (if present):	0
Type: SANDY CVAY	
Depth (inches): 0 - 3.5	Hydric Soil Present? Yes No
heart vituative layer & voto a plant noticial	
YDROLOGY	2
Vetland Hydrology Indicators:	ø
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Salt Crust (B11)	Water Marks (B1) (Riverine)
High Water Table (A2) Biotic Crust (B12)	Sediment Deposits (B2) (Riverine)
Saturation (A3) Aquatic Invertebrates (B13)	Drift Deposits (B3) (Riverine)
Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along	
Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C-	
Surface Soil Cracks (B6) Recent Iron Reduction in Tille	
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Other (Explain in Remarks) iteld Observations:	FAC-Neutral Test (D5)
surface Water Present? Yes No Depth (inches):	
	_
Vater Table Present? Yes No/ Depth (inches):	-
Saturation Present? Yes No/_ Depth (inches): includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins	spections), if available:
Remarks: an-the immediate surganding areas that	Inde were tation the number out
cracks are apprent as well as the solt and +	
withouts in the ones, Hydrology not observed in	
or lendium latifalium monosulture.	NWI Riverne.

W-2Z

Project/Site: OKNINS MIC		AIKUN City SOLAND Sampling Date: 07-08-24
\ / 0 - • • /		11 0
Applicant/Owner: Sidway Wells, Mystina Radviace		
		~
		ave, convex, none): None Slope (%):
		Long: -121. 840 606 Datum: NAD 11
Soil Map Unit Name: TAMBA MUCKY CLAY, M		
Are climatic / hydrologic conditions on the site typical for this time of y	1	
Are Vegetation, Soil, or Hydrology significantly	The second second second	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling poi	nt locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No	Is the Sam	/
Remarks:	e	
VEGETATION – Use scientific names of plants.		
Absolute	Dominant Indica	tor Dominance Test worksheet:
Tree Stratum         (Plot size:)         % Coverage           1	r Species? Statu	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
Sapling/Shrub Stratum (Plot size:	_ = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
0	_ = Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 550 FT)  1. Distichlis spicata 30	Y FA	UPL species x 5 =
2. Salicornia pacifica 40	OR	Column Totals: (A) (B)
3. Polypogen monospeliensis	N FAC	Prevalence Index = B/A =
, 0, 0		Hydrophytic Vegetation Indicators:
5		Dominance Test is >50%
6		Prevalence Index is ≤3.0¹
7		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
	_ = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
72	_ = Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic		Present? Yes No
Remarks: No Lejudim Latifalium in una Salicania paifica can prefer more and	nidoste Usien	w5.
Solicomia porque can profit most so		

[W-22]

#### SOIL

Sampling Point: 59-5

Depth Matrix		c Features			
(inches) Color (moist) %	Color (moist)	%Type	Loc <sup>2</sup>	Texture	Remarks
0-5 OYR2/2 100	<u> </u>			<u>Oraz loam</u>	
- 105 .010 2/				921 01	
5-125 104R 2/1				Sity Clay	
= 11 = -11 4/1 92	1010 56	7	<del></del>	<u> </u>	1.
5-165 54 41 93	101/R 5/8	<u> </u>	<u> </u>	Clay R	edox concentrations,
		·			maser
Type: C=Concentration, D=Depletion, I	RM=Reduced Matrix, CS	=Covered or Co	ated Sand G	rains. <sup>2</sup> Location	n: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to	all LRRs, unless other	wise noted.)		Indicators for I	Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redo	x (S5)		1 cm Muck	(A9) (LRR C)
_ Histic Epipedon (A2)	Stripped Mat				(A10) (LRR B)
Black Histic (A3)		ky Mineral (F1)		Reduced V	
_ Hydrogen Sulfide (A4)	Loamy Gleye	ed Matrix (F2)			Material (TF2)
Stratified Layers (A5) (LRR C)	X Depleted Ma	atrix (F3)		Other (Expl	ain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark	Surface (F6)			
Depleted Below Dark Surface (A11)	Depleted Da	rk Surface (F7)			
_ Thick Dark Surface (A12) كالمالية المالية ا	Redox Depre	essions (F8)		3Indicators of hy	drophytic vegetation and
_ Sandy Mucky Mineral (S1)	Vernal Pools	(F9)		wetland hydro	ology must be present,
Sandy Gleyed Matrix (S4)				unless distur	ped or problematic.
Restrictive Layer (if present):	I bly ton lib true	inchase with			
Type:		, X			$\vee$
Depth (inches):				Hydric Soil Pres	sent? Yes No
Remarks:					5
Remarks: Redox concentrations as	soft morrer.	> 2% dis	tinot.	montual C	or high value.
	soft morses.	>2% dig	tinct.	-) low Irron	a hip volue.
YDROLOGY	soft morses.	> Z <sup>0</sup> 60 Jij	tinot.	-) lavdrom	on hije value.
YDROLOGY Vetland Hydrology Indicators:			tinct.		
YDROLOGY Vetland Hydrology Indicators:	uired; check all that apply	)	tind.	Secondary	Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators:		)	tinct.	Secondary	
YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one requ	uired; check all that apply	) B11)	tinct.	Secondary Water	Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2)	uired; check all that apply  Salt Crust (  Biotic Crust	) B11) t (B12)		Secondary Water Sedim	Indicators (2 or more required) Marks (B1) (Riverine)
YDROLOGY Wetland Hydrology Indicators: rimary Indicators (minimum of one requ Surface Water (A1) High Water Table (A2) Saturation (A3)	uired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv	r) B11) t (B12) ertebrates (B13)		Secondary  Water  Sedim  Drift D	Indicators (2 or more required)  Marks (B1) (Riverine)  ent Deposits (B2) (Riverine)  eposits (B3) (Riverine)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requestions) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	uired; check all that apply Salt Crust ( Biotic Crust Aquatic Invo	) B11) t (B12) ertebrates (B13) Sulfide Odor (C1		Secondary  Water Sedim Drift D	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ge Patterns (B10)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverire	uired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor	) ng Living Roo	Secondary  Water Sedim Drift D Draina	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	uired; check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Dividized Ri Presence o	b) B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron (	) ng Living Roo C4)	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis	Indicators (2 or more required)  Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Dividized Ri Presence o Recent Iron	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron (	) ng Living Roo C4)	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (CS
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Dividized Ri Presence o Recent Iron	b) B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron (	) ng Living Roo C4)	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura	Indicators (2 or more required)  Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S Deliver Crust Aquatic Inv. Hydrogen S Deliver Crust Recent Iron (B7) Thin Muck	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron (	) ng Living Roo C4)	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (CS
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S Deliver Crust Aquatic Inv. Hydrogen S Deliver Crust Recent Iron (B7) Thin Muck	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7)	) ng Living Roo C4)	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:	sired; check all that apply  Salt Crust ( Biotic Crust Aquatic Invo. Hydrogen S Deliver (B7) Thin Muck S Other (Expl.)	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) lain in Remarks)	) ng Living Roo C4)	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of one requestions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S Depth (inc. No Depth (inc.)	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) ain in Remarks) hes):	ng Living Roo C4) Iled Soils (C6	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura Shallo FAC-N	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) leutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S Depth (inc.)  No Depth (inc.)	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) ain in Remarks) hes):	ng Living Roo C4) Iled Soils (C6	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura Shallo	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) leutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes	sired; check all that apply Salt Crust ( Biotic Crust Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iron (B7) Thin Muck S Other (Expl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) lain in Remarks) hes):	ng Living Roo C4) Iled Soils (C6	Secondary  Water Sedim Drift D Draina ots (C3) Crayfis Satura FAC-N	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) tion Visible on Aerial Imagery (C9 w Aquitard (D3) leutral Test (D5)
Primary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Saturation Present? Secribe Recorded Data (stream gauge, or surface)	Salt Crust ( Salt Crust ( Aquatic Invo Hydrogen S  Depth (incl No Depth (incl monitoring well, aerial pl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) lain in Remarks) hes): hes): hes):	g Living Roc C4) lled Soils (C6	Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo FAC-N  and Hydrology Pre	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Patterns (B10) eason Water Table (C2) ish Burrows (C8) ition Visible on Aerial Imagery (C9 w Aquitard (D3) leutral Test (D5)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  ield Observations:  surface Water Present? Yes  saturation Present? Yes  includes capillary fringe)  describe Recorded Data (stream gauge,	Salt Crust ( Salt Crust ( Aquatic Invo Hydrogen S  Depth (incl No Depth (incl monitoring well, aerial pl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) lain in Remarks) hes): hes): hes):	g Living Roc C4) lled Soils (C6	Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo FAC-N  and Hydrology Pre	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Patterns (B10) eason Water Table (C2) ish Burrows (C8) ition Visible on Aerial Imagery (C8) w Aquitard (D3) leutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one requestions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes	Salt Crust ( Salt Crust ( Aquatic Invo Hydrogen S  Depth (incl No Depth (incl monitoring well, aerial pl	B11) t (B12) ertebrates (B13) Sulfide Odor (C1) hizospheres alor f Reduced Iron ( n Reduction in Ti Surface (C7) lain in Remarks) hes): hes): hes):	g Living Roc C4) lled Soils (C6	Secondary  Water Sedim Drift D Draina ots (C3) Dry-Se Crayfis Satura Shallo FAC-N  and Hydrology Pre	Indicators (2 or more required) Marks (B1) (Riverine) ent Deposits (B2) (Riverine) eposits (B3) (Riverine) ige Patterns (B10) eason Water Table (C2) ish Burrows (C8) ition Visible on Aerial Imagery (C9 w Aquitard (D3) leutral Test (D5)

W-27

Project/Site: COLLINS VILLE	City/County: Susur	JCITY/SOLANO Sampling Date: JULY 10, 2021
Applicant/Owner: 15 POWER		State: Sampling Point: SP-6
Investigator(s): C.Y. ROORIGUEZ + S. WELLS		
Landform (hillslope, terrace, etc.):		,
~ 0		
Subregion (LRR): Lat: Lat:		,
Soil Map Unit Name: TAMBA MUCKY CLAM, MI	. /	•
Are climatic / hydrologic conditions on the site typical for this time of		•
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are	"Normal Circumstances" present? Yes No No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	- Is the Sample	1 Area
Hydric Soil Present? Yes NoX	within a Wetlar	· /
Wetland Hydrology Present? Yes No	- Within a Wetian	id: No
Remarks: In the larger potential with	and area, Le	Viorgover mulofital mubis
monosulture may be changing It		
slightly higher Jones of ele	witters	
VEGETATION – Use scientific names of plants.		
Absolut	te Dominant Indicator	Dominance Test worksheet:
The state of the s	er Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2	<del>-</del>	Total Number of Dominant
3		Species Across All Strata: (B)
4	<i>\(</i>	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2.		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5		FAC species x 3 =
5,4,4	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size: 339.11)		UPL species x 5 =
2. SALICOKNIA PACIFICA Z	OBL	Column Totals: (A) (B)
3. LEPIDIUM LATIFOLIUM 25	FAC	Prevalence Index = B/A =
4. DISTICIALLIS SPICATA 90	FAC	Hydrophytic Vegetation Indicators:
5		∑ Dominance Test is >50%
6		Prevalence Index is ≤3.0 <sup>1</sup>
7		Morphological Adaptations <sup>1</sup> (Provide supporting
8		data in Remarks or on a separate sheet)
_117	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)		The state of the s
1	<del> </del>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2	<b></b>	Service (Control of the Control of t
d <del>- f</del>	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic	Crust	Present? Yes No
Remarks:	Leadeim	Oate Column
Remarks: In the transition area of	) para-anti-	The state of the s
monorweum.	3.	

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W-ZZ)

Sampling Point: 5P-6

SUIL								Sampling Point:
Profile Desc	ription: (Describe	to the dept	h needed to docum	ent the	indicator	or confir	m the absence of	findicators.)
Depth	Matrix		Redox	k Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-35	2.54 3/2	98	CYR 3/11	7			SACL -	
0-5,5	213/ 41/	18.	3/1/ 1/9				OFF OL	
				,				
3 5 10	10 VA 3/.	<u> </u>	10 1/0 5/1			• •	CANO	
13-13	10 115	11.	10 YR 5/6		_ <u>C,cs</u>	101	SAND_	
-								
							-	
<sup>1</sup> Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, CS	=Covere	d or Coate	d Sand G	rains. <sup>2</sup> Locat	ion: PL=Pore Lining, M=Matrix.
	ndicators: (Application							or Problematic Hydric Soils3:
Histosol			Sandy Redo		10 ac-20m1 ♥ //		1 cm Mu	ck (A9) (LRR C)
	pipedon (A2)		Stripped Ma					ck (A10) (LRR B)
Black Hi			Loamy Muck		1 (F1)			Vertic (F18)
The second second	n Sulfide (A4)		Loamy Gley					ent Material (TF2)
	and the second s	• • • • • • • • • • • • • • • • • • • •			( ( )			xplain in Remarks)
	Layers (A5) (LRR C	•)	Depleted Ma		(E6)		Other (E.	xpiairi iri Remarks)
	ck (A9) (LRR D)	- (444)	Redox Dark					
	Below Dark Surface	e (A11)	Depleted Da				3,	h. d h. d'
	ark Surface (A12)		Redox Depr		F8)			hydrophytic vegetation and
	lucky Mineral (S1)		Vernal Pools	s (F9)				drology must be present,
	leyed Matrix (S4)				3		unless dist	urbed or problematic.
	ayer (if present):							
	3ACL	_						
Depth (inc	ches): 🗢 🗢 3.5	5					Hydric Soil P	resent? Yes No _X
Remarks:								0.01.0
P	many a secon	l are	to confuin -	151	15, Lf	Par	death for	a flust layer fung
( )	A I C Mata		1	, ,	. 00.	0.1.	I La. V.	ti Vocal and Socialized
Sangy	bronch derondo	ix. ha	tentral of		rolly"		1 houldown	30009
CUAN	testure. or	eganiu/	alast matter.	معلممد	-+ ~~	afle i	a first la	for (1987 manual)
UVDDO! O	01/	0 /					9	0
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of o	ne required:	check all that apply	()			Seconda	ary Indicators (2 or more required)
Surface 1	Water (A1)		Salt Crust (	B11)			Wat	er Marks (B1) (Riverine)
	ter Table (A2)		Biotic Crus					iment Deposits (B2) (Riverine)
	CO. CO. C.				- (D40)			
Saturatio			Aquatic Inv					Deposits (B3) (Riverine)
A	arks (B1) ( <b>Nonriveri</b>		Hydrogen S		2 , 2			inage Patterns (B10)
Sedimen	t Deposits (B2) (Nor	rriverine)	Oxidized R	hizosphe	res along	Living Ro	ots (C3) Dry-	-Season Water Table (C2)
Drift Dep	osits (B3) (Nonriver	ine)	Presence of	of Reduce	ed Iron (C4	+)	Cra	yfish Burrows (C8)
Surface	Soil Cracks (B6)		Recent Iron	Reducti	on in Tilled	d Soils (C	6) Satu	uration Visible on Aerial Imagery (C9)
	on Visible on Aerial I	magery (B7	TO PROPERTY OF STREET			a constituent variable		llow Aquitard (D3)
	ained Leaves (B9)	9-17 (-1	Other (Exp					C-Neutral Test (D5)
			Outer (Exp	an in ite	marks)			7.1000011001
Field Observ		-05	V -					
Surface Water	er Present? Ye	es N	o X Depth (inc	hes):				
Water Table	Present? Ye	es N	o X Depth (inc	hes):				. /
Saturation Pr	resent? Ye	es N	o X Depth (inc	hes):		Wet	land Hydrology F	Present? Yes NoX
(includes cap	illary fringe)						170	
	corded Data (stream	gauge, mor	nitoring well, aerial p	hotos, pr	evious ins	pections),	, if available:	
Remarks: 11	1 0					1		
Mellians. H	rydrology a	NOT OU	in trough	OM	as my	1 Lep	eduin l	alefolum
- · -	-()_ (4)		L Otas	Ca.D	A !	Line	iti, alah	they hamper alevation
Trangel		MAN	our in	-0~	بال ياليب	,, - 0,00	- and	
-the -	meashs O.	us ne	actulad a	NIO	100	1 an	nl crad	as a Schoenoplatus
marin.	marcard of a	F-10 N	January W		1	12		~ ~ = =
amer	earner		9					

## W-23

Project/Site: COLLINSVILLE	City/C	County: _ Suisu	NCITY/SOLAND Sampling Date: JULY 2, 7
Applicant/Owner: LS PoWFP			State: CA Sampling Point: SP-1
Investigator(s): 5.WEUS + CY RODRIGH	CZ Secti	on Township Ra	nge: 3N IE 23
Landform (hillslope, terrace, etc.):	Loos	l rollef /	1000
Subregion (LRR):C	Lat. 38. C	82503	-121 83988 Slope (%).
Soil Map Unit Name: PIABLO - AYAR CLA	10 ATAMBA W	11111111111	Long: 121, 85 1 8 6 0 Datum: 1510 1
Are climatic / hydrologic conditions on the site to site to	3 - 110-1011	INCKY CLA	NWI classification:
Are Climatic / hydrologic conditions on the site typical for the	is time of year?		
Are Vegetation, Soil, or Hydrology			"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology			eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sar	npling point l	ocations, transects, important features, etc.
×			
	No No	Is the Sampled	Area
- T	No	within a Wetlan	nd? Yes No
Remarks:			
Point next to NWIIPEM 1B Fush	oreme atou	just without	l
		0	
VEGETATION Lies esigntific names of the			
VEGETATION – Use scientific names of pla		min and the disease	
Tree Stratum (Plot size:)		minant Indicator ecies? Status	Dominance Test worksheet:
1			Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2			
3			Total Number of Dominant Species Across All Strata:  (B)
4			Percent of Deminent Species CO
Conline/Charle Ctretum / Diet einer	= To	otal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
3			OBL species x 1 =
4.			FACW species x 2 =
5			FAC species x 3 =
-	= To	otal Cover	FACU species x 4 =
Herb Stratum (Plot size:)	20%	V MAGAI	UPL species x 5 =
1. FRANKENIA SALINA	75%	Y PACW	Column Totals: (A) (B)
2. PISTICALIS SPICATA	- ZIno 1	FAC	Deviate and the DA
3. ORIED BRANCHES (NO IP) 4. SCHOENOPLEETUS CALIFORNICU		000	Prevalence Index = B/A =
	P 7 10 -1	N OBL	Hydrophytic Vegetation Indicators:  Dominance Test is >50%
5			Prevalence Index is ≤3.0¹
6			Morphological Adaptations <sup>1</sup> (Provide supporting
7 8			data in Remarks or on a separate sheet)
0.	107 = 10	otal Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Plot size:)	101-10	otal Cover	
1			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2			be present, unless disturbed or problematic.
	= To	otal Cover	Hydrophytic
% Bare Ground in Herb Stratum	er of Biotic Crust	0	Vegetation Present? Yes No
Remarks:			

Depth			11000	x Feature	S						
(inches)	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup>	Loc2	Texture		R	emarks	
0-1.5	5/R3/1	100		_			Sall				
.5-8.5	104R 4/1	100			_		Sall				
5-17.5	Gley 15/101	99	104R 4/6	T	<u>C</u>	М	Clay				
Black His Hydroge Stratified 1 cm Mu Depleted	ipedon (A2)		Sandy Redo Stripped Ma Loamy Muc Loamy Gley Depleted M Redox Dark Depleted D Redox Dep Vernal Pool	atrix (S6) ky Minera yed Matrix atrix (F3) c Surface ark Surface ressions (	(F2) (F6) ce (F7)		2 cr Rec Oth <sup>3</sup> Indicate wetlar	m Muck (Aduced Ver d Parent Mer (Explain er (Explain ers of hydron	Material (TF in in Rema rophytic ve	B) F2) rks) egetation and e present,	
Sandy G Restrictive I Type: Depth (inc	Sleyed Matrix (S4) Layer (if present): ches):						Hydric S	oil Prese	nt? Yes	No_	
Sandy Grestrictive I Type: Depth (included) Permarks:	Ches):					:		oil Prese	nt? Yes	No_	
Sandy G Restrictive I Type: Depth (inc Remarks:  YDROLO Wetland Hye	Ches):  GY  drology Indicators:		t: check all that ann	v)		:				No_	id)
Sandy Grestrictive I Type: Depth (increments:  YDROLO Wetland Hydromary India Surface High Water M Sedimer Drift Dep Surface Inundation	GY drology Indicators: cators (minimum of or Water (A1) arter Table (A2) on (A3) larks (B1) (Nonriver at Deposits (B2) (Nonriver Soil Cracks (B6) on Visible on Aerial Intained Leaves (B9)	ne required ine) nriverine) tine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	(B11) st (B12) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Surface (	dor (C1) res along ed Iron (C4 on in Tilled (C7)	Living Ro	See ots (C3)	Condary Ir Water M Sedimer Drift Der Drainag Dry-Sea Crayfish Saturati Shallow	ndicators (2 larks (B1) ( nt Deposits posits (B3) e Patterns ason Water	Table (C2) (C8) on Aerial Imager D3)	

#### WETLAND DETERMINATION DATA FORM - Arid West Region City/County: Susun City/Solano Sampling Date: JULY 2, 2021 Project/Site: COLLINSVILLE Applicant/Owner: L5 POWER State: CA Sampling Point: SP-Investigator(s): CY RODRIGUEZ + S. WELLS Section, Township, Range: 3NIE 23 Landform (hillslope, terrace, etc.): slight fullslipe Local relief (concave, convex, none): none Slope (%): 22.5 Lat: 38.082501 Long: -121.839900 Subregion (LRR): Soil Map Unit Name: PIABLO - AY AR CLAYS, 2to 9 To alope \_\_\_\_ 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 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? No Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species 0 = Total Cover That Are OBL, FACW, or FAC: (A/B) Sapling/Shrub Stratum (Plot size: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_ x 2 = FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species = Total Cover x 4 = Herb Stratum (Plot size: UPL species x 5 = Column Totals: (A) \_\_\_\_(B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is ≤3.01 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) = Total Cover Woody Vine Stratum (Plot size: Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Hydrophytic Vegetation % Cover of Biotic Crust \_\_\_ % Bare Ground in Herb Stratum Present? Remarks: All plants are dead. Prossicaceae 5pp. 1 housed (not reland sep.) Pharoica are FAC U. Specus Specus + Raphanus suturo? 3 Propagny.

[W-23

Matrix	needed to document the indicator or c Redox Features		
(inches) Color (moist) %	Calan (m. 1-1)	DC <sup>2</sup> Texture Remarks	
0-14.5 2,54 3/2 100		0110	
	·		
ype: C=Concentration, D=Depletion, RM=R dric Soil Indicators: (Applicable to all L	Reduced Matrix, CS=Covered or Coated Sa	Indicators for Problematic Hydric S	
Histosol (A1)			oons ;
Histic Epipedon (A2)	Sandy Redox (S5) Stripped Matrix (S6)	1 cm Muck (A9) (LRR C) 2 cm Muck (A10) (LRR B)	
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced Vertic (F18)	
_ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)	
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Explain in Remarks)	
_ 1 cm Muck (A9) (LRR D) _ Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		
Thick Dark Surface (A12)	<ul><li>Depleted Dark Surface (F7)</li><li>Redox Depressions (F8)</li></ul>	3Indicators of hydrophytic vogotation a	and
_ Sandy Mucky Mineral (S1)	Vernal Pools (F9)	<sup>3</sup> Indicators of hydrophytic vegetation a wetland hydrology must be present.	
Sandy Gleyed Matrix (S4)		unless disturbed or problematic.	,
estrictive Layer (if present):			
Туре:	_		V
Depth (inches):	_	Hydric Soil Present? Yes	No
Depth (inches):		Hydric Soil Present? Yes	No
Depth (inches):		Hydric Soil Present? Yes	No
Depth (inches):	aha ak all that angla)		No
Depth (inches):		Secondary Indicators (2 or more	
Depth (inches):	Salt Crust (B11)	Secondary Indicators (2 or more Water Marks (B1) (Riverine	)
Depth (inches):emarks:  /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required; _ Surface Water (A1) _ High Water Table (A2)	Salt Crust (B11) Biotic Crust (B12)	Secondary Indicators (2 or more  Water Marks (B1) (Riverine Sediment Deposits (B2) (Riv	) verine)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more  Water Marks (B1) (Riverine Sediment Deposits (B2) (Riverine Drift Deposits (B3) (Riverine	) verine)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)	) verine)
Depth (inches):	<ul> <li>Salt Crust (B11)</li> <li>Biotic Crust (B12)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living</li> </ul>	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) G Roots (C3) Dry-Season Water Table (C3)	) verine)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4)	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (Cimerous) Crayfish Burrows (C8)	yerine) e)
Popth (inches):    Popth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Grayfish Burrows (C8) Saturation Visible on Aerial I	yerine) e)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sci	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Tory-Season Water Table (C3) Crayfish Burrows (C8) Saturation Visible on Aerial I	yerine) e)
Depth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Grayfish Burrows (C8) Saturation Visible on Aerial I	yerine) e)
Popology  Wetland Hydrology Indicators:  Inimary Indicators (minimum of one required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Field Observations:	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sci	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Tory-Season Water Table (C3) Crayfish Burrows (C8) Saturation Visible on Aerial I	yerine) e)
Popology  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required: Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present?  Yes N	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Scan Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches):	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Tory-Season Water Table (C3) Crayfish Burrows (C8) Saturation Visible on Aerial I	yerine) e)
Popth (inches):	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sca	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Tory-Season Water Table (C3) Crayfish Burrows (C8) Saturation Visible on Aerial I	yerine) e)
Principle (Present? Yes Nater Table Present? Yes Nater	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Scalar (C7) Other (Explain in Remarks)    O	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C3) Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial II Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes	yerine) e)
Prince Semarks:  Primary Indicators (minimum of one required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N Staturation Present? Yes N Signal Semantic Seman	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Scalar (C7) Other (Explain in Remarks)    O	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C3) Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial II Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes	yerine) e)
Popeth (inches):    Comparison   Comparison	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Scalar Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Calar Depth (inches):	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Graph Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial I Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes  ions), if available:	yerine) (e) (2) Imagery (C
Print Deposits (B2) (Nonriverine)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Ves N Saturation Present? Yes N Sturation Present? Yes N Situration Present? Yes N	Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Scalar Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): Depth (inches): Calar Depth (inches):	Secondary Indicators (2 or more  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C3) Crayfish Burrows (C8) Is (C6) Saturation Visible on Aerial II Shallow Aquitard (D3) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes	yerine) (e) (2) Imagery (Cs

Note: This sampling point did not meet the three criteria and		[W-24]
the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic Resources Delineation Report for more detail.  WETLAND DETE	RMINATION DATA F	ORM – Arid West Region
Project/Site: WALASMUS	City/County:	Son Arub Sampling Date: 07-02
Applicant/Owner: LS PINER		State: CA Sampling Point: SQ-1
Investigator(s): 2 MEAU CY- POPULO	Section, Towns	
		oncave, convex, none): Slope (%):
(1)	A Company of the Comp	579 Long: -121, 842914 Datum: NAV 15
Soil Map Unit Name: Jamba Mudy Clar	Δ.	NWI classification:
Are climatic / hydrologic conditions on the site typical for the	f 1	,
Are Vegetation, Soil, or Hydrology	<i>f</i>	Are "Normal Circumstances" present? Yes No
		/
Are Vegetation, Soil, or Hydrology		(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling p	point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes I	No is the S	SW SW
1	lo listine o	ampled Area  a Wetland?  Yes No
Wetland Hydrology Present? Yes I	vo X	A Wetland? Yes _/\ No Vo
Remarks:	all court acres	to the Nathurt = NWII freshwater
3000	Strum	to the Northwest -NWI freshwater ing indicators of hydrophysic vegetal in ovid: When ladeing hydrology dri
pondo sois siroter up NWY Thirder	a bediever Inuda	of and : liber to being howardown du
VEGETATION – Use scientific names of pla		season + Dandy soil
, , , , , , , , , , , , , , , , , , ,	Absolute Dominant Inc	
Tree Stratum (Plot size:)	% Cover Species? S	tatus Number of Dominant Species /
1,		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
,		Species Across All Strata: (B)
	O = Total Cover	Percent of Dominant Species (7)
Sapling/Shrub Stratum (Plot size:)	= 10tal 00val	That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x1 =
4		FACW species x 2 =
5	Total Course	FAC species x 3 = FACU species x 4 =
Herb Stratum (Plot size:)	= Total Cover	UPL species x5 =
1. DisticMis spicata	.50 Y F	AC   Column Totals: (A) (B)
2. Herenotheca grandiflora.	<u> </u>	
3. Broynus diandros	_ <u> </u>	Prevalence Index = B/A =
4. (MKnown spp. #1 (twicks)	10 N	Hydrophytic Vegetation Indicators:
5. Unknown spp. #2 (grass)	- 6' N -	Dominance Test is >50%
6.		Prevalence Index is ≤3.0¹
7		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8.		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	70 = Total Cover	
1,		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.

Heterothua grandiflora likely brased on shelletons (dead) plants & one partially live plant. Jepon colony; dislusted areas, dry theamteds, sand.

= Total Cover

% Cover of Blotic Crust

Hydrophytic Vegetation Present?

% Bare Ground in Herb Stratum

_	_		
٠.	rı	31	

SOIL								Sampling P	oint: 🔼 = 🗡
Profile Desc	cription: (Describe	to the dep	th needed to docun	nent the	indicator	or confirm	the absence	of indicators.)	
Depth	Matrix		Redox	x Feature					
(inches)	Color (moist)	%	Color (moist)	. %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	
0-65	7.548.3/2	95	75 yr 1/8	5		M	Santy	coased sand	L arrains
•									0
- · · · ·	INVIA AL	<u>aa</u>	- 110 E'I D				<u> </u>		
85-16	104R 3/3	97	2/K-2/8,	_ن_	. <u>C</u>	$\overline{}$	Sandy		
*									
			-					·	
								<b>.</b>	
		···							
¹Type: C=C	oncentration D=Dec	nietion RM:	=Reduced Matrix, CS	=Covere	d or Coate	ed Sand Gra	ains <sup>2</sup> l o	cation: PL=Pore Linir	ng M=Matrix
			LRRs, unless other	wise not	ted.)			for Problematic Hyd	
Histosol			X Sandy Redo	v (85) d	(annan	wholen u	1 cm N	Muck (A9) (LRR C)	
	pipedon (A2)		Stripped Ma	trix (S6)	Com	entration		Muck (A10) (LRR B)	
	istic (A3)		Loamy Muc		al (F1)			ced Vertic (F18)	
1	en Sulfide (A4)		Loamy Gley					arent Material (TF2)	
	d Layers (A5) (LRR	C)	Depleted Ma					(Explain in Remarks)	
	uck (A9) (LRR D)	,	Redox Dark						
	d Below Dark Surfac	ce (A11)	Depleted Da	ark Surfa	ce (F7)				
	ark Surface (A12)		Redox Depr	essions (	(F8)		<sup>3</sup> indicators	of hydrophytic vegeta	ation and
Sandy N	Mucky Mineral (S1)		Vernal Pool	s (F9)			wetland	hydrology must be pr	esent,
Sandy C	Gleyed Matrix (S4)						unless d	listurbed or problemat	tic.
Restrictive	Layer (if present):								
Туре:									
Depth (in	ches):						Hydric Soil	l Present? Yes <u></u>	✓ No
Remarks:				······································			4.4	Λ :Λ	,
[	5 Janel on	the !	direct soil I	layer	i when	e conc	envavins	where with	wa. a
A4A 1000 4	the all	ا بند	Ulius coate	st († .	Cana	masm	were	ofermed of	hand lense
1/20/VVV	, Con ballow	vo, a	My Dr. C.	• •	30 61	1	,	abound of	-
HYDROLO	GY								
	drology Indicators	*							
1			de abook all that apple				Saca	ndary Indicators (2 or	more required)
		one require	d; check all that apply						
1	Water (A1)		Salt Crust					Vater Marks (B1) (Riv	
1	ater Table (A2)		Biotic Crus					Sediment Deposits (B2	
Saturati	on (A3)		Aquatic In					Orift Deposits (B3) (Ri	•
	Aarks (B1) (Nonrive		Hydrogen					Prainage Patterns (B1	•
Sedime	nt Deposits (B2) (No	onriverine)	Oxidized F	Rhizosphe	eres along	Living Roo		Dry-Season Water Tat	
Drift De	posits (B3) ( <b>Nonriv</b> e	erine)	Presence	of Reduc	ed Iron (C	4)	c	Crayfish Burrows (C8)	
Surface	Soil Cracks (B6)		Recent Iro	n Reduct	ion in Tille	d Soils (C6	) §	Saturation Visible on A	verial Imagery (C9)
Inundat	ion Visible on Aerial	Imagery (B	7) Thin Muck	Surface	(C7)			Shallow Aquitard (D3)	
Water-S	Stained Leaves (B9)	,	Other (Exp	olain in R	emarks)		F	AC-Neutral Test (D5)	)
Field Obser	rvations:								
Surface Wa	ter Present?	Yes	No Depth (inc	ches):	\(\rightarrow\)				•
Water Table			No Depth (in	,	Q'				
Saturation F		-	No Depth (in		15	—   Wetla	and Hydrolog	y Present? Yes	No X
	pillary fringe)	: 63	TWO X7 Dopus (iiii	onos <i>j.</i>			ina riyarolog		
Describe Re	ecorded Data (strear	n gauge, m	onitoring well, aerial į	photos, p	revious ins	spections), i	if available:		
									·
Remarks:	1-1 0-1 -1-	ı h	all d	n			·· \$· \$···· \$		1
	300 fruit to	<b>- /////</b>	marying y	o a x	orge,	wrise	xexaxiel.	enea my sul	r and.
5. N. W. L. R.	that you	burko	y Jadina	und	realtra	of not	tenne.	enzydrológy ?	due to
In ()		_	J		•	1)	~\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	00	- u
any	gamen.					•			

# [W-24)

Project/Site: COUINSVILLE City/Cour	nty: SOVANO Sampling Date: JUY 2, 2
	State: <u>CA</u> Sampling Point: <u>SP-2</u>
Investigator(s): S. WELLS & C.Y. ROVRIGUE & Section,	Township Range: 2N 16 23
Landform (hillslope, terrace, etc.): Sught hillslope Local reli	
Subregion (LRR): Lat: 38.08	2549 Long: -121.842681 Datum: NAD 193
Soil Map Unit Name: Tanka Mudy clay Mys 16	
	(/
Are climatic / hydrologic conditions on the site typical for this time of year? Yes_	
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 sampli	ng point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes NoX	
Hydric Soil Present? Yes No V	the Sampled Area thin a Wetland? Yes No
Wetland Hydrology Present? Yes No W	thin a Wetland? Yes No
Remarks:	
VEGETATION – Use scientific names of plants.  Absolute Domina	nt Indicator   Dominance Test worksheet:
Tree Stratum (Plot size:)	? Status Number of Dominant Species
1	That Are OBL, FACW, or FAC: (A)
2	
3	Species Across All Strata: (B)
3. 4. Sapling/Shrub Stratum (Plot size:)	Percent of Dominant Species That Are OBL, FACW, or FAC:
1	Prevalence Index worksheet:
2	Total % Cover of: Multiply by:
3	OBL species x1 =
4	FACW species x 2 =
5	FAC species x 3 =
Herb Stratum (Plot size: 5 ) JROMUS*, = Total C	
1. Dead Annual grass (Average.) 10 N	UPL species x 5 =
2. DISTIGHTUS SPICATA 5 N	Column Totals: (A) (B)
3. BEASSICA SP. 40 Y	Prevalence Index = B/A =
4. David STICKS + ISPANCHES 30 Y	Hydrophytic Vegetation Indicators:
5	Dominance Test is >50%
6	Prevalence Index is ≤3.0¹
7	Morphological Adaptations¹ (Provide supporting
8	data in Remarks or on a separate sneet)
$\sqrt{SS}$ = Total C	cover Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Woody Vine Stratum (Piot size:)	Indicators of hydric and mothers hydroten and
1	Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.
2	
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Cover Hydrophytic Vegetation Present? Yes No
Remarks:	
· · · · · · · · · · · · · · · · · · ·	·

e	Λ	1	1	
	w	3	L	_

Sampling Point: 30-Z

Profile Description: (Describe to the depth needed to document the indicator or co	onfirm the absence of indicators.)
Depth         Matrix         Redox Features           (inches)         Color (moist)         %         Color (moist)         %         Type¹         Lo	poc <sup>2</sup> Texture / Remarks
inches) Color (moist) % Color (moist) % Type <sup>1</sup> Lo	oc rexture / Remarks
N16	0.00-
0-15 2543/2 100	Sachlo
	<u> </u>
,	
	3.
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sa	and Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solls <sup>3</sup> :
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	1 cm Muck (A9) (LRR C)
Histosol (A1) Sandy Redox (S5) Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mineral (F1)	Reduced Vertic (F18)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Red Parent Material (TF2)
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)	
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)	3
Thick Dark Surface (A12) Redox Depressions (F8)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Vernal Pools (F9)	wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) estrictive Layer (if present):	unless distribed of problematic.
	, /
Type:	Hydric Soil Present? Yes No
	Hydric Soil Present? Yes No
Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Type: Depth (inches):  Remarks:  YDROLOGY  Wetland Hydrology Indicators:	
Type: Depth (inches): temarks:  YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Type: Depth (inches): emarks:  /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required; check all that apply) Surface Water (A1) Salt Crust (B11)	Secondary Indicators (2 or more required) Water Marks (B1) (Riverine)
Type: Depth (inches): emarks:  /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required; check all that apply) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Type: Depth (inches): emarks:  //DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one required; check all that apply) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Roots (C3) Dry-Season Water Table (C2)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Rig Roots (C3)  Crayfish Burrows (C8)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Reg Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Try-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C8)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Tory-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  g Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Reg Roots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Regroots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Regroots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Type:	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Regroots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No
Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Demarks:   Depth (inches):  Demarks:  Depth (inches):  Demarks:  Demarks:  Demarks:  Demarks:  Demarks:  Demarks:  Demarks:  Demarks:  Demarks:  Depth (inches):  Demarks:  Depth (inches):  Demarks:  De	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Regroots (C3)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C8)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

# (W-25

Project/Site: Collinsville	City/County: Sola	MO Sampling Date: 07-63-2
Applicant/Owner: US POWEN		State: CA Sampling Point: SP-
Investigatories: SIMPILS C VRODVIAVE	B Section Township R	tange: 23 3N IF
Landform (hillolane torrace etc.): Plat	Local relief (concave	lange: 23 3N 1E 1, convex, none): <u>nyne</u> Slope (%): S Long: 121, 841899 Datum: NAD 19
Catalorii (Illislope, terrace, etc.).	1at 38 087 470	1001/00, 10010)
Soil Map Unit Name: TAMBA MUCKY CLAT	MI A II-	Long Datum: No No 11
	1/	NWI classification:
Are climatic / hydrologic conditions on the site typical for		
Are Vegetation, Soil, or Hydrology		e "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	p showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sample	And Anna
Hydric Soil Present? Yes	No within a Wetl	
Wetland Hydrology Present? Yes	No Within a Weti	and? TesNo
Remarks:		
/EGETATION – Use scientific names of pl	ants.  Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover Species? Status	
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1		Prevalence Index worksheet:
2.		Total % Cover of: Multiply by:
3.		OBL species x 1 =
4.		FACW species x 2 =
5		FAC species x 3 =
	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)  1. FUMEN CRISPUS	5 N FAC	UPL species x 5 =
2 Distichlis spicata	TE V FAC	Column Totals: (A) (B)
3. Pulhoschoenus mantinus	30 7 082	Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
4 5.		Dominance Test is >50%
6.		Prevalence Index is ≤3.0¹
7.		Morphological Adaptations <sup>1</sup> (Provide supporting
8.		data in Remarks or on a separate sheet)
	50 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)		
1		Indicators of hydric soil and wetland hydrology must
2		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	over of Biotic Crust	Present? Yes No
Remarks: Hopetotan in olt it 100	no dought dogwoods	
remarks: yegetation in plut is ver vernaining plant characteris	tics.	d; vegetation ID'd based on

TW-25

SOIL

Sampling Point:

Chappan	Matrix (maint)	0/	0.1	Redo					2000
(inches)	Color (moist)	00		(moist)	%_	Type¹	Loc²	Texture	Remarks
0-8.5	10 YR 3/4	71	TOYR	5/8			M	Sand	
8.5-16	7.54re 25/2	96	5YR	46	A	0,05	M	Sound	has covered sand grains paste-like
Histosol Histic Ep Black Hi Hydroge Stratified 1 cm Mu Depletee Thick Da Sandy M	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) (LRR C uck (A9) (LRR D) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	able to all	LRRs, un	Matrix, CS cless other candy Redo camy Muc coamy Gley Depleted M Redox Dark Depleted Da Redox Depleted Da Redox Depleted Da Redox Depleted Pool	ox (S5) atrix (S6) ky Miner red Matri atrix (F3 Surface ark Surface ressions	ral (F1) (x (F2) (x (F6) (x (F6)	d Sand Gr	Indicators  1 cm 2 cm Reduction Red F Other  3Indicators wetland	pocation: PL=Pore Lining, M=Matrix.  Is for Problematic Hydric Soils <sup>3</sup> :  Muck (A9) (LRR C)  Muck (A10) (LRR B)  Coed Vertic (F18)  Parent Material (TF2)  (Explain in Remarks)  Is of hydrophytic vegetation and hydrology must be present, disturbed or problematic.
estrictive	Layer (if present):								
1,20								1	
Type:			_					11	
Depth (in	ches):		=					Hydric Soi	Present? Yes No
Depth (in: Remarks: YDROLO Wetland Hyd	ches):		di shook o	II that and	Α.				
Depth (in: Remarks:  YDROLO  Wetland Hyderimary India	ches):	ne require	TO CONTRACT					Seco	ndary Indicators (2 or more required)
Primary India Surface High Water M Sedimer Drift Deg Surface Inundation	ches):	ne) rriverine) ine)		Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck	(B11) at (B12) vertebrat Sulfide C thizosph of Reduce n Reduce Surface	Odor (C1) eres along eed Iron (C4 tion in Tilled (C7)	)	Seco	ndary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Primary India Surface High Water M Sedimer Drift Deg Surface Inundation Water-S	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) farks (B1) (Nonriveri nt Deposits (B2) (Norriveri soil Cracks (B6) on Visible on Aerial In tained Leaves (B9)	ne) rriverine) ine)		Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of	(B11) at (B12) vertebrat Sulfide C thizosph of Reduce n Reduce Surface	Odor (C1) eres along eed Iron (C4 tion in Tilled (C7)	)	Seco	ndary Indicators (2 or more required)  Nater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Primary India Surface High Water M Sedimer Drift Deg Surface Inundati Water-S Field Obser Surface Wat	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriveri nt Deposits (B2) (Nor posits (B3) (Nonriver Soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present?	ne) iriverine) ine) magery (B	No 9	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) at (B12) vertebrat Sulfide C thizosph of Reduc n Reduc Surface clain in R	Odor (C1) eres along eed Iron (C4 tion in Tilled (C7)	)	Seco	ndary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Depth (includes cap	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) darks (B1) (Nonriveri nt Deposits (B2) (Non posits (B3) (Nonriver soil Cracks (B6) on Visible on Aerial In tained Leaves (B9) vations: er Present? Ye Present?	ne) priverine) ine) magery (B	No \( \frac{\frac{1}{2}}{2} \) No \( \frac{\frac{1}{2}}{2} \) No \( \frac{\frac{1}{2}}{2} \) No \( \frac{\frac{1}{2}}{2} \)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp  Depth (inc	(B11) It (B12) Vertebrat Sulfide C thizosph of Reduc n Reduc Surface Italian in R ches): ches): ches): ches): ches):	Odor (C1) eres along ed Iron (C4 tion in Tilled (C7) emarks)	d Soils (C6	Seco V S I I I I S S I S	ndary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)

W-26

oplicant/Owner: 15 POWER	State: A Sampling Point: SP-						
CV PINTELIAUX I + S I I LI I C							
evestigator(s): CY RODR164EZ + S. WEUS Section, Township, Range: 3N 1E2Z							
andform (hillslope, terrace, etc.): Local relief (concave	e, convex, none): MML Slope (%): D						
ubregion (LRR): Lat: Lat:	Long: -121, 844126 Datum: NAD 1						
oil Map Unit Name: DIMBLO - AYAR CLAYS, 2 to 9 No logue	NWI classification: None						
re climatic / hydrologic conditions on the site typical for this time of year? Yes No							
/	e "Normal Circumstances" present? Yes No						
	needed, explain any answers in Remarks.)						
UMMARY OF FINDINGS – Attach site map showing sampling point							
Hydrophytic Vegetation Present?  Yes No Hydric Soil Present?  Yes No Wetland Hydrology Present?  Yes No Within a Wetland Hydrology Present?	ed Area						
Remarks:							
	1.5						
EGETATION – Use scientific names of plants.							
ree Stratum (Plot size:) Absolute Dominant Indicator % Cover Species? Status							
	Number of Dominant Species That Are OBL, FACW, or FAC: (A)						
·	Total Number of Dominant						
·	Species Across All Strata: (B)						
apling/Shrub Stratum (Plot size:) = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:						
	Prevalence Index worksheet:						
	Total % Cover of: Multiply by:						
·	OBL species x 1 =						
	FACW species x 2 =						
	FAC species x 3 =						
= Total Cover	FACU species x 4 =						
Herb Stratum (Plot size: 5) - DISTIGNTUS SPICATA 75 X FAC	UPL species x 5 =						
. 10	- Column Totals: (A) (B)						
HETEROTHERA GRANDIFLORA 2000	Prevalence Index = B/A =						
dead Rombio 500	Hydrophytic Vegetation Indicators:						
	Dominance Test is >50%						
	Prevalence Index is ≤3.0¹						
	Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)						
85 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)						
Voody Vine Stratum (Plot size:)	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.						
= Total Cover	Hydrophytic						
6 Bare Ground in Herb Stratum	Vegetation Present? Yes No						
Remarks:							

Depth Matrix	Redox	Features	S					
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc2	Texture		Remarks	
0-3 INYR 2/1					Sand			
0.0_10.10					- DIN US	-		
	7 = 10 81				0 1			
3-12.5 2.57 3/2	7.5 YR 5/4		C	M	Sand	hard to	hind	low no
							1	4.0
2= 11 2 5/0 3/-						A		
125-14 7.5YR 3/2					Loamy Sau	nd		
JO CORE					7			
31N	2.5 YR 4/6	7	_		+	-		
3170	C.5 12 16			101				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM	M=Reduced Matrix CS:	=Covered	or Coate	d Sand G	rains <sup>2</sup> Lo	cation: PL=Po	re Lining	M=Matrix
Hydric Soil Indicators: (Applicable to al	II LRRs. unless other	vise note	ed.)	d Odila O		for Problema		
Histosol (A1)			Ju.,			Muck (A9) (LR		
Histic Epipedon (A2)	Sandy Redo							
	Stripped Mat		(E4)			Muck (A10) (LF		
Black Histic (A3)	Loamy Muck					ced Vertic (F18	*	
Hydrogen Sulfide (A4)	Loamy Gleye		(F2)			Parent Material		
Stratified Layers (A5) (LRR C)	Depleted Ma				Other	(Explain in Re	marks)	
1 cm Muck (A9) (LRR D)	Redox Dark							
Depleted Below Dark Surface (A11)	Depleted Da							
Thick Dark Surface (A12)	Redox Depre	essions (F	-8)		<sup>3</sup> Indicators	of hydrophytic	vegetation	n and
Sandy Mucky Mineral (S1)	Vernal Pools	(F9)				hydrology mus		nt,
Sandy Gleyed Matrix (S4)					unless o	disturbed or pro	blematic.	
Restrictive Layer (if present):								
Type:								
Depth (inches):					Hydric Soil	Present?	/oc	No X
Remarks: ( , , , , )	± 71.					1		
tron second cone to I	et 290	~ la	ye G 3	in Ve	ny red o	compared	to m	uddle
took second core to I	at 200	~ la	ye G 3	oin Ve	nd rad -	compared	ty m	uddle
YDROLOGY	at 220 ark at bottom	~ la	ye G 3	iin Ve	ny red -	compared	ty m	uddle
IYDROLOGY Wetland Hydrology Indicators:		· ·	ye G 3	oin Ve				
YDROLOGY		, r	ye G 3	iin Ve		companed		
IYDROLOGY Wetland Hydrology Indicators:		)	ye G 3	oin Ve	Secon		s (2 or mor	re required)
IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)	ed; check all that apply	) B11)	ye C 3	oin Ve	<u>Secor</u> V	ndary Indicator Vater Marks (B	s (2 or mor	re required)
IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)	ed; check all that apply Salt Crust (I	) B11) (B12)		oin Ve	<u>Seco</u> r V S	ndary Indicator Vater Marks (B Sediment Depos	s (2 or mor 1) (Riverin sits (B2) (F	re required) ne) Riverine)
IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ed; check all that apply  Salt Crust (I  Biotic Crust  Aquatic Inve	B11) (B12) ertebrates	s (B13)	oin Ve	Secon	ndary Indicator Vater Marks (B Sediment Depos Orift Deposits (B	s (2 or mor 1) (Riverin sits (B2) (R 33) (Riveri	re required) ne) Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)	ed; check all that apply  Salt Crust (I Biotic Crust  Aquatic Invo	B11) (B12) ertebrates	s (B13) lor (C1)		<u>Secon</u> V S D D	ndary Indicator Vater Marks (B Sediment Depos Orift Deposits (B Orainage Patter	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverins (B10)	re required) ne) Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Inve	) B11) (B12) ertebrates sulfide Ode	s (B13) lor (C1) res along l	Living Roo	Secon V S D D ots (C3) D	ndary Indicator Vater Marks (B Sediment Depos Orift Deposits (E Orainage Patter Ory-Season Wa	s (2 or mor 1) (Riverin sits (B2) (R 33) (Riverins (B10) ter Table (	re required) ne) Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh	) B11) (B12) ertebrates sulfide Odd nizosphere	s (B13) lor (C1) res along l	Living Roo	Secon  V S D D D D D D D	ndary Indicator Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow	s (2 or mor 1) (Riverin sits (B2) (R 33) (Riverins (B10) ter Table (	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron	) B11) (B12) ertebrates sulfide Odd nizosphere	s (B13) lor (C1) res along l	Living Roo	Secon  V S D D D D D D D	ndary Indicator Vater Marks (B Sediment Depos Orift Deposits (E Orainage Patter Ory-Season Wa	s (2 or mor 1) (Riverin sits (B2) (R 33) (Riverins (B10) ter Table (	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron	) B11) (B12) ertebrates sulfide Ode nizosphere f Reduced Reductio	s (B13) lor (C1) les along l d Iron (C4 on in Tilled	Living Roo	Secon V S D	ndary Indicator Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverins (B10) tter Table ( s (C8)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron	B11) (B12) ertebrates sulfide Ode nizosphere f Reduced Reductio Surface (C	s (B13) lor (C1) res along l d Iron (C4 on in Tilled	Living Roo	Secon  V S D D D D C S S S	ndary Indicators Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverins (B10) ter Table (F rs (C8) le on Aeria d (D3)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E	ed; check all that apply  Salt Crust (I  Biotic Crust  Aquatic Invo  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Thin Muck S	B11) (B12) ertebrates sulfide Ode nizosphere f Reduced Reductio Surface (C	s (B13) lor (C1) res along l d Iron (C4 on in Tilled	Living Roo	Secon  V S D D D D C S S S	ndary Indicator Vater Marks (B Sediment Deposits (B Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverins (B10) ter Table (F rs (C8) le on Aeria d (D3)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Butter Stained Leaves (B9)  Field Observations:	ed; check all that apply  Salt Crust (i Biotic Crust Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.	B11) (B12) ertebrates sulfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren	s (B13) lor (C1) es along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (C6	Secon  V S D D D D C S S S	ndary Indicators Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverins (B10) ter Table (F rs (C8) le on Aeria d (D3)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Butter Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	B11) (B12) ertebrates sulfide Odd nizosphere f Reduced Reductio Surface (Cain in Ren	s (B13) for (C1) res along f d fron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Ce	Secon  V S D D D D C S S S	ndary Indicators Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverins (B10) ter Table (F rs (C8) le on Aeria d (D3)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Yes  Water Table Present?	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) I Soils (Co	Secon  V S D D D D D D	ndary Indicator Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeria d (D3) st (D5)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) I Soils (Co	Secon  V S D D D D C S S S	ndary Indicator Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeria d (D3) st (D5)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl.	B11) (B12) ertebrates sulfide Odd nizosphere f Reduccio Reductio Surface (Cain in Ren nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Ce	Secon	ndary Indicator Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeria d (D3) st (D5)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E)  Water-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl.	B11) (B12) ertebrates sulfide Odd nizosphere f Reduccio Surface (Cain in Ren nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Ce	Secon	ndary Indicator Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeria d (D3) st (D5)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl.	B11) (B12) ertebrates sulfide Odd nizosphere f Reduccio Surface (Cain in Ren nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Ce	Secon	ndary Indicator Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (F 33) (Riverin ns (B10) ter Table ( rs (C8) le on Aeria d (D3) st (D5)	re required) ne) Riverine) ne)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Sincludes capillary fringe)  Describe Recorded Data (stream gauge, marks:	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl. No Depth (incl. No Depth (incl.	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Co wetl pections),	Secon	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Sincludes capillary fringe)  Describe Recorded Data (stream gauge, marks:	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl. No Depth (incl. No Depth (incl.	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Co wetl pections),	Secon	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Sincludes capillary fringe)  Describe Recorded Data (stream gauge, marks:	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl. No Depth (incl. No Depth (incl.	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Co wetl pections),	Secon	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Sincludes capillary fringe)  Describe Recorded Data (stream gauge, marks:	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl. No Depth (incl. No Depth (incl.	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Co wetl pections),	Secon	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Sincludes capillary fringe)  Describe Recorded Data (stream gauge, marks:	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No Depth (incl. No Depth (incl. No Depth (incl.	B11) (B12) ertebrates culfide Ode nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): nes):	s (B13) lor (C1) res along l d Iron (C4 on in Tilled C7) marks)	Living Roo ) d Soils (Co wetl pections),	Secon	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, manually the same same same same same same same sam	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): notos, pre	s (B13) lor (C1) res along lod Iron (C4 on in Tilleo C7) marks)  evious ins	Living Roo ) d Soils (Co wetl pections),	Secondary Second	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, manually the same same same same same same same sam	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (incl. No	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): notos, pre	s (B13) lor (C1) res along lod Iron (C4 on in Tilleo C7) marks)  evious ins	Living Roo ) d Soils (Co wetl pections),	Secondary Second	ndary Indicators Vater Marks (B Sediment Deposits (E Drainage Patter Dry-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bayater-Stained Leaves (B9)  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, manual contents of the contents o	ed; check all that apply  Salt Crust (I Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Thin Muck S Other (Expl.  No Depth (inch No Depth (inch No Depth (inch nonitoring well, aerial pl	B11) (B12) ertebrates culfide Odd nizosphere f Reduced Reductio Surface (Cain in Ren nes): nes): notos, pre	s (B13) lor (C1) res along lod Iron (C4 on in Tilleo C7) marks)  evious ins	Wetle pections),	Secondary Second	ndary Indicators Vater Marks (B Sediment Deposits (E Orainage Patter Ory-Season Wa Crayfish Burrow Saturation Visib Shallow Aquitar FAC-Neutral Te	s (2 or mor 1) (Riverin sits (B2) (Riverins (B10) ter Table (ss (C8) le on Aeriad (D3) st (D5)	re required) ne) Riverine) ne) C2) al Imagery (C

W-26

plicant/Owner: US PONCY pestigator(s): 5. Wells , C.Y. Fodrigues andform (hillslope, terrace, etc.): Flat	Section, Township, Ra Local relief (concave,  ear? Yes No_ disturbed? Are oblematic? (If ne	convex, none): None Slope (%): Datum: NATO   9
restigator(s): 5. WENS , CN. FORMACE Indform (hillslope, terrace, etc.): 1. FLAT  bregion (LRR): 1. Lat: 1. La	Section, Township, Ra Local relief (concave, ear? Yes No_ disturbed? Are oblematic? (If ne	nge: Slope (%): Slope (%): Datum: NWI classification: (If no, explain in Remarks.)
bregion (LRR):	Local relief (concave,	Convex, none): Slope (%):  Long: Datum: NWI classification: (If no, explain in Remarks.)
bregion (LRR): Lat:	ear? Yes No Are oblematic? (If ne	Long: Datum: _NAO ]
il Map Unit Name: PIAOLO - AMAR CLATS 12 to 9025 e climatic / hydrologic conditions on the site typical for this time of year vegetation, Soil, or Hydrology significantly e Vegetation, Soil, or Hydrology naturally pro-	ear? Yes No_ disturbed? Are oblematic? (If ne	NWI classification: (If no, explain in Remarks.)
e climatic / hydrologic conditions on the site typical for this time of year vegetation, Soil, or Hydrology significantly by vegetation, Soil, or Hydrology naturally pre-	ear? Yes No No Are oblematic?	(If no, explain in Remarks.)
e Vegetation, Soil, or Hydrology significantly e Vegetation, Soil, or Hydrology naturally pro	disturbed? Are oblematic? (If ne	
e Vegetation, Soil, or Hydrology naturally pre	oblematic? (If ne	'Normal Circumstances' present? Yes No
		Tromas disdanistandos prosonts 103 110
IMMARY OF FINDINGS – Attach site map showing		eeded, explain any answers in Remarks.)
	g sampling point l	ocations, transects, important features, etc.
ydrophytic Vegetation Present? Yes No Yes No X / Vetland Hydrology Present? Yes No X	Is the Sampled	I Area
GETATION – Use scientific names of plants.		
Absolute         % Cover           Cover         0	Dominant Indicator Species? Status	Dominance Test worksheet:
		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
		Total Number of Dominant
		Species Across All Strata: (B)
apling/Shrub Stratum (Plot size:)	_ = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
		OBL species x 1 =
		FACW species x 2 =
		FAC species x 3 =
<u> </u>	_ = Total Cover	FACU species x 4 =
Distichlis Spicate 75	Y FAC	UPL species x 5 =
Distichlis spicate 75 Rumex crispus 5		Column Totals: (A) (B)
		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		Dominance Test is >50%
		Prevalence Index is ≤3.0¹
		Morphological Adaptations¹ (Provide supporting
		data in Remarks or on a separate sheet)
an	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
oody Vine Stratum (Plot size:)		
		Indicators of hydric soil and wetland hydrology must
		be present, unless disturbed or problematic.
9	_ = Total Cover	Hydrophytic
Bare Ground in Herb Stratum	Crust 0	Vegetation Present?  Yes No
Remarks:		T

W-26Sampling Point: SP-2

Color (moist) \$ Type Log Testure Permarks    Color (moist)   % Type Log   Testure   Permarks	Depth	Matrix			ox Feature			the absence of	
S-16-5 (ONE 3)	(inches)	-		Color (moist)	%	Type	Loc		Remarks
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix, critic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos Epipedon (A2)	0-85	104K 71	100					SANY	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix, critic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos Epipedon (A2)	5-15-5	INE3h	98	7.54R 5/R		-	MIS	SANIYA	
Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A1) Sandy Redox (S5) Histo (A2) Histosol (A2) Slack Histo (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F2) Stratified Layers (A5) (LRR C) Loamy Mucky Mineral (F2) Stratified Layers (A5) (LRR D) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (F3) Pereson (F8) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (F3) Sendy Gleyed Matrix (S4)  Pereson (F9)  Depleted Dark Surface (A12) Sandy Mucky Mineral (S1) Surface (A12) Sandy Mucky Mineral (S1) Surface (A12) Sandy Mucky Mineral (S1) Surface (A14) Surface (A14) Surface (A15) Surface (A16) Surface (A17) Surface (	0 100	10.10					MICO	0.1100	
Indicators (Applicable to all LRRs, unless otherwise noted.) Histosel (A1) Histosel (A1) Histosel (A2) Histosel (A2) Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Loamy Mucky Mineral (F1) Depleted Both Dark Surface (A11) Thick Dark Surface (A11) Depleted Dark Surface (A12) Sandy Mucky Mineral (F3) Depleted Both Dark Surface (A12) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (S1) Surface Water (A1) Hydric Soil Present? Hydric Soil Present? Yes No  DROLOGY  etiand Hydrology Indicators: Imary Indicators (minimum of one required; check all that apply) Surface Water (A1) Salt Crust (B11) High Water Table (A2) Salt Crust (B12) Sediment Deposits (B2) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Surface Water (B1) (Nonriverine) Surface Water (B1) (Nonriverine) Surface Sulface (B1) (Nonriverine) Presence of Reduced Iron (C4) Indicators (D2) Presence (Reduced Matrix (R5) Presence (Reduced Matrix (R5) Presence (Reduced Matrix (R5) Shallow Aquitard (D3) FAC-Neutral Test (D5) Indicators (D2) FAC-Neutral Test (D5) Indicators (D3) FAC-Neutral Test (D5) Indicators (D2) FAC-Neutral Test (D5) Indicators (D3) FAC-Neutral Test (D5) Indica									
Indicators (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)  Sandy Redox (S5)  Histo Epipedon (A2)  Slack Histic (A3)  Loamy Mucky Mineral (F1)  Redoxed Vertic (F18)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Stratified Layers (A5) (LRR C)  Depleted Matrix (F3)  Depleted Both Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (F1)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Vernal Pools (F9)  Popth (Indeators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if present):  Type:  Depth (Inches):  Surface Water (A1)  Hydric Soil Present? Yes  No  Depth (Inches):  Secondary Indicators (2 or more required):  Hydric Soil Reserve (B1)  Presence of Reduced Iron (C4)  Salt Crust (B11)  Secondary Indicators (2 or more required):  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Nonriverine)  Surface Water (B1)  Surface Water (B1)  Presence of Reduced Iron (C4)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present?  Yes  No  Depth (Inches):  Wetland Hydrology Present?  Yes  No  Depth (Inches):  Wetland Hydrology Present?  Yes  No  Wetland Hydrology Present?  Yes  No  Depth (Inches):  Wetland Hydrology Present?  Yes  No  Wetland Hydrology Present?  Yes  No  Depth (Inches):  No  Wetland Hydrology Present?  Yes  No  Wetland Hydrology Present?  Yes  No  Depth (Inches):  No  Wetland Hydrology Present?  Yes  No  Wet									
Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A1) Sandy Redox (S5) Histo (A2) Histosol (A2) Slack Histo (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F2) Stratified Layers (A5) (LRR C) Loamy Mucky Mineral (F2) Stratified Layers (A5) (LRR D) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (F3) Pereson (F8) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (F3) Sandy Mucky Mineral (F3) Sendy Gleyed Matrix (S4)  Pereson (F9)  Depleted Dark Surface (A12) Sandy Mucky Mineral (S1) Surface (A12) Sandy Mucky Mineral (S1) Surface (A12) Sandy Mucky Mineral (S1) Surface (A14) Surface (A14) Surface (A15) Surface (A16) Surface (A17) Surface (									
Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histos Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) 2 cnamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) 2 camy Gleyed Matrix (F2) Red Parent Material (TF2) Tink Dark Surface (A11) Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Tink Dark Surface (A12) Redox Depressions (F8) Probleted Sandy Mucky Mineral (S1) Vernal Pools (F9) Probleted Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sardy Gley	ype: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, C	S=Covere	d or Coat	ed Sand Gr	ains. <sup>2</sup> Locat	
Histic Epipedon (A2)  Black Histic (A3)  Black Histic (A3)  Black Histic (A3)  Loamy Mucky Mineral (F1)  Loamy (Beyed Matrix (F2)  Loamy (Beyed Matrix (F2)  Loamy (Beyed Matrix (F3)  Depleted Below Dark Surface (A11)  Peleted Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Vernal Pools (F9)  Sandy Mucky Mineral (S1)  Vernal Pools (F9)  Satistictive Layer (If present):  Type:  Depth (inches):  Bepth (inches):  Bepth (inches):  Secondary Indicators (2 or more required)  Surface Water (A1)  Water Marks (B1) (Riverine)  Biolic Crust (B12)  Sediment Deposits (B2) (Riverine)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) (Nonriverine)  Surface Soil Croaks (B6)  Surface Soil Croaks (B6)  Inundation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Wetland Hydrology Present? Yes No Depth (inches):  Urdace Water Present?  Yes No Depth (inches):  Water-Stained Leaves (B9)  Depth (inches):  Water-Stained Leaves (B9)  Wetland Hydrology Present? Yes No Depth (inches):  Urdace Soil State (Steam gauge, monitoring well, aerial photos, previous inspections), if available:			able to all			ed.)			
Black Histo (A3)									
Hydrogen Sulfide (A4)  Stratified Layers (A5) (LRR C)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Loam Musk (A9) (LRR D)  Depleted Below Dark Surface (A11)  Depleted Dark Surface (F6)  Depleted Below Dark Surface (A12)  Redox Depressions (F9)  Vernal Pools (F9)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Surface (A12)  Sandy Surface (									
Stratified Layers (AS) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks)  To muck (A9) (LRR D) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if present): Type:    Depth (inches):   Hydric Soil Present? Yes No									
Tem Muck (A9) (LRR D)					•	(F2)			
Depleted Below Dark Surface (A11)			3)					Other (E)	plain in Remarks)
Thick Dark Surface (A12) Redox Depressions (F8) Vernal Pools (F9) Redox Depressions (F8) And Gleyed Matrix (S4) Redox Depressions (F8) Vernal Pools (F9) Redox Depressions (F8) And Gleyed Matrix (S4) Unless disturbed or problematic.    Popth (inches):			10.00						
Sandy Mucky Mineral (S1) Vernal Pools (F9) wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if present):  Type:  Depth (inches):  Secondary Indicators? Yes No  Secondary Indicators (2 or more required)  Surface Water (A1) Salt Crust (B11) Set Marks (B1) (Riverine)  Surface Water (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine)  Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3)  Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No Depth (inches):  Urdace Water Present? Yes No Depth (inches):  Versence of Reduced Iron Present? Yes No Depth (inches):  Urdace Soil Cracks (B6) Inches):  Wetland Hydrology Present? Yes No Depth (inches):  Versence of Reduced Iron Remarks) if available:			e (A11)						
Sandy Gleyed Matrix (S4)  strictive Layer (if present):  Type:						F8)			
Depth (inches): Depth (inches)				Vernal Poo	ols (F9)				
Type:								unless dist	urbed or problematic.
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply) Surface Water (A1) Surface Water (A1) Surface Water (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Drift Deposits (B3) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Other (Explain in Remarks)  Depth (inches): Vater Table Present? Ves No Depth (inches): Vater Table Vesent? Ves No Vater Table Vesent? Ves	estrictive L	ayer (if present):		(					
etland Hydrology Indicators: imary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  Salt Crust (B11)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B2) (Nonriverine)  Sediment Deposits (B2) (Riverine)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (B7)  Water Marks (B1) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Other (Explain in Remarks)  Depth (inches):  Vater Table Present?  Yes  No  Depth (inches):  Vater Table Present? Yes  No  Depth (inches):  Vestand Hydrology Present? Yes  No  Depth (inches):  Vestand Hydrolo	Type:								
Secondary Indicators (2 or more required)	Depth (inc	ches):						Hydric Soil Pr	esent? Yes No
Surface Water (A1) Surface Water (A2) Salt Crust (B12) Saturation (A3) Sediment Deposits (B3) (Riverine) Sediment Deposits (B3) (Nonriverine) Sediment Deposits (B3) (Riverine) Drainage Patterns (B10) Sediment Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B3) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B2) (Riverine) Sediment Deposits (B3) (Riverine) Sediment Deposits (B3) (Riverine) Sediment	50	may oils							
Surface Water (A1) Salt Crust (B12) Sediment Deposits (B2) (Riverine)  High Water Table (A2) Biotic Crust (B12) Sediment Deposits (B2) (Riverine)  Saturation (A3) Aquatic Invertebrates (B13) Drift Deposits (B3) (Riverine)  Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)  Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)  Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C4) Crayfish Burrows (C8)  Surface Soil Cracks (B6) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C8)  Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3)  Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5)  Water Table Present? Yes No Depth (inches):  Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	50	U .							
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Saturation (A3)	DROLO(	GY drology Indicators:							
Water Marks (B1) (Nonriverine)	DROLOG	GY drology Indicators:		Salt Crus	t (B11)			Wate	er Marks (B1) (Riverine)
Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Indiace Water Present?  Water Table Present?  Yes No Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C5)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No  No  No  No  No  No  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOG etland Hydrimary Indic _ Surface	GY drology Indicators: cators (minimum of c		Salt Crus	t (B11) ust (B12)			Wate	ment Deposits (B2) (Riverine)
Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Dry-Season Water Table (C2)  Dry-Season Water Table (C3)  Saturation Visible on Aerial Imagery (C5)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No	DROLOG letland Hydrimary Indice Surface L High Wa	GY drology Indicators: eators (minimum of c		Salt Crus	t (B11) ust (B12)	s (B13)		Wate	ment Deposits (B2) (Riverine)
Drift Deposits (B3) (Nonriverine)	DROLOG letland Hydrimary Indice Surface High Wa Saturation	GY drology Indicators: cators (minimum of of of other (A1) ster Table (A2) on (A3)	one require	Salt Crus Biotic Cru Aquatic In Hydroger	t (B11) ust (B12) nvertebrate n Sulfide O	dor (C1)		Wate Sedi Drift Drail	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
Surface Soil Cracks (B6)	DROLOG letland Hydrimary Indice Surface High Wa Saturation Water M	GY drology Indicators: cators (minimum of o Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriver	ne require	Salt Crus Biotic Cru Aquatic Iu Hydroger	t (B11) ust (B12) nvertebrate n Sulfide O	dor (C1)	Living Root	Wate Sedi Drift Drail	per Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10)
Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Shallow Aquitard (D3) Water-Stained Leaves (B9) Other (Explain in Remarks) FAC-Neutral Test (D5) Factorial Test (D5) Water Present?	TDROLOG letland Hydrimary Indice Surface High Wa Saturation Water M	GY drology Indicators: cators (minimum of o Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No	ine) nriverine)	Salt Crus Biotic Cru Aquatic Iu Hydroger Oxidized	t (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe	dor (C1) res along		Wate Sedi Drift Drain ts (C3) Dry-	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2)
Water-Stained Leaves (B9)  Other (Explain in Remarks)  FAC-Neutral Test (D5)  ield Observations:  ourface Water Present? Yes No Depth (inches):  outface Water Present	DROLOG Surface High Wa Saturation Water M Sedimer Drift Dep	GY drology Indicators: cators (minimum of of Water (A1) eter Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No	ine) nriverine)	Salt Crus Biotic Cru Aquatic Iu Hydroger Oxidized Presence	t (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce	dor (C1) res along ed Iron (C	4)	Wate Sedi Drift Drain ts (C3) Dry Cray	per Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) mage Patterns (B10) Season Water Table (C2) rfish Burrows (C8)
ield Observations:  Surface Water Present? Yes No Depth (inches): Vater Table Present? Yes No Vater Table Present? Yes Yes No Yes	DROLOG Vetland Hydromary Indice Surface High Wa Saturation Water Management Sedimer Drift Dep	drology Indicators: cators (minimum of o Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriver nt Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6)	ine require ine) nriverine) rine)	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti	dor (C1) res along d Iron (C on in Tille	4)	Wate Sedi Drift Drain ts (C3) Dry Cray Satu	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) eration Visible on Aerial Imagery (CS
urface Water Present? Yes No Depth (inches):'  //ater Table Present? Yes No Depth (inches):'  aturation Present? Yes No Depth (inches):'  mcludes capillary fringe)  escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOG  etland Hyd  imary Indice  Surface  High Wa  Saturatic  Water M  Sedimer  Drift Dep  Surface  Inundati	GY drology Indicators: cators (minimum of control of co	ine require ine) nriverine) rine)	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface (	dor (C1) res along d Iron (C on in Tille C7)	4)	Wate Sedi Drift Drain ts (C3) Cray Cray ) Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3)
Vater Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No	DROLOG  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Surface Inundati  Water-S	GY  drology Indicators: cators (minimum of or Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriver int Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial i	ine require ine) nriverine) rine)	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface (	dor (C1) res along d Iron (C on in Tille C7)	4)	Wate Sedi Drift Drain ts (C3) Cray Cray ) Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3)
aturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No ncludes capillary fringe)  rescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOG    Surface     Surface     High Wa     Saturation     Water M     Sedimer     Drift Dep     Surface     Inundation     Water-Sield Observire	drology Indicators: cators (minimum of of or Water (A1) ster Table (A2) on (A3) larks (B1) (Nonriver on Deposits (B2) (Nonriver Soil Cracks (B6) ion Visible on Aerial of Stained Leaves (B9) revations:	ine) nriverine) rine)	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent In Thin Muc	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface (	dor (C1) res along d Iron (C on in Tille C7)	4)	Wate Sedi Drift Drain ts (C3) Cray Cray ) Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3)
ncludes capillary fringe) lescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOG  Vetland Hydrimary Indice  Surface  High Water Management  Sedimer  Drift Dep  Surface  Inundati  Water-S  Vetled Observirians	drology Indicators: cators (minimum of of of water (A1) cater Table (A2) con (A3) clarks (B1) (Nonriver of Deposits (B2) (No cosits (B3) (Nonriver Soil Cracks (B6) con Visible on Aerial cational Leaves (B9) convations: der Present?	ine) nriverine) rine) Imagery (B	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent In Thin Muc Other (Ex	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( splain in Re	dor (C1) res along d Iron (C on in Tille C7)	4)	Wate Sedi Drift Drain ts (C3) Cray Cray ) Satu Shal	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3)
	DROLOG  Setland Hydrimary Indice Surface High Water M Sedimer Drift Dep Surface Inundati Water-S  ield Obser  Water Table	GY  drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver at Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ter Present?  Present?	rine) Imagery (B	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc Other (Ex	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe e of Reduce on Reducti k Surface ( splain in Re	dor (C1) res along d Iron (C on in Tille C7)	4) ed Soils (C6)	Wate Sedi Drift Drain ts (C3) Dry Cray ) Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS) low Aquitard (D3) -Neutral Test (D5)
temarks: pit was dug in the channel of what appears to be a smale. Pit is Nearlow "preshwater pond" on NWI map, approximately 300ft upstream.	/DROLOG /etland Hyd rimary Indice _ Surface   High Wa _ Saturatio _ Water M _ Sedimer _ Drift Dep _ Surface _ Inundati _ Water-S field Obser Surface Wat Vater Table Saturation P Includes cal	GY drology Indicators: cators (minimum of	ine) nriverine) rine) Imagery (B	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent In Thin Muc Other (Ex No Depth (in	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( rplain in Re nches): nches):	dor (C1) res along d Iron (C on in Tille C7) marks)	4) dd Soils (C6)	Wate Sedi Drift Drain ts (C3) Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS) low Aquitard (D3) -Neutral Test (D5)
"Freshwater pind" on NWI map, apport mately 300ft upstream.	/DROLOG /etland Hydrimary Indice _ Surface   High Wa _ Saturatio _ Water M _ Sedimer _ Drift Dep _ Surface _ Inundati _ Water-S //ield Obser //surface Water Table //saturation P //includes ca	GY drology Indicators: cators (minimum of	ine) nriverine) rine) Imagery (B	Salt Crus Biotic Cru Aquatic II Hydroger Oxidized Presence Recent In Thin Muc Other (Ex No Depth (in	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( rplain in Re nches): nches):	dor (C1) res along d Iron (C on in Tille C7) marks)	4) dd Soils (C6)	Wate Sedi Drift Drain ts (C3) Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS) low Aquitard (D3) -Neutral Test (D5)
"Freshwater pind" on NWI map, apport mately 300H upstream.	POROLOGI Vetland Hydrominary Indico Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundati Water-S Gurface Wat Vater Table Saturation P Includes cal Describe Re	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver ont Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ler Present? Present. Pre	rine) Imagery (B  Yes Yes In gauge, m	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc Other (Ex No Depth (in No Depth (in No Depth (in nonitoring well, aerial	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( plain in Re nches): nches): photos, pr	dor (C1) res along d Iron (C on in Tille C7) marks)	4) ed Soils (C6) Wetla	Wate Sedi Drift Drain as (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3) -Neutral Test (D5)
	DROLOG  Setiand Hydromany Indice Surface High Water M Sedimer Drift Dep Surface Inundati Water-S Sield Obser For Surface Water Table	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver ont Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ler Present? Present. Pre	rine) Imagery (B  Yes Yes In gauge, m	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc Other (Ex No Depth (in No Depth (in No Depth (in nonitoring well, aerial	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( plain in Re nches): nches): photos, pr	dor (C1) res along d Iron (C on in Tille C7) marks)	4) ed Soils (C6) Wetla	Wate Sedi Drift Drain as (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3) -Neutral Test (D5)
	POROLOGI Vetland Hydrominary Indico Surface High Wa Saturatio Water M Sedimer Drift Dep Surface Inundati Water-S Gurface Wat Vater Table Saturation P Includes cal Describe Re	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver ont Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ler Present? Present. Pre	rine) Imagery (B  Yes Yes In gauge, m	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc Other (Ex No Depth (in No Depth (in No Depth (in nonitoring well, aerial	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( plain in Re nches): nches): photos, pr	dor (C1) res along d Iron (C on in Tille C7) marks)	4) ed Soils (C6) Wetla	Wate Sedi Drift Drain as (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3) -Neutral Test (D5)
	DROLOG  Setiand Hydromany Indice Surface High Water M Sedimer Drift Dep Surface Inundati Water-S Sield Obser For Surface Water Table	drology Indicators: cators (minimum of or Water (A1) ater Table (A2) on (A3) larks (B1) (Nonriver ont Deposits (B2) (No posits (B3) (Nonrive Soil Cracks (B6) ion Visible on Aerial I Stained Leaves (B9) rvations: ler Present? Present. Pre	rine) Imagery (B  Yes Yes In gauge, m	Salt Crus Biotic Cru Aquatic In Hydroger Oxidized Presence Recent In Thin Muc Other (Ex No Depth (in No Depth (in No Depth (in nonitoring well, aerial	at (B11) ust (B12) nvertebrate n Sulfide O Rhizosphe of Reduce on Reducti k Surface ( plain in Re nches): nches): photos, pr	dor (C1) res along d Iron (C on in Tille C7) marks)	4) ed Soils (C6) Wetla	Wate Sedi Drift Drain as (C3) Dry Cray Satu Shal FAC	er Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) nage Patterns (B10) Season Water Table (C2) fish Burrows (C8) rration Visible on Aerial Imagery (CS low Aquitard (D3) -Neutral Test (D5)

Note:				
This compling point	did not	most th	a three	crite

I his sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic WETLAND DETERMINATION DATA FORM — Arid West Region Resources Delineation Report for more detail.

Project/Site: COLLINS VILLE City/County: BIRD	S LANDING /SULANDSampling Date: 17/3/2
	State: Sampling Point: SP -
Investigator(s): S.WELLS + C.Y ROVRIGUEZ Section, Township, R.	ange: 3N IE 72
Landform (hillslope, terrace, etc.): Local relief (concave,	
Subregion (LRR):	Long: 121.846.953 Datum: Albert 19
Soil Map Unit Name: DIABLO - Ayar CLAYS 2to 9 no regue	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _	<i>/</i> -
· · · · · · · · · · · · · · · · · · ·	"Normal Circumstances" present? Yes No
	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	·
	Clak
Hydrophytic Vegetation Present? Yes No Is the Sample	d Area
Hydric Soll Present?  Yes No within a Wetland Hydrology Present?  Yes No within a Wetland Hydrology Present?	and? Yes No X 11/25/2
Remarks: Stong indicators of hydrophylic vegetation of by	undaire and Theorem Rushing
ingritors of phydrology yes to gut fearing sweet.	Show AND OD Some (S)
+ above Novi Judnoon envergery nothing.	
VEGETATION – Use scientific names of plants.	MANN.
Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	Number of Dominant Species
1,	That Are OBL, FACW, or FAC: (A)
2,	Total Number of Dominant
3	Species Across All Strata: (B)
= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100/20 (A/B)
Sapling/Shrub Stratum (Plot size:)	That we obe, Thow, of the Park
1	Prevalence Index worksheet:
2	
4.	FACW species x 2 =
5	FAC species x 3 =
= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)  1. DISTICULIS SPICATA 75 Y FAC	UPL species x 5 =
2. LEPIDIUM LATIFOLIUM , 5000 N FAC	Column Totals: (A) (B)
3. Mead Studio (Runex aigns) 70% N FAC	Prevalence Index = B/A =
4. Dead Sticks (CENTAUREA SOLSTITIALIS) 500 Q	Hydrophytic Vegetation Indicators:
5. [ LEPIDIUM CATIVOLUMIC dood sticks)	Dominance Test is >50%
6.	Prevalence Index is ≤3.0¹
7	Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:) = Total Cover	
1,	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
= Total Coyer	Hydrophytic Vegetation
% Bare Ground in Herb Stratum % Cover of Biotic Crust	Present? Yes No
Remarks:	
Best guess in opecus for the and shins	, seems to have topidum
latifelium Malely + C. Soldhealis could under	it the thousand,
Remarks: Best guess on opecies for the dead states  Patifolism Whath + C. Soldillalis could under  Veytabor of nearby uplands used for delination	V Markery .

SOIL

Sampling Point: SP-1

	pth needed to docum	ent the ind	licator o	r confiri	m the absence of indicators.)
Depth Matrix		Features			
(inches) Color (moist) %	Color (moist)	%\	Type <sup>1</sup>	Loc2	Texture Remarks
0-3.5 10 yr 2/2					SANDYLOAM
1 1/0 1/0	7 -1 11				
3.5-12 10 YR 3/2 90	2.57 4/4	10_	<u> </u>	<u> M</u>	SANO
	,				
12-14 MR26 93	10YR 4/4		$\overline{C}$	Μ	SANVO
12 17 10 10 10	1011011			<i>/</i>	
	1				
<sup>1</sup> Type: C=Concentration, D=Depletion, RN				Sand G	
Hydric Soil Indicators: (Applicable to a	. 1		.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	,X Sandy Redo				1 cm Muck (A9) (LRR C)
Histic Epipedon (A2)	Stripped Ma		-43		2 cm Muck (A10) (LRR B)
Black Histic (A3)	Loamy Much				Reduced Vertic (F18) Red Parent Material (TF2)
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C)	Loamy Gley Depleted Ma		-2)		Other (Explain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark		3)		Office (Explain in Normalina)
Depleted Below Dark Surface (A11)	Depleted Da				
Thick Dark Surface (A12)	Redox Depr				<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Vernal Pools				wetland hydrology must be present,
Sandy Gleyed Matrix (S4)					unless disturbed or problematic.
Restrictive Layer (if present):					
Type:					$\checkmark$
Depth (inches):					Hydric Soil Present? Yes / No
Remarks: ( ) 0	\ /	10	4.\	. `	7.0
Remarks: Sunty good > In	s arroma (	£ 4)	- mar	X /	2 20
	·	,			
HYDROLOGY					
ITIDIOLOGI					
181-11- Allendus Laure Indiantaus					
Wetland Hydrology Indicators:	edu abadu all that apply	Δ.			Secondary Indicators (2 or more required)
Primary Indicators (minimum of one requir					Secondary Indicators (2 or more required)
Primary Indicators (minimum of one requir Surface Water (A1)	Salt Crust	(B11)			Water Marks (B1) (Riverine)
Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2)	Salt Crust	(B11) t (B12)	(042)		Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2) Saturation (A3)	Salt Crust Biotic Crus Aquatic Inv	(B11) t (B12) vertebrates			<ul><li>Water Marks (B1) (Riverine)</li><li>Sediment Deposits (B2) (Riverine)</li><li>Drift Deposits (B3) (Riverine)</li></ul>
Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)	Salt Crust   Biotic Crust   Aquatic Inv	(B11) t (B12) vertebrates ( Sulfide Odo	r (C1)	iving Do	<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> </ul>
Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine	Salt Crust of Biotic Crust of Aquatic Inv Hydrogen of Crust of Recognition   Oxidized Recognition	(B11) t (B12) vertebrates ( Sulfide Odo hizosphere	r (C1) s along L		<ul> <li>Water Marks (B1) (Riverine)</li> <li>Sediment Deposits (B2) (Riverine)</li> <li>Drift Deposits (B3) (Riverine)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine)	Salt Crust of Biotic Crust of Aquatic Inv Hydrogen of Oxidized R	(B11) t (B12) rertebrates of Sulfide Odo hizosphere of Reduced	r (C1) s along L Iron (C4)	)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) pots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6)	Salt Crust ( Biotic Crust ( Aquatic Inv Hydrogen ( Oxidized R Presence ( Recent Iro	(B11) t (B12) vertebrates ( Sulfide Odo hizosphere of Reduced n Reduction	r (C1) s along L Iron (C4) ı in Tilled	)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (	Salt Crust of Biotic Crust of Aquatic Inv Hydrogen of Oxidized Researce of Recent Iron B7)  Thin Muck	(B11) t (B12) rertebrates ( Sulfide Odo hizosphere of Reduced n Reduction Surface (C	r (C1) s along L Iron (C4) i in Tilled 7)	)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)	Salt Crust of Biotic Crust of Aquatic Inv Hydrogen of Oxidized Researce of Recent Iron B7)  Thin Muck	(B11) t (B12) vertebrates ( Sulfide Odo hizosphere of Reduced n Reduction	r (C1) s along L Iron (C4) i in Tilled 7)	)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Water-Stained Leaves (B9) Field Observations:	Salt Crust  Biotic Crust Aquatic Inv Hydrogen  Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) t (B12) vertebrates ( Sulfide Odo hizosphere of Reduced n Reduction Surface (C'	r (C1) s along L Iron (C4) i in Tilled 7)	)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes	Salt Crust   Blotic Crust   Aquatic Inv   Hydrogen   Oxidized R   Presence   Recent Irol   Other (Exp   No Depth (inc	(B11) t (B12) rertebrates (Bulfide Odo hizosphere of Reduced in Reduction Surface (Citain in Rem	r (C1) s along L Iron (C4) i in Tilled 7)	)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) t (B12) rertebrates ( Sulfide Odo hizosphere of Reduced n Reduction Surface (C: lain in Rem	r (C1) s along L Iron (C4) i in Tilled 7)	) Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) pots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) t (B12) rertebrates ( Sulfide Odo hizosphere of Reduced n Reduction Surface (C: lain in Rem	r (C1) s along L Iron (C4) i in Tilled 7)	) Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) t (B12) rertebrates ( Sulfide Odo hizosphere of Reduced n Reduction Surface (C' lain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	) Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) pots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp	(B11) t (B12) rertebrates ( Sulfide Odo hizosphere of Reduced n Reduction Surface (C' lain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	) Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) pots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Inift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, results)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Irol Thin Muck Other (Exp No Depth (inc	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced in Reduction Surface (Citain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Cots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  tland Hydrology Present? Yes No
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Inift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, results)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Irol Thin Muck Other (Exp No Depth (inc	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced in Reduction Surface (Citain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Cots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  tland Hydrology Present? Yes No
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Inift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, results)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Irol Thin Muck Other (Exp No Depth (inc	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced in Reduction Surface (Citain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Cots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  tland Hydrology Present? Yes No
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Inift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, results)	Salt Crust Biotic Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Irol Thin Muck Other (Exp No Depth (inc	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced in Reduction Surface (Citain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Cots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)  tland Hydrology Present? Yes No
Primary Indicators (minimum of one requir  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Inift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, results)	Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Thin Muck Other (Exp No Depth (inc No Depth (inc	(B11) t (B12) rertebrates Sulfide Odo hizosphere of Reduced in Reduction Surface (Citain in Rem ches): ches):	r (C1) s along L Iron (C4) in Tilled 7) arks)	Soils (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) pots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D3) FAC-Neutral Test (D5)

## J-28)

Project/Site: Collinsville	City/County: _ S	ANO Sampling Date: 67-08-24
Applicant/Owner: US POWEY		State: CA Sampling Point: SP -
Investigator(s): Sidney Wells, Christing R	adviguet Section Township R	lange JN 1 E ZZ
Landform (hillslope, terrace, etc.):		, convex, none): Slope (%):
		Long:
Soil Map Unit Name: 01950 - AMAR CLAYS		
A Real Control of the		
Are climatic / hydrologic conditions on the site typical for the		
Are Vegetation, Soil, or Hydrology		e "Normal Circumstances" present? YesX 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.
Hydric Soil Present? Yes	No Is the Sample No within a Wetl	
VEGETATION – Use scientific names of pla		
Tree Stratum (Plot size:)	Absolute Dominant Indicator % Cover Species? Status	
1		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3		Total Number of Dominant Species Across All Strata: (B)
4	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
3		OBL species x1 =
4.		FACW species x 2 =
5		FAC species x 3 =
	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:)	· · · · · · · · · · · · · · · · · · ·	UPL species x 5 =
1. Conjum maculatum	- 35 Y FACH	Column Totals: (A) (B)
2. Arteme douglasiana	13 1 +76	Prevalence Index = B/A =
3		Hydrophytic Vegetation Indicators:
4		✓ Dominance Test is >50%
5		Prevalence Index is ≤3.0¹
6		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8	50 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:)	C. C	The state of the s
1 2		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic Vegetation
Was Equation ( Controll to Control and Wildows Control Control	er of Biotic Crust	Present? Yes No
Remarks:		

-	_	**	
$\overline{}$	t I		

rofile Desc Depth	Matrix		Red	OX FESTIIRE	5			
inches)	Color (moist)	%	Color (moist)	ox Feature: %	Type <sup>1</sup>	Loc²	Texture	Remarks
)-4	7.54R 3/2	100					Saloan	0
1-11.5	10/R21/2	70	254R 4/6	30	<u></u>	PL/M	SiClan	
			¥0					
.5-15.5	10/R 2/1	96	54R 3/4	4	<u></u>	PL/M	Clay -	*.
• •				-				
	ncentration, D=Dep					ed Sand Gr		on: PL=Pore Lining, M=Matrix.
	ndicators: (Applic	able to all			ed.)			Problematic Hydric Soils <sup>3</sup> :
_ Histosol (			Sandy Red					k (A9) (LRR C)
= 0	ipedon (A2)		Stripped M		L /E4\			k (A10) (LRR B)
Black His			Loamy Muc					Vertic (F18)
	Sulfide (A4)	• \	Loamy Gleg  Depleted M		(FZ)			nt Material (TF2)
	Layers (A5) (LRR C ck (A9) (LRR D)	9	Redox Darl		F6)		— Other (Exp	olain in Remarks)
	Below Dark Surface	(A11)	Redox Dan		3			
	rk Surface (A12)	((1))	Redox Dep				3Indicators of h	nydrophytic vegetation and
• • • • • • • • • • • • • • • • • • • •	ucky Mineral (S1)		Vernal Poo		-,			rology must be present,
	leyed Matrix (S4)			/			Desired Court of the latest	rbed or problematic.
strictive L	ayer (if present):							
Type:								X
Type: Depth (incomarks: So	hes):	offset	from location	on of	vege	lation,	Hydric Soil Pre	esent? Yes No  No  No
Type: Depth (inc marks: 50 DISSODU	hes): il pit was o s plants (Co	offset onium r	from location	on of	vege	tation y		A CONTRACTOR OF THE CONTRACTOR
Type: Depth (inc marks: ろい からかかい	hes): il pit was ( s plants (Ca	offset onlum v	from location	on of	vege	tation,		A CONTRACTOR OF THE CONTRACTOR
Type:	hes): il pit was o s plants (Co	onium r	naculatum)	) -	vege	tation 1	plot due t	A CONTRACTOR OF THE CONTRACTOR
Type:	hes):  I pit was a  S plants (Co	onium r	naculatum	) - ly)	vege	tation i	plot due t	y Indicators (2 or more required)
Type:	hes):  I pit was a plants (Case)  GY  rology Indicators: ators (minimum of only Nater (A1)	onium r	n a CV (a twn)	ly) -	vege	tation i	Plot due t  Secondar  Wate	y Indicators (2 or more required) or Marks (B1) (Riverine)
Type:	hes):  I pit was (  S plants (Co  SY  rology Indicators: ators (minimum of one  Nater (A1) er Table (A2)	onium r	check all that appl Salt Crust Biotic Crus	ly) - : (B11) st (B12)		tation y	Plot due t  Secondar  Wate  Sedir	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine)
Depth (incomarks: Social Social Policies Policie	hes):  I pit was (  S plants (Co  SY  rology Indicators: ators (minimum of o  Nater (A1) er Table (A2) n (A3)	nium Y	check all that appl Salt Crust Biotic Crust Aquatic In	ly) - : (B11) st (B12) svertebrate:	s (B13)	tation y	Secondar  Wate Sedir Drift I	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine)
DROLOG  Tiland Hyd  mary Indica  Surface V  High Wat  Saturation  Water Ma	hes):  I Pit Was ( S plants (Co  S plants (Co  S plants (Co  S plants (Co  Nater (A1)  Per Table (A2)  In (A3)  Parks (B1) (Nonriveri	ne required	salt Crust Aquatic In Hydrogen	ly) : (B11) st (B12) ivertebrate: Sulfide Oc	s (B13) dor (C1)		Secondar  Wate Sedir  Drift I	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10)
DROLOG  etland Hyd mary Indica Surface V High Wat Saturation Water Ma Sediment	rology Indicators: ators (minimum of or Vater (A1) rer Table (A2) n (A3) arks (B1) (Nonriveriation of the proposits (B2) (Nonriveriation of the proposition of the pr	ne required	scheck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	ly) : (B11) st (B12) ivertebrate: Sulfide Oc Rhizospher	s (B13) dor (C1) res along	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2)
DROLOG etland Hyd mary Indica Surface V High Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of or Vater (A1) rer Table (A2) n (A3) arks (B1) (Nonriveriat Deposits (B2) (Nonriveriatis (B3) (Nonriveriatis (	ne required	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F	ly) t (B11) st (B12) evertebrate: Sulfide Oc Rhizospher of Reduce	s (B13) dor (C1) res along d Iron (C4	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Crayf	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
DROLOC  Surface V  High Water Ma  Sediment  Drift Depo	hes):  IN PIT WAS (Company)  Foliation (Company)  F	ne required ne) priverine) ine)	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly) - (B11) st (B12) evertebrate: Sulfide Oc Rhizospher of Reduce	s (B13) dor (C1) res along d Iron (C4 on in Tille	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) tage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C
DROLOC  etland Hyd mary Indica Surface V High Water Ma Sediment Drift Depo Surface S Inundatio	hes):  IN PIT WAS (Company)  Foliation (Company)  F	ne required ne) priverine) ine)	salt Crust Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly)  (B11) st (B12) evertebrate: Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille C7)	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3)
DROLOG  Patland Hyd  mary Indica  Surface V  High Wat  Saturation  Water Ma  Sediment  Drift Depo	rology Indicators: ators (minimum of or Nater (A1) er Table (A2) n (A3) arks (B1) (Nonriverist Deposits (B2) (Nonriverist) soil Cracks (B6) n Visible on Aerial Inained Leaves (B9)	ne required ne) priverine) ine)	salt Crust Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ly) - (B11) st (B12) evertebrate: Sulfide Oc Rhizospher of Reduce	s (B13) dor (C1) res along d Iron (C4 on in Tille C7)	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) tage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C
DROLOG  etland Hyd mary Indica Surface V High Water Ma Sediment Drift Depo Surface S Inundatio Water-Sta	rology Indicators: ators (minimum of or Nater (A1) ar Table (A2) n (A3) arks (B1) (Nonriveriat Deposits (B2) (Nonriveriat Deposits (B3) (Nonriveriat Deposits (B6)) n Visible on Aerial In ained Leaves (B9) ations:	ne required ne) ine) magery (B7	scheck all that appl Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Ex	ly) st (B11) st (B12) evertebrate: Sulfide Oc Rhizospher of Reduce on Reduction c Surface (in plain in Re	s (B13) dor (C1) res along d Iron (C4 on in Tille C7)	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3)
DROLOG  Color of the state of t	hes):  IN PIT WAS (Company)  Foliation (Company)  F	ne required ne) niverine) ine) magery (B7	Salt Crust Biotic Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Thin Muck Other (Exp	ly) st (B11) st (B12) evertebrates Sulfide Oc Rhizospher of Reduce on Reduction c Surface (in plain in Re	s (B13) dor (C1) res along d Iron (C4 on in Tille C7)	Living Roof	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3)
DROLOG  Color of the state of t	hes):  IN PIT WAS (Company)  Foliation (Company)  F	ne required ne) niverine) ine) magery (B7	Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Thin Muck  Other (Exp	ly) st (B11) st (B12) svertebrate: Sulfide Oc Rhizospher of Reduce on Reduction of Surface (in plain in Re suches):	s (B13) dor (C1) res along d Iron (C4 on in Tille C7)	Living Root 4) d Soils (C6)	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall FAC-	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3) Neutral Test (D5)
DROLOG  Partiand Hyd  mary Indica  Surface V  High Water Ma  Sediment  Drift Depo  Surface S  Inundatio  Water-State Id Observ  rface Water  ater Table F  turation Precludes capi	hes):  IN pit Was ( Solutions):  Foliations:  ators (minimum of orwater (A1)  er Table (A2)  n (A3)  arks (B1) (Nonriveriat Deposits (B2) (Norriversiates (B3) (Nonriversiates (B4))  atoms:  r Present?	ne) priverine) ine) magery (B7	Salt Crust  Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Irc  Thin Muck  Other (Exp	ly) st (B11) st (B12) svertebrate: Sulfide Oc Rhizospher of Reduce on Reductic s Surface (i plain in Re aches): aches):	s (B13) dor (C1) res along d Iron (C4 on in Tille C7) marks)	Living Roof 4) d Soils (C6)	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall FAC-	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3) Neutral Test (D5)
Depth (inc emarks: So Dissolv)  DROLOG  etland Hyd  mary Indica  Surface V  High Water Ma  Sediment  Drift Depo  Surface S  Inundatio  Water-Sta  etld Observ  rface Water  ater Table F  turation Precludes capi	hes):  Il pit Was ( S plants (Ca  Note: (A1)  Table (A2)  Tabl	ne) priverine) ine) magery (B7	Salt Crust  Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Irc  Thin Muck  Other (Exp	ly) st (B11) st (B12) svertebrate: Sulfide Oc Rhizospher of Reduce on Reductic s Surface (i plain in Re aches): aches):	s (B13) dor (C1) res along d Iron (C4 on in Tille C7) marks)	Living Roof 4) d Soils (C6)	Secondar  Wate Sedir Drift I Drain ts (C3) Dry-S Crayf Satur Shall FAC-	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3) Neutral Test (D5)
DROLOG etland Hyd imary Indica Surface V High Water Ma Sediment Drift Depo Surface S Inundatio Water-State eld Observ rface Water ater Table F turation Precludes capi	hes):  IN pit Was ( Solutions):  Foliations:  ators (minimum of orwater (A1)  er Table (A2)  n (A3)  arks (B1) (Nonriveriat Deposits (B2) (Norriversiates (B3) (Nonriversiates (B4))  atoms:  r Present?	ne required  ne)  priverine)  ine)  magery (B7	Salt Crust  Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Thin Muck  Other (Exp	ly) st (B11) st (B12) evertebrates Sulfide Oc Rhizospher of Reduce on Reduction st Surface (in plain in Re exches): exches): photos, pre	s (B13) dor (C1) res along d Iron (C4 on in Tille C7) marks)	Living Roof 4) d Soils (C6)  Wetla	Secondar  Wate Sedir Drain ts (C3) Dry-S Crayf Satur Shall FAC-	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3) Neutral Test (D5)
DROLOG  etland Hyd mary Indica Surface V High Water Ma Sediment Drift Depo Surface S Inundatio Water-Sta eld Observ rface Water ater Table F turation Pre cludes capi scribe Rec	hes):  IN pit Was ( Solutions):  Foliations:  ators (minimum of orwater (A1)  er Table (A2)  n (A3)  arks (B1) (Nonriveriat Deposits (B2) (Norriversiates (B3) (Nonriversiates (B4))  atoms:  r Present?	ne required  ne)  priverine)  ine)  magery (B7	Salt Crust  Salt Crust  Biotic Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Thin Muck  Other (Exp	ly) st (B11) st (B12) evertebrates Sulfide Oc Rhizospher of Reduce on Reduction st Surface (in plain in Re exches): exches): photos, pre	s (B13) dor (C1) res along d Iron (C4 on in Tille C7) marks)	Living Roof 4) d Soils (C6)  Wetla	Secondar  Wate Sedir Drain ts (C3) Dry-S Crayf Satur Shall FAC-	y Indicators (2 or more required) or Marks (B1) (Riverine) ment Deposits (B2) (Riverine) Deposits (B3) (Riverine) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C ow Aquitard (D3) Neutral Test (D5)



Project/Site: Callinsville		City/County:	861	ano	Sampling I	Date: 07-	08-2
Applicant/Owner: US POWEN				State: <u>C/</u> 9			
Investigator(s): Sidney Wells, Christing	a Rodinguez	Section To	vnshin Ra	nge: JN IE	22		
Landform (hillslong terrace etc.):	0	Local relief	(concave	convex none). Mo	re	Slone (%	). Ø
Landform (hillslope, terrace, etc.):	Lati	8 081	112	1000: -171 PL	8972	_ Clope (//	A0198
Soil Map Unit Name:OIABLO - AYAR_ C							10 1 10
						×	
Are climatic / hydrologic conditions on the site typi						~	<i>(</i> 2)
Are Vegetation, Soil, or Hydrology						176	No
Are Vegetation, Soil, or Hydrology	naturally pr	oblematic?	(if ne	eeded, explain any answ	ers in Remar	ks.)	
SUMMARY OF FINDINGS - Attach sit	te map showing	g sampling	g point l	ocations, transect	s, importa	int featur	es, etc.
Hydrophytic Vegetation Present? Yes	No_X_			• ₩//we ex			
	No X		e Sampleo		No	X	
	No X	withi	n a Wetlai	nd? Yes	No		
Remarks:							
VEGETATION – Use scientific names	of plants.	_		1			log <sup>er</sup> .
		Dominant		Dominance Test wo	rksheet:	,	
<u>Tree Stratum</u> (Plot size:) 1		Species?		Number of Dominant That Are OBL, FACW		<u>ø</u> _	_ (A)
2		+30 <del></del> V		Total Number of Dom		7	
3				Species Across All St	rata: _		_ (B)
4		_ = Total Cov	/er	Percent of Dominant of That Are OBL, FACW		ø_	_ (A/B)
1				Prevalence Index wo	orksheet:		
2				Total % Cover of		Multiply by:	
3				OBL species	x1=	=	
4				FACW species	x2=	=	
5		-x		FAC species			
5	Ţ	_ = Total Cov	/er	FACU species	x 4 =		
Herb Stratum (Plot size: 5 )	7 h	/	X	UPL species			
2. ARTENESIA DOUGLASIANA			FAC	Column Totals:	(A)		(B)
3. CENTAUREA SOLSTITIAL	1 ( Elmet) 40	1	X	Prevalence Inde	x = B/A =		
4. SALSOLA SODA? dead, skeleta		- X	FACIJ	Hydrophytic Vegetat			
5				Dominance Test	is >50%		
6.		-		Prevalence Index	is ≤3.0 <sup>1</sup>		
7.				Morphological Ad	aptations¹ (P	rovide suppo	orting
8				data in Remar			
		_ = Total Cov	/er	Problematic Hydr	ophytic Vege	tation' (Expl	ain)
Woody Vine Stratum (Plot size:	_)			francisco de bonacio	29 223	al la valuata av	
1	· · · · · · · · · · · · · · · · · · ·	- :		<sup>1</sup> Indicators of hydric s be present, unless dis			must
2		- T-1-10			1/	100000000000000000000000000000000000000	
11		_ = Total Cov	/er	Hydrophytic Vegetation	×	<b>V</b>	
% Bare Ground in Herb Stratum	% Cover of Biotic C	Crust	<u>/</u>	Present? Y	es	No	
Remarks: Skeleton looked Similar survey that spices nos no	to Sulsolo tobserved	i soda	shelete	heard trid in	n fer	ustri -	_
1							

_	_		
•	- 60	M	

Sampling Point:	Sampling	Point:	
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Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup> Texture Remarks
0-4 2,5 4 3/2	LOAMYSAND
11 115 - 51/ 3/	<u> </u>
4-16.5 Z.SY 3/5	<u>SAND</u>
1	2
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise note	CP100
Histosol (A1) Sandy Redox (S5)	1 cm Muck (A9) (LRR C)
Histic Epipedon (A2) Stripped Matrix (S6)	2 cm Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mineral	, · · · · · · · · · · · · · · · · · · ·
Hydrogen Sulfide (A4) Loamy Gleyed Matrix	
Stratified Layers (A5) (LRR C) Depleted Matrix (F3)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (I	
Depleted Below Dark Surface (A11) Depleted Dark Surface	
Thick Dark Surface (A12) Redox Depressions (F	
Sandy Mucky Mineral (S1) Vernal Pools (F9)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type:	✓
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
*	
-	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	
an controlle statement attraction. Companies	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)	* /
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)	Water Marks (B1) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2)  Salt Crust (B11) Biotic Crust (B12)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Aquatic Invertebrates	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
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) (Nonriverine)  Hydrogen Sulfide Od	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10)
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) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospher	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Es along Living Roots (C3) Dry-Season Water Table (C2)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) es along Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)
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) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Presence of Reduced	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) In in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Aquatic Invertebrates Water Marks (B1) (Nonriverine) Hydrogen Sulfide Od Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospher Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)  Thin Muck Surface (C	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) Dry-Season Water Table (C2) Dry-Season Water Table (C3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates Water Marks (B1) (Nonriverine) Hydrogen Sulfide Od Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospher Drift Deposits (B3) (Nonriverine) Presence of Reduced Surface Soil Cracks (B6) Recent Iron Reduction Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C) Water-Stained Leaves (B9) Other (Explain in Ref	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) Dry-Season Water Table (C2) Dry-Season Water Table (C3)
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) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water Stained Leaves (B9)  Field Observations:	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Aquatic Invertebrates Hydrogen Sulfide Od Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present?  Presence of Reduced Recent Iron Reduction Thin Muck Surface (C) Water-Stained Leaves (B9)  Other (Explain in Ref	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) C7) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Aquatic Invertebrates Water Marks (B1) (Nonriverine) Hydrogen Sulfide Od Sediment Deposits (B2) (Nonriverine) Orift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)  Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches):	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C5) Dry-Season Water Table
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C2) Crayfish Burrows (C8) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C5) Dry-Season Water Table
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Capture (Explain in Renotation Present))	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Hundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Context)         Water-Stained Leaves (B9)       Other (Explain in Rerefield Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Capture (Explain in Renotation Present))	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Hundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Context)         Water-Stained Leaves (B9)       Other (Explain in Rerefield Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Hundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Context)         Water-Stained Leaves (B9)       Other (Explain in Rerefield Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Hundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Context)         Water-Stained Leaves (B9)       Other (Explain in Rerefield Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water Table (C3) Dry-Season Water Table (C2) Dry-Season Water
Wetland Hydrology Indicators:         Primary Indicators (minimum of one required; check all that apply)         Surface Water (A1)       Salt Crust (B11)         High Water Table (A2)       Biotic Crust (B12)         Saturation (A3)       Aquatic Invertebrates         Water Marks (B1) (Nonriverine)       Hydrogen Sulfide Od         Sediment Deposits (B2) (Nonriverine)       Oxidized Rhizospher         Drift Deposits (B3) (Nonriverine)       Presence of Reduced         Surface Soil Cracks (B6)       Recent Iron Reduction         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (Context)         Water-Stained Leaves (B9)       Other (Explain in Rerefield Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, presented and provided pro	Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Or (C1) Drainage Patterns (B10) Dry-Season Water Table (C2) Dry-Season Water

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

WETLAND DET	ERMINATION	DATA FORM -	- Arid West Region	LW-29
Project/Site: COLLINSVILLE	City/0	County: SUISUN C	Sampling	Date: 7/8/2
Applicant/Owner: L5 POWER			State: A Sampling	Point: SP-1
Investigator(s): CY, NOORIGUEZ + S. U				
Landform (hillslope, terrace, etc.):				Slope (%): Ø
Subregion (LRR):	1 at: 3 8	081801	Long: -121, 846 584	
Soil Map Unit Name: \$1ABLO -AYAR CLATS			NWI classification:	
		\/		
Are climatic / hydrologic conditions on the site typical for			"Normal Circumstances" present?	vaa X Na
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology	_ naturally problem	atic? (If ne	eeded, explain any answers in Rema	arks.)
SUMMARY OF FINDINGS – Attach site ma	p showing sar	npling point le	ocations, transects, import	tant features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	No	Is the Sampled within a Wetlar		
VEOLETATION III : 115				
VEGETATION – Use scientific names of pla		winest ladicates	Dominance Test worksheet:	
Tree Stratum (Plot size:)		minant Indicator ecies? Status	Number of Dominant Species	1.
1			That Are OBL, FACW, or FAC:	(A)
2	_,		Total Number of Dominant	
3			Species Across All Strata:	(B)
4	7		Percent of Dominant Species	(===10
Sapling/Shrub Stratum (Plot size:)	<u></u>	otal Cover	That Are OBL, FACW, or FAC:	100% (A/B)
1			Prevalence Index worksheet:	
2.			Total % Cover of:	Multiply by:
3.			OBL species x 1	I =
4			FACW species x 2	<u>≥</u> =
5			FAC species x 3	3 =
Sx D4.	= то	otal Cover	FACU species x 4	
Herb Stratum (Plot size: 5 &g. ++)  1. LEPIDIUM LATIFOLIUM	30	V FAC.	UPL species x 5	
2. FRANKENIA SALINA		V FACIAL	Column Totals: (A)	(B)
3		1.1000	Prevalence Index = B/A =	
4.			Hydrophytic Vegetation Indicat	ors:
5		7.0	∑ Dominance Test is >50%	
6.			Prevalence Index is ≤3.01	
7			Morphological Adaptations¹ (	Provide supporting
8			data in Remarks or on a s  Problematic Hydrophytic Veg	Long the control of t
Manda Mina Stratum / Diot airce	_ <u>55</u> _=To	otal Cover	Troblemate Trydrophytic veg	ctation (Explain)
Woody Vine Stratum (Plot size:)  1			<sup>1</sup> Indicators of hydric soil and wetla	and hydrology must
2.			be present, unless disturbed or pr	
	= To	otal Cover	Hydrophytic Vegetation Present? Yes	No
Remarks:		/		

_	_	 
c	$\overline{}$	10
_		

Sampling Point: SP-1

Depth (inches)	Matrix Color (moist)	<u></u> %	Redox Color (moist)	Features	_Type <sup>1</sup> _	Loc <sup>2</sup>	Texture	Remarks
(inches)	Color (moist)		Color (moist)	%	Type	LOC	rexture	Remarks
0-4	5 YR 2.5/1	99	54R 4/6			$\sim$	Loany Soud	
	3 // /)		- 11				) ()	
<u> </u>					-			· · · · · · · · · · · · · · · · · · ·
4-16	2.5 Y 3/2	-65 -	INYR 3/4	75	145	01 +M	Sand	
	1.5/1/2		1011			12.7		:
	•							
¹Type: C=Cd	oncentration, D=Deple	tion RM=R	Peduced Matrix CS:	=Covered	or Coated	Sand Gra	ains <sup>2</sup> Location: Pl	_=Pore Lining, M=Matrix.
	ndicators: (Applica					ound on		lematic Hydric Soils <sup>3</sup> :
Histosol	S. 170		X Sandy Redo				1 cm Muck (A9)	
	ipedon (A2)		Stripped Mat		a a		2 cm Muck (A10	0.0
Black His	2. 2.		Loamy Muck	•			Reduced Vertic	A 1
	n Sulfide (A4) Layers (A5) ( <b>LRR C</b> )	Į.	Loamy Gleye Depleted Ma		(FZ)		Red Parent Mat Other (Explain in	
	ck (A9) (LRR D)		Redox Dark		F6)		Other (Explain)	( Nemarka)
	Below Dark Surface	(A11)	Depleted Da					
Thick Da	rk Surface (A12)		Redox Depre	essions (F	8)		3Indicators of hydrop	
	ucky Mineral (S1)		Vernal Pools	(F9)			wetland hydrology	
	leyed Matrix (S4) ayer (if present):			-			unless disturbed of	or problematic.
Type:	ayer (ii present).							
Depth (inc	thes):						Hydric Soil Present?	? Yes X No
Remarks:							Tiyuno con i recent	. 100 2
HYDROLO	GY							
	Irology Indicators:							
2.5	ators (minimum of on	e required:	check all that apply	)			Secondary Indi	cators (2 or more required)
Surface \	Water (A1)		Salt Crust (	B11)			Water Mark	ks (B1) (Riverine)
	ter Table (A2)		Biotic Crust	200 B				Deposits (B2) (Riverine)
Saturatio	n (A3)		Aquatic Inve		s (B13)			sits (B3) (Riverine)
Water Ma	arks (B1) (Nonriverin	e)	Hydrogen S	Sulfide Od	or (C1)		Drainage P	atterns (B10)
Sedimen	t Deposits (B2) (Noni	riverine)	Oxidized RI	nizospher	es along L	iving Root	s (C3) Dry-Season	n Water Table (C2)
Drift Dep	osits (B3) ( <b>Nonriveri</b>	ne)	Presence of	f Reduced	d Iron (C4)			urrows (C8)
	Soil Cracks (B6)	64TO-COM	Recent Iron			Soils (C6)		Visible on Aerial Imagery (C9)
	on Visible on Aerial Im	agery (B7)	Thin Muck S				Shallow Ad	NV APPLICATION OF THE PROPERTY
7 .	ained Leaves (B9)		Other (Expl	ain in Rer	marks)		FAC-Neutr	al Test (D5)
Field Observ Surface Water		s No	Depth (incl	200).				
Water Table		s No	. /			-		
Saturation Pr		s No	7			Wetla	nd Hydrology Present	t? Yes No
(includes cap		NC	Deptil (illici	165)		_ vvetia	na rryarology r resem	i: res / No
Describe Rec	orded Data (stream g	auge, moni	toring well, aerial pl	notos, pre	evious insp	ections), if	f available:	
Dawarder								
Remarks:								

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

WETLAND DETE	RMINATION	DATA FORM -	<ul> <li>Arid West Region</li> </ul>	TN-29
ject/Site: COLUINSVILUE City/County: <u>&lt; 4154</u>			CITY/SOLAND Samplin	ng Date: 7/8/2
Applicant/Owner: 45 POWER			State: CA Samplin	
vestigator(s): CM, RODRIGHEZ - S. WELLS Section, Township, R				
Lat: 38.031740			convex none). whe	Slope (%): Ø
Subragion (I BB):	1000: -121, 846.81C	elope (70)		
Soil Map Unit Name: VI ASLO - AYA R	1A45 71	-9 m	NIW/I classification:	_ &
· ·				
Are climatic / hydrologic conditions on the site typical for the			"Normal Circumstances" present?	V X N-
Are Vegetation, Soil, or Hydrology				
Are Vegetation, Soil, or Hydrology			eeded, explain any answers in Rer	
SUMMARY OF FINDINGS – Attach site map	showing sar	npling point le	ocations, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes  Remarks:	No _X	Is the Sampled within a Wetlar		, <u>X</u>
VEGETATION – Use scientific names of pla	nts.			
		minant Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:)  1		ecies? Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
2	<del></del>		Total Number of Dominant	427
3			Species Across All Strata:	(B)
4	= To	otal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
Sapling/Shrub Stratum (Plot size:)  1	1		Prevalence Index worksheet:	
2.			Total % Cover of:	Multiply by:
3.			OBL species x	1 =
4.			FACW species x	per contract of the contract o
5			FAC species x	3 =
Cuch.	= To	otal Cover	FACU species x	4 =
Herb Stratum (Plot size: SEX.++)  1. CENTAUREA SOLSTITIALIS	30	<b>/ /</b>	UPL species x	
2. LEPIDIUM LATIFOLIUM	- 20 -	V FAC	Column Totals: (A	A)(B)
3		/	Prevalence Index = B/A =	
4.			Hydrophytic Vegetation Indica	ators:
5.			Dominance Test is >50%	
6			Prevalence Index is ≤3.0 <sup>1</sup>	
7			Morphological Adaptations¹ data in Remarks or on a	
8			Problematic Hydrophytic Ve	
Woody Vine Stratum (Plot size:)	_ <u>SS_</u> = To	otal Cover		goulder (Explain)
1			<sup>1</sup> Indicators of hydric soil and we	tland hydrology must
2.			be present, unless disturbed or	problematic.
% Bare Ground in Herb Stratum 45 % Cove	= To	otal Cover	Hydrophytic Vegetation Present? Yes	No <u>X</u>
Remarks:				

SOIL

Sampling Point: Sp-7

Profile Description: (Describe to the depth ne		onfirm the absence of it	idicators.)
Depth Matrix (inches) Color (moist) % C	Redox Features  olor (moist) % Type <sup>1</sup> Lo	oc² Texture	Remarks
(mones) Soloi (molec) 70 Soloi (molec)	<u> </u>	TOXICIO	Tromaine
5 ICT 7 CV2 2=1- 100		SANO	
0-15.5 7.5 YR 2.5/2 100		SAND	
		<del></del>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Red	uced Matrix CS=Covered or Coated Sa	nd Grains <sup>2</sup> I ocation	n: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRR			Problematic Hydric Soils <sup>3</sup> :
	Sandy Redox (S5)		(A9) (LRR C)
Programme and the contract of	Stripped Matrix (S6)		(A10) (LRR B)
Black Histic (A3)	Loamy Mucky Mineral (F1)	Reduced V	/Ti
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	(Company)	t Material (TF2)
Stratified Layers (A5) (LRR C)	Depleted Matrix (F3)	Other (Exp	lain in Remarks)
1 cm Muck (A9) (LRR D)	Redox Dark Surface (F6)		
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)	Charles and the second and the secon	ydrophytic vegetation and
	Vernal Pools (F9)		ology must be present,
Sandy Gleyed Matrix (S4)		unless distur	bed or problematic.
Restrictive Layer (if present):			
Type:			~
Depth (inches):		Hydric Soil Pres	sent? Yes No 🔏
Remarks:			
IIVDDOL OOV			
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one required; che	eck all that apply)	Secondary	Indicators (2 or more required)
Surface Water (A1)	Salt Crust (B11)	Water	Marks (B1) (Riverine)
High Water Table (A2)	Biotic Crust (B12)	Sedim	nent Deposits (B2) (Riverine)
Saturation (A3)	Aquatic Invertebrates (B13)	Drift D	eposits (B3) (Riverine)
Water Marks (B1) (Nonriverine)	— Hydrogen Sulfide Odor (C1)	Draina	age Patterns (B10)
Sediment Deposits (B2) (Nonriverine)	Oxidized Rhizospheres along Living	g Roots (C3) Dry-S	eason Water Table (C2)
Drift Deposits (B3) (Nonriverine)	Presence of Reduced Iron (C4)	Crayfi	sh Burrows (C8)
Surface Soil Cracks (B6)	Recent Iron Reduction in Tilled Soi	ls (C6) Satura	ation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)	Shallo	w Aquitard (D3)
Water-Stained Leaves (B9)	Other (Explain in Remarks)	FAC-N	Neutral Test (D5)
Field Observations:			
Surface Water Present? Yes No _			
Water Table Present? Yes No			
Saturation Present? Yes No		Wetland Hydrology Pre	esent? Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous inspecti	ons), if available:	
Remarks:			

Materia	- in the state of
Note: This sampling point did not meet the three criteria and the data sheet was revised on 11/25/24 to indicate it is not a wetland. See section 5.1 of the Aquatic WETLAND DETERMINATION DATA FORM Resources Delineation Report for more detail.	∥ – Arid West Region W-30
Project/Site: COLUNSVILLE City/County: City	1/SOMNO Sampling Date: 7/8/2
	State: Sampling Point: SC-
Investigator(s): Chrometoure 5, Wrats Section, Township, F	
Landform (hillelens torress etc.): RAT Lend relief (consequent	n convey none). M (A) A Glore (A) A
Landform (hillslope, terrace, etc.):	Long: -12.1. 844150 Patim: NOV 19
Soil Map Unit Name: DIABLO - AMAR CLASS Lite 9 percent	Datum.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	,
/ \	e "Normal Circumstances" present? Yes No
	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No Is the Sample within a Wetl	
Remarks: A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Remarks: Strong undicalors of light spling is exclabed position. Personally laddly wilload alpholo	my litely die to dry reason
VEGETATION – Use scientific names of plants.	
Tree Stratum (Plot size:) Absolute Dominant Indicator % Cover Species? Status	l l
1	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	Total Number of Dominant
3	Species Across All Strata: (B)
4 = Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 VTo (A/B)
Sapling/Shrub Stratum (Plot size:)	Prevalence Index worksheet:
1	Total % Cover of: Multiply by:
3.	OBL species x1 =
4	FACW species x 2 =
5	FAC species x 3 =
= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:  1 015TICHUS SPICATA  75 Y FAC	UPL species x 5 =
1. DISTICHUS SPICATA 75 Y FAC 2. CENTAMBER SOLSTITIALIS 10 X	Column Totals: (A) (B)
3	Prevalence Index = B/A =
4	Hydrophytic Vegetation Indicators:
5.	Dominance Test is >50%
6	Prevalence Index is ≤3.0¹
7	Morphological Adaptations <sup>1</sup> (Provide supporting
8	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size: )	i robiemano riyoropriyno vegetation (explain)
1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2	be present, unless disturbed or problematic.
= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum V % Cover of Biotic Crust	Vegetation Present?  Yes No
Remarks:	
•	

~	~		
	"	3	

ng Point: Sp-1

Depth Matrix Redox Features	_Loc²	Tautuus
(inches) Color (moist) % Color (moist) % Type <sup>1</sup>	LOC	Texture Remarks  ONM Y SANY
0-3 104R 1/2 100	_	<u> </u>
5-14.5 104R3/1 98 57R4/6 2 C		SAND
1913 10/10/1	- 2:1	<u> </u>
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coa	ted Sand G	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) X Sandy Redox (S5)		1 cm Muck (A9) (LRR C)
Histic Epipedon (A2) Stripped Matrix (S6)		2 cm Muck (A10) (LRR B)
Black Histic (A3) Loamy Mucky Mineral (F1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)		Reduced Vertic (F18) Red Parent Material (TF2)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Depleted Matrix (F3)		Other (Explain in Remarks)
1 cm Muck (A9) (LRR D) Redox Dark Surface (F6)		Outer (Explain in Normaline)
Depleted Below Dark Surface (A11)  Depleted Dark Surface (F7)		
Thick Dark Surface (A12) Redox Depressions (F8)		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)  Vernal Pools (F9)		wetland hydrology must be present,
_ Sandy Gleyed Matrix (S4)		unless disturbed or problematic.
estrictive Layer (if present):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Depth (inches):Remarks:		Hydric Soil Present? Yes No
Depth (inches):Remarks:  YDROLOGY		Hydric Soil Present? Yes No
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:		Hydric Soil Present? Yes No No
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
Depth (inches):  temarks:  YDROLOGY  Vetland Hydrology Indicators:  trimary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)
Depth (inches):  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11)  High Water Table (A2) Biotic Crust (B12)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)
Depth (Inches):		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine)
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine)  Semarks:  Primary Indicators (minimum of one required; check all that apply) Salt Crust (B11) Biotic Crust (B12) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10)
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine)  Oxidized Rhizospheres alon	g Living Ro	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Presence of Reduced Iron (Carretted Section (A2))	g Living Ro C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Recent Iron Reduction in Till	g Living Ro C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Prince Water (A1) Salt Crust (B11) Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Thin Muck Surface (C7)	g Living Ro C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)
Propositic (B1) Sediment Deposits (B2) (Nonriverine) Depth (Inches):  Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)  Depth (Inches):  Propositic (Inches):  Inches (Inches):  Propositic (Inches):  Inches (Inches):  Propositic (Inches):  Inches (Inches (I	g Living Ro C4)	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Print Depth (Inches):  Proposition (Ba) (Nonriverine)  Depth (Inches):  Print Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Proposition (B4)  Proposition (B4)  Proposition (B4)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Till  Thin Muck Surface (C7)  Other (Explain in Remarks)  Proposition (B4)  Presence of Reduced (C7)  Water-Stained Leaves (B9)  Countries  Cou	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)
Process  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Presence of Reduced Iron (C7)  Water-Stained Leaves (B9)  Depth (inches):  Depth (inches):	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9 Shallow Aquitard (D3)
Depth (inches):    Commarks	g Living Ro	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Drift Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Water Table Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  Saturation Present?  Yes  No  Depth (inches):	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Print (Inches):  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1) (Nonriverine)  Sediment Deposits (B2) (Nonriverine)  Drift Deposits (B3) (Nonriverine)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Water Stained Leaves (B9)  Presence of Reduced Iron (C1)  Recent Iron Reduction in Till  Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)  Presence of Reduced (C7)  Water-Stained Leaves (B9)  Depth (inches):  Water Table Present?  Yes  No  Depth (inches):  Depth (inches):	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks (B1) (Nonriverine) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) (Nonriverine) Oxidized Rhizospheres alon Drift Deposits (B3) (Nonriverine) Presence of Reduced Iron (C) Surface Soil Cracks (B6) Recent Iron Reduction in Till Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Popth (inches):    Primary Indicators (minimum of one required; check all that apply)   Surface Water (A1)	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):    Depth (inches):     Depth (inches):   Depth (in	g Living Ro C4) led Soils (C	Secondary Indicators (2 or more required)  Water Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Drift Deposits (B3) (Riverine)  Drainage Patterns (B10)  Oots (C3) Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)

## W-30

#### WETLAND DETERMINATION DATA FORM - Arid West Region

0-11-15		UISUNCITY SOLAND Sampling Date: JULY 9
	City/County:	State: Sampling Point: SP-Z
Applicant/Owner: LS POWER		
Investigator(s): C.Y. PODRIGUEZ	Section, Townshi	ip, Range:
Landform (hillslope, terrace, etc.): The of a	Dunk Juli Local relief (cond	cave, convex, none): Slope (%): 1)
Subregion (LRR):	Lat: <u>38.082463</u>	cave, convex, none):
Soil Map Unit Name: DIAGO ATMR CLA	M, 2 to y no slope	NWI classification:
Are climatic / hydrologic conditions on the site typical	al for this time of year? YesX	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 po	oint locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No le the Sar	mpled Area
Hydric Soil Present? Yes	✓ No	Wetland? Yes No
Wetland Hydrology Present? Yes	No	wettand:
Remarks:		
		A .
VEGETATION – Use scientific names of	of plants.	
	Absolute Dominant Indic	cator Dominance Test worksheet:
Tree Stratum (Plot size:) 1.	% Cover Species? Star	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2.		Total Number of Dominant
3.		Species Across All Strata: (B)
4		Percent of Dominant Species
	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:		Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
3.		OBL species x1 =
4.		FACW species x 2 =
5		FAC species x 3 =
= v <sub>T</sub>	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:		UPL species x 5 =
1	7\	Column Totals: (A) (B)
2. BYASSICA Sheleton (species		Prevalence Index = B/A =
3. Dead grass (Annul?)		Hydrophytic Vegetation Indicators:
4. trankenia solina		Dominance Test is >50%
6 Container Statistialis	<del></del>	Prevalence Index is ≤3.0¹
7.		Morphological Adaptations <sup>1</sup> (Provide supporting
8.		data in Remarks or on a separate sheet)
	84 = Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:		Indicators of hydric call and watland hydrology severt
1	<del></del>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		
17	= Total Cover	Hydrophytic Vegetation
% Bare Ground in Herb Stratum	% Cover of Biotic Crust	Present? Yes No
Remarks: Collected Sperimens of the on species (there that had	dead grass but con	Id not make a determination.
on species (trat that have	I some structure It	ft). Maybe à Hocleum?
1		φ.

_	$\sim$	•	
•	, ,		

Inpling Point:  $\frac{\sqrt{30}}{59-2}$ 

Profile Desc Depth	Matrix		Redox	x Feature	s		re .	egin e e
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
^ -	1. 10 77	-02						
0-4.5	10 YR 4/2	-9+ -9+	104R 4/6	3		. / _	CLAY	
								**
15-13	10 yr 3/2	100	(4)				C/AM	
<del>'''                                  </del>	10/10/10	100					041	· <del></del>
<del></del>				·		<del></del>		
1/5	101/0 6/			.——		-		
15.5	107K 16	100 -				7	SI CL :	
5	107R3/1		745					Stryis in Matrix darden
Type: C=Co	ncentration, D=Deple	etion, RM=I	Reduced Matrix. CS	=Covered	d or Coated	d Sand G	irains. <sup>2</sup> Lo	ocation: PL=Pore Lining, M=Matrix.
	ndicators: (Applica						Alle Control of the C	s for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redo		`			Muck (A9) (LRR C)
	ipedon (A2)		Stripped Ma		1			Muck (A10) (LRR B)
Black His			Loamy Muck	ky Minera	l (F1)			ced Vertic (F18)
Hydroger	n Sulfide (A4)	-	Loamy Gley	ed Matrix	(F2)			Parent Material (TF2)
Stratified	Layers (A5) (LRR C	_	Depleted Ma		7	2.8		(Explain in Remarks)
1 cm Mu	ck (A9) (LRR D)		X Redox Dark			2		E
	Below Dark Surface	(A11)	Depleted Da				= 2 - 9	a, the graph
	rk Surface (A12)		Redox Depre		F8)			of hydrophytic vegetation and
	ucky Mineral (S1)		Vernal Pools	(F9)			wetland	hydrology must be present,
	leyed Matrix (S4)	_*_	(4)			· ·	unless o	disturbed or problematic.
Restrictive L	ayer (if present):							
	.,							
Туре:				4 .				
				6 .			Hydric Soi	I Present? Yes No
Type: Depth (inc Remarks: So  Lutury	hes):	Joyn out by	came or	th in	land Hole	clod		Present? Yes No_
Type:	hes):	wal.	- Came or tween the	d in	had Hole	clod		
Type:	hes):  one tro the openes fret.	wal.	came or	d in clock.	hard Hole	clod		
Type:	hes):  oil Gre type  the openes  fret.  GY  rology Indicators:	#3 (4)		*	hard Hole	clode	o. Meast	veninto are estimat. The core came for
Type:  Depth (inc  Remarks: St  Type (inc)  Primary Indicates	hes):  The operation of an artist of artist of an artist of art	#3 (4)	check all that apply	ý	And Hole	clock	s. Measur	nements are estimate. The core came from
Type:	hes):  The opposes  Freet,  GY  rology Indicators:  ators (minimum of on  Vater (A1)	#3 (4)		ý	And Hole	clock	s. Measur	veninto are estimat. The core came for
Type:	hes):  The opposes  Freet,  GY  rology Indicators:  ators (minimum of on  Vater (A1)  er Table (A2)	#3 (4)	check all that apply Salt Crust ( Biotic Crust	) B11) : (B12)	-	clod	Secon	nements are estimate. The core came from
Type:	hes):  The opening of on Water (A1)  er Table (A2)  n (A3)	e required;	check all that apply Salt Crust ( Biotic Crust Aquatic Inv	) B11) : (B12) ertebrates	s (B13).	clode	Second Se	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine)
Type:	hes):  The operation of	e required;	check all that apply Salt Crust ( Biotic Crust Aquatic Invo	) B11) (B12) ertebrates	s (B13). dor (C1)		Secon V	ndary Indicators (2 or more required) Vater Marks (B1) (Riverine) Sediment Deposits (B2) (Riverine)
Type:	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonri	e required; e) riverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Invi	B11) (B12) ertebrates Sulfide Od	s (B13). dor (C1) res along L	iving Roo	Secon V	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)
Type:	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) erks (B1) (Nonriverin cosits (B3) (Nonriverin	e required; e) riverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo	B11) (B12) ertebrates Sulfide Od	s (B13). dor (C1) res along L	iving Roo	Secon V S C	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)
Type:	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) arks (B1) (Nonriverin Deposits (B2) (Nonri	e required; e) riverine)	check all that apply Salt Crust ( Biotic Crust Aquatic Invi	B11) (B12) ertebrates Sulfide Od hizospher f Reduces	s (B13). dor (C1) res along L d Iron (C4)	iving Roo	Secon V S	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)
Type:	rology Indicators: ators (minimum of on Vater (A1) er Table (A2) n (A3) erks (B1) (Nonriverin cosits (B3) (Nonriverin	e required; e) riverine) ne)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron	B11) c (B12) ertebrates Sulfide Od hizospher f Reduced	s (B13). dor (C1) res along L d Iron (C4) on in Tilled	iving Roo	Secon V S C S C S C S C S C S C S C S	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Crayfish Burrows (C8)
Type:	rology Indicators: ators (minimum of on Nater (A1) er Table (A2) in (A3) erks (B1) (Nonrivering to the proposits (B2) (Nonrivering to the proposits (B3) (Nonrivering to the proposite to the proposition to the propositio	e required; e) riverine) ne)	check all that apply Salt Crust ( Biotic Crust Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron	B11) c (B12) ertebrates Sulfide Od hizospher f Reduced Reductio	s (B13). dor (C1) res along L d Iron (C4) on in Tilled C7)	iving Roo	Secon V Sis (C3) C	ndary Indicators (2 or more required)  Vater Marks (B1) (Riverine)  Sediment Deposits (B2) (Riverine)  Orift Deposits (B3) (Riverine)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C
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#### WETLAND DETERMINATION DATA FORM - Arid West Region

[N-31]

O dinopilla	Solo	IAA T. 7 270
	City/County: <u>Sola</u>	Mo Sampling Date: July 7, 2024
Applicant/Owner: LS POWOV		State: CA Sampling Point: SP-
Investigator(s): SidNOM WONS CHNISTINA P	0	
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none): MML Slope (%):
Subregion (LRR):	Lat: <u>38.082410</u>	_ Long:121,842498
Soil Map Unit Name: TAMBA MUCKY CUA	AY, MLMA 16	NWI classification:
Are climatic / hydrologic conditions on the site typical for		
Are Vegetation, Soil, or Hydrology		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		eeded, explain any answers in Remarks.)
		ocations, transects, important features, etc.
A	,	osalismo, transcesso, important reatures, etc.
Hydrophytic Vegetation Present? Yes	I is the samplet	A Company of the Comp
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	within a wetia	nd? Yes NoX
Remarks:	140	
Tromano.		
VEGETATION – Use scientific names of pla	ants.	7
	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
1 2		That Are OBL, I ACW, OI I AC (A)
3		Total Number of Dominant Species Across All Strata:  (B)
4		Species Across Air Strata.
	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum (Plot size:)	*	
1		Prevalence Index worksheet:
2		Total % Cover of: Multiply by:
3		OBL species x 1 =
4		FACW species x 2 =
5	= Total Cover	FAC species x 3 = FACU species x 4 =
Herb Stratum (Plot size: 5 m, 4)	= Total Cover	UPL species x5 =
1. Frankenia salina	5 N FACW	Column Totals: (A) (B)
2. Centaurea solstitialis	30 Y UPL	(b)
3. <u>Distichlis spicata</u>	30 Y FAC	Prevalence Index = B/A =
4		Hydrophytic Vegetation Indicators:
5		Dominance Test is >50%
6		Prevalence Index is ≤3.0¹
7		Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation¹ (Explain)
Woody Vine Stratum (Plot size:	= Total Cover	
1		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2.		be present, unless disturbed or problematic.
	= Total Cover	Hydrophytic
% Bare Ground in Herb Stratum 35 % Co	ver of Biotic Crust	Vegetation Present? Yes No
Remarks:	51 DIONO OTUST	165
Tomano.		

0	^	11	
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Sampling Point: 5P-1

	9 (8)	to the dep	th needed to docum			or confirm	n the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Feature:	s Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-55	75 YR3/2	99	107R7/6	1		M	10.50	
0 313	7.3 /10/2	751	10/12 110	-			<u> </u>	<del></del>
11	10/10/3/2	9-	102/0/11//					
5.516	TOYR 3/3	<u> 15</u>	10 YR 4/6			1./	_SA	
-					//		· = = = = = = = = = = = = = = = = = = =	
		:X <del></del>						
<del></del>	-						) <del>}</del>	<del></del>
-	= 13							*
			Reduced Matrix, CS			d Sand G		cation: PL=Pore Lining, M=Matrix.
75.75.5	SAN-SAN	able to all	LRRs, unless other		ed.)			for Problematic Hydric Soils <sup>3</sup> :
Histosol	W. M. Arrana		Sandy Redo					Muck (A9) (LRR C)
	pipedon (A2)		Stripped Mat		L/EAN			Muck (A10) (LRR B)
Black Hi	n Sulfide (A4)		Loamy Muck Loamy Gleye					ed Vertic (F18) arent Material (TF2)
	i Layers (A5) (LRR 0	<u>.</u> )	Depleted Ma		(12)			(Explain in Remarks)
	ick (A9) (LRR D)	Ž.	Redox Dark		F6)		Outer	(Large series in Containe)
	Below Dark Surface	e (A11)	Depleted Da					
	ark Surface (A12)		Redox Depre				3Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Vernal Pools	(F9)			wetland	hydrology must be present,
Sandy G	leyed Matrix (S4)						unless d	isturbed or problematic.
Restrictive I	_ayer (if present):							
Туре:								<b>\</b>
Depth (inc	ches):						Hydric Soil	Present? Yes No X
Remarks:		-					<u></u>	-
								*
IVDDOLO	CV.							
HYDROLO								
	drology Indicators:							
Primary Indic	ators (minimum of o	ne required	i; check all that apply					ndary Indicators (2 or more required)
Surface			Salt Crust (					Vater Marks (B1) (Riverine)
High Wa	ter Table (A2)		Biotic Crust	100				ediment Deposits (B2) (Riverine)
Saturation			— Aquatic Inventor					rift Deposits (B3) (Riverine)
	arks (B1) ( <b>Nonriveri</b>		Hydrogen S					rainage Patterns (B10)
	it Deposits (B2) (Nor		Oxidized RI					ry-Season Water Table (C2)
	osits (B3) (Nonriver	ine)	Presence of		7,50			rayfish Burrows (C8)
	Soil Cracks (B6)	outour out	Recent Iron			d Soils (Ce		aturation Visible on Aerial Imagery (C9)
A	on Visible on Aerial I	magery (B7						hallow Aquitard (D3)
	tained Leaves (B9)		Other (Expl	ain in Re	marks)		F	AC-Neutral Test (D5)
Field Observ								
Surface Water	er Present? You	es 1	No Depth (incl	hes):				
Water Table	Present? You	es 1	NoDepth (incl	hes):				<i>x</i>
Saturation Pr		es 1	No Depth (incl	hes):		_ Wetl	and Hydrolog	y Present? Yes No/
(includes cap		nauge mo	nitoring well, aerial pl	hotos pr	avious inc	nections)	if available:	
Describe Rec	Solucu Data (Strediti	gauge, 1110	moning well, aerial pi	notos, pre	-vious IIIS	,,,	ii avallable.	
Damadar	ممو	XEU	201				2 40	76 :
Remarks:	There is a N	witton	d with green	veget	ation	Altina	of the	soil put. To hydrology
1 1:4	000 00 Th	1 400 010	ediate area.	120	VI / L PUCC		الم المالم، و	000000000000000000000000000000000000000
mollar	no ro all	ONINK	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,-,	(myno	(+ Ful	huoth emi	igent-NWIY ()

ATTACHMENT C: COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT BOTANICAL
SURVEY REPORT



# LS POWER GRID CALIFORNIA, LLC COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT BOTANICAL SURVEY REPORT

**OCTOBER 2023** 

PREPARED FOR:



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#### 1 - INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct fully floristic botanical surveys for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). As depicted in Figure 1: Project Components, the Proposed Project proposes the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that will interconnect Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that will connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project has been designed to address overloads on the existing Contra Costa-Newark 230 kV corridor and provide an additional supply into the northern greater San Francisco Bay Area to increase reliability to the area and advance additional renewable generation.

This Botanical Survey Report was prepared to identify any special-status plant species that may be present within or adjacent to the Proposed Project's terrestrial survey area.<sup>1</sup>

#### 2 - PROJECT DESCRIPTION

#### 2.0 PROJECT LOCATION

As depicted in Figure 2: Project Overview Map, the Collinsville Substation will be near the unincorporated community of Collinsville, which is located in the southwestern portion of Solano County. The terrestrial survey area is bordered on the south and southwest by the Sacramento River where it debouches into the Suisun Bay; on the west by the Montezuma Hills and Suisun Marsh; and to the north and east by agricultural lands. The Proposed Project will create a connection to the existing Pittsburg Substation, which is located in the city of Pittsburg in the northern portion of Contra Costa County.

#### 2.1 PROJECT OVERVIEW

The four main components of the Proposed Project comprise the following:

- The approximately 20-acre Collinsville Substation;
- Two approximately 1.5-mile-long single-circuit 500 kV transmission line segments that will interconnect PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed Collinsville Substation; and

<sup>&</sup>lt;sup>1</sup> The survey area consists of all terrestrial areas of the Proposed Project area north of the Carquinez Strait. This includes the Collinsville Substation, the entire 500 kV alignment, and the entire 230 kV overhead alignment, plus an approximately 10-acre buffer.

- One approximately 6-mile-long double-circuit 230 kV transmission line connecting the proposed Collinsville Substation to PG&E's existing Pittsburg Substation, including:
  - A 1- to 2-mile-long overhead transmission segment,
  - Four to six steel in-river monopole structures to transition the overhead conductors to submarine cables on the northern edge of the Sacramento River,
  - Four to six approximately 4.5-mile-long submarine cables running in a northeast to southwest direction installed 6 to 15 feet below the sediment surface, and
  - Four to six utility vault structures near PG&E's existing Pittsburg Substation to connect the submarine cables to underground cables that will terminate at PG&E's existing Pittsburg Substation.

PG&E will be responsible for the final configuration of the new circuits into the Pittsburg Substation and the northern connection from the existing Vaca Dixon-Tesla 500 kV Transmission Line to the proposed Collinsville Substation. Construction is anticipated to begin in early 2026, after all required approvals have been received, and will take 24 to 30 months to complete. Energization of the Proposed Project facilities is required by June 1, 2028. The inwater construction and installation of the submarine cables is anticipated to take approximately 7 months to complete.

#### 3 - METHODS

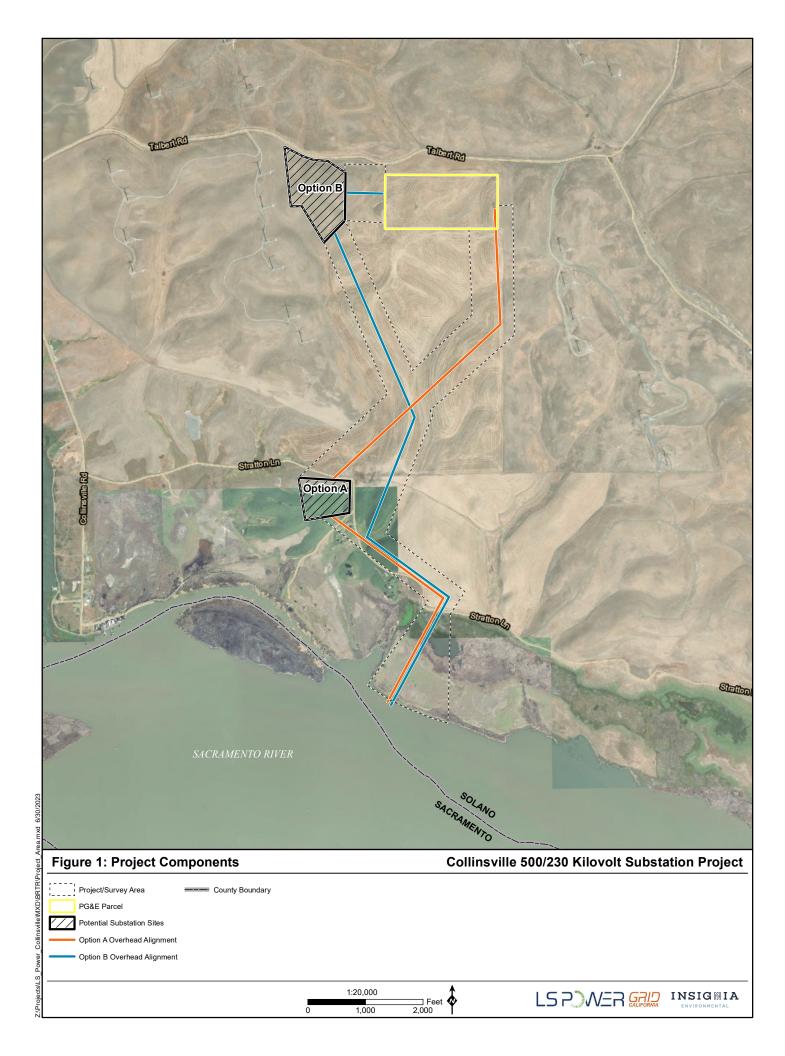
#### 3.0 DEFINITIONS

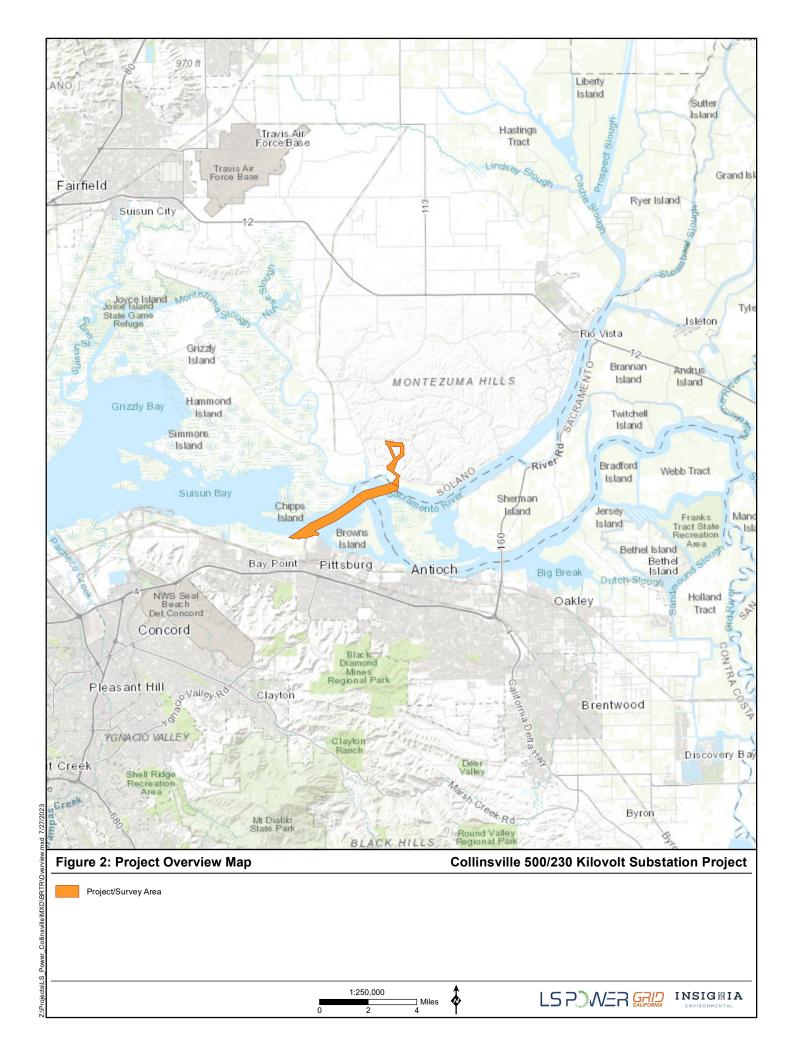
The following definitions were used to define special-status resources within the survey area.

#### 3.0.0 Special-Status Plants

Plant species were considered special-status if they met one or more of the following criteria:

- Species listed or candidates for listing as threatened or endangered under the federal Endangered Species Act;
- Species listed or candidates for listing as threatened or endangered under the California Endangered Species Act;
- Species meeting the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 California Code of Regulations Section 15380), which may include species not found on the federal or state endangered species lists; or





• Species considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California (i.e., California Rare Plant Ranks [CRPRs] 1A, 1B, 2A, 2B, and 3).<sup>2</sup>

#### 3.0.1 Sensitive Natural Communities and Habitats

Natural communities were considered sensitive if they met one or more of the following criteria:

- Sensitive vegetation communities/habitats identified in local or regional plans, policies, or regulations, or designated as sensitive by the California Department of Fish and Wildlife (CDFW) or United States (U.S.) Fish and Wildlife Service (USFWS) (including communities assigned a State Rarity Rank of S1-S3 under the CDFW Vegetation Classification and Mapping Program);
- Areas that provide habitat for locally unique biotic species/communities (e.g., oak woodlands, grasslands, and forests);
- Habitat that contains or supports rare, endangered, or threatened wildlife or plant species as defined by the CDFW and USFWS;
- Habitat that supports one or more CDFW Species of Special Concern;
- Areas that provide habitat for rare or endangered species and that meet the definition in CEQA Guidelines Section 15380;
- Existing game and wildlife refuges and reserves;
- Lakes, wetlands, estuaries, lagoons, streams, and rivers; or
- Riparian corridors.

#### 3.1 RECORDS SEARCH

A literature and database review, including a geographic information system review of records from the California Natural Diversity Database (CNDDB) (CDFW 2023), was conducted of the

The CRPR system can be extended using the following threat codes:

<sup>&</sup>lt;sup>2</sup> The following keys describe the CRPR system:

<sup>1</sup>A = Presumed extirpated in California, and rare or extinct elsewhere

<sup>1</sup>B = Rare, Threatened, or Endangered in California and elsewhere

<sup>2</sup>A = Presumed extirpated in California, but common elsewhere

<sup>2</sup>B = Rare, Threatened, or Endangered in California, but more common elsewhere

<sup>3 =</sup> Need more information (Review List)

<sup>4 =</sup> Limited Distribution (Watch List)

<sup>.1 =</sup> Seriously endangered in California (more than 80 percent of occurrences threatened/high degree and immediacy of threat)

<sup>.2 =</sup> Moderately threatened in California (20 to 80 percent of occurrences threatened/moderate degree and immediacy of threat)

<sup>.3 =</sup> Not very endangered in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat)

U.S. Geological Survey 7.5-minute quadrangles within and adjacent to the survey area. Records for all known special-status species within 0.25 mile, 1 mile, and 5 miles of the Proposed Project were compiled and reviewed. The CNPS Inventory of Rare and Endangered Plants of California (CNPS 2023a) was reviewed to obtain additional information regarding special-status plant species. The survey area overlaps significantly with the Sacramento Municipal Utility District's Solano 4 Wind Project, for which a final Environmental Impact Report is available (Sacramento Municipal Utility District 2021); this document was also referenced during preliminary records searches. Attachment B: Special-Status Species with the Potential to Occur contains a list of rare plants and fungi with the potential to occur in the survey area.

#### 3.2 REFERENCE POPULATION SEARCH

Reference population checks were conducted in accordance with the CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities guidelines (2009). Known occurrences and populations of special-status plants within 5 miles of the survey area were investigated prior to conducting surveys to confirmblooming status and obtain a visual image of occurring special-status species. Further, local botanists working in areas adjacent to the Proposed Project were consulted to determine if special-status plants were observed blooming prior to field surveys.

#### 3.3 FIELD SURVEY

The geographical boundaries of the terrestrial survey, which are depicted in Attachment A: Biological Resources Map, included land-based portions of the proposed substation site, as well as proposed transmission line routes. While the existing PG&E Pittsburg Substation, located at the southern terminus of the Proposed Project in Contra Costa County, is situated adjacent to marsh habitat suitable for marsh-dependent plant species, the facility is within fully developed land cover (e.g., graveled or paved) and rip-rap is present along much of the shoreline. Because Proposed Project activities at the Pittsburg Substation site are not anticipated to overlap with or result in direct impacts to sensitive habitats or special-status plant species, the Pittsburg Substation site was excluded from field surveys.

Insignia biologists conducted special-status plant surveys of 100 percent of the survey area. Transect spacing between surveyors was less than or equal to 10 meters. The surveys were conducted in accordance with guidelines published by the CNPS (2001), the CDFW (2009), and the USFWS (2000), which state the following:

- Surveys should be conducted at the proper time of year when locally significant plants are both evident and identifiable.
- Surveys must be floristic in nature, and the species, subspecies, or variety must be identified for every observed plant to determine the rarity status.
- Surveys must be conducted in a manner that is consistent with conservation ethics and accepted plant collection and documentation techniques.

Field surveys were conducted within the bloom period for all but four special-status plant species with the potential to occur within the survey area; these special-status species are discussed further in Section 5 – Discussion and Summary. Although surveys were conducted outside of the

typical bloom period, two of these species are perennial and observable year-round. The other two are annual species that have bloom periods that extend into April. The unusually protracted rainy season, cooler temperatures of the preceding winter, and other observations in the Proposed Project area support an extended bloom period of approximately 1 month for these species this season (Moore and Laurenroth 2017). As a result, all special-status plant species with potential to occur would have been identifiable during the surveys.

#### 4 - RESULTS

#### 4.0 GEOGRAPHY, CLIMATE, AND HYDROLOGY

The Proposed Project area receives an average of 23 inches of rainfall per year, with the majority of precipitation falling between November and March. Average annual temperatures range from 48 to 73 degrees Fahrenheit (National Oceanic and Atmospheric Administration [NOAA] 2023). The elevation of the Proposed Project area ranges from 3 to 250 feet above sea level.

#### 4.1 RECORDS SEARCH

Results of the initial desktop analysis indicated that the upland areas around the proposed Collinsville Substation site and transmission line route are mainly grassland habitat and agricultural areas. Grassland habitats, in general, may provide suitable habitat for special-status plants. The southern edge of the survey area along the Sacramento River supports native riparian habitat areas and freshwater wetlands. The Pittsburg Substation site in Contra Costa County may have some fringe marsh habitat near the shoreline outside of the survey area, but the majority of the facility is developed (e.g., graveled or paved) and rip-rap is present along much of the survey area shoreline.

Insignia compiled a list of 28 special-status plant species that have the potential to occur within 5 miles of the survey area, as shown in Attachment B: Special-Status Species with the Potential to Occur. Attachment C: CNDDB Plant Occurrences Map depicts all rare plant occurrences identified from the literature search within 5 miles of the survey area. No USFWS-designated critical habitat for federally listed plants is found within or adjacent to the survey area.

#### 4.2 REFERENCE POPULATION SEARCH

Reference checks were attempted for recorded populations of special-status plant species. Eight reference sites were visited by the botanical survey team prior to initiation of the fully floristic botanical surveys within the survey area. Many locations with historically documented occurrences of special-status plants have been converted to active agriculture use; this cover type is extensive and is the primary land use within 5 miles of the survey area. Further, reference populations for many special-status plant species were located on private property that was inaccessible to the survey team.

To supplement field reference checks, local botanists working in areas adjacent to the Proposed Project were consulted. The following four special-status plant species were confirmed to be

blooming in habitats adjacent to the Proposed Project before or during the May and July survey periods (Bartosh 2023):

- Chaparral ragwort (Senecio aphanactis),
- Fragrant fritillary (Fritillaria liliacea),
- Diablo helianthella (Helianthella castanea), and
- Papoose tarplant (Centromadia parryi ssp. parryi).

#### 4.3 FIELD SURVEY

On May 23 to 26, May 30, May 31, and July 10 to 12, 2023, Insignia biologists conducted fully floristic botanical surveys within the survey area to identify occurrences of special-status plants and characterize the vegetation communities within the survey area. Approximately 325 acres of terrestrial habitat and land cover were surveyed. All sensitive natural resources observed were photographed and recorded using a submeter-accurate Global Positioning System unit. The subsections that follow describe the results of the field survey.

#### 4.3.0 Vegetation Communities

Eleven vegetation community alliances and land cover types were identified in the survey area, as presented in Table 1: Vegetation Community Alliances and Land Cover Types. The vegetation community and land cover locations are documented in Attachment A: Biological Resources Map. Four of the nine natural communities observed are considered sensitive. The following subsections describe each vegetation community identified within the survey area.

**Table 1: Vegetation Community Alliances and Land Cover Types** 

Vegetation Community Alliance or Land Cover Type	Approximate Size in Survey Area (acres)
Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance	16.7
Distichlis spicata Herbaceous Alliance	1.6
Frankenia salina Herbaceous Alliance*	2.2
Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance	1.2
Lolium perenne Herbaceous Semi-Natural Alliance	281.0
Open Water	0.4
Road	1.9
Rosa californica Shrubland Alliance*	0.9
Salix exigua Shrubland Alliance	2.6
Schoenoplectus (acutus, californicus) Herbaceous Alliance*	14.1
Schoenoplectus acutus/Rosa californica Association*	2.1
Total	324.7

<sup>\*</sup>CDFW-designated sensitive natural community (State Rarity Rank S1-S3)

### Brassica nigra - Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance

This community is typically associated with disturbed areas where black mustard (*Brassica nigra*) and short-pod mustard (*Hirshfeldia incana*) achieve 80 percent relative cover in the herbaceous layer. Similar ruderal forbs, such as tocolote (*Centaurea melitensis*) and yellow star thistle (*Centaurea solstitialis*), may achieve dominance or co-dominance. Within the survey area, this community was generally observed in dense colonies between stands of non-native grassland in areas where heavy cattle grazing historically occurred.

#### Distichilis spicata Herbaceous Alliance

The *Distichlis spicata* Herbaceous Alliance is commonly found in alkaline or saline ecosystems adjacent to estuarine marshes or other wetland habitats that may be tidally influenced. Salt grass (*Distichilis spicata*) typically contains greater than 30 percent relative cover in the herbaceous layer; however, it can be co-dominant with other halophytes, including spear-leaved orache (*Atriplex prostrata*) and alkali heath (*Frankenia salina*). The herbaceous layer is continuous and typically leaves an undeveloped or sparse shrub layer. This community was generally observed in the southern portion of the survey area within standing water in tidally influenced brackish areas.

#### Frankenia salina Herbaceous Alliance

The Frankenia salina Herbaceous Alliance is commonly found adjacent to coastal salt marshes or brackish marshes. Typically, alkali heath contains greater than 30 percent relative cover in the herbaceous layer and stands are often found in the high marsh where soils are intermittently or seasonally flooded. Pickleweed (Salicornia pacifica) is often found among this community in lower percentages of 5 to 10 percent. This community was observed in the southern portion of the survey area at the highest point of the marsh and adjacent to water that seasonally and tidally inundates this community.

#### Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance

The *Juncus arcticus* (var. *balticus*, *mexicanus*) Herbaceous Alliance varies widely in species composition based on the geographic location, but it typically includes greater than 30 percent relative cover in the shrub layer of arctic rush (*Juncus arcticus*) or Baltic rush (*Juncus balticus*). This community generally occurs in wet meadows with poor draining soils between estuarine marshes and sloughs. This community was observed in the southern portion of the survey area adjacent to the coastline and in upland areas of the marsh between sloughs.

#### Lolium perenne Herbaceous Semi-Natural Alliance

This community contains Italian rye grass (*Festuca perennis*) that is dominant or co-dominant with other non-natives in the herbaceous layer, including rip-gut brome (*Bromus diandrus*), sea barley (*Hordeum marinum*), and wild oat (*Avena fatua*). Typically, the herbaceous layer is continuous and often forms monocultures, which contributes to a poorly developed shrub layer. Within the survey area, this community is the most widespread and is found in upland areas that lack native species and have low species diversity. Additionally, this community shows evidence of heavy grazing, landowner maintenance, and agricultural use.

#### Rosa californica Shrubland Alliance

The Rosa californica Shrubland Alliance is commonly found in creek bottoms, stream terraces, and bordering sloughs and channels. California wild rose (Rosa californica) typically contains greater than 50 percent relative cover in the shrub canopy and may be co-dominant with Himalayan blackberry (Rubus armeniacus). The shrub layer is thick and continuous while the herbaceous layer is open. Emergent trees, including willows (Salix spp.), may be present in low quantities. This community is found in the southern portion of the survey area adjacent to intertidal sloughs. Himalayan blackberry was commonly observed, and in some cases codominant, among thick patches of California wild rose. Isolated red willows (Salix laevigata) were observed scattered throughout this community.

#### Salix exigua Shrubland Alliance

The *Salix exigua* Shrubland Alliance is widespread in California and contains significant variation when determining habitat and shrub composition. Often the shrub layer is intermittent to continuous dominated by sandbar willow (*Salix exigua*) and contains greater than 20 percent absolute cover in the shrub layer. In a high-quality habitat, sandbar willow may be co-dominant with other willow species and emergent riparian trees may be present at a low cover. Within the survey area, this community was observed between tidally influenced sloughs and estuarine marshes containing sandy soil. Heavy cattle grazing was observed to have a direct impact on this community, leading to a sparse shrub layer dominated by sandbar willows that are in the process of re-growing.

#### Schoenoplectus (acutus, californicus) Herbaceous Alliance

This community is found in a variety of wetland habitats, including brackish marshes, freshwater ponds, sloughs, swamps, and roadside ditches. The shrub layer is intermittent to continuous, forming thick stands that often result in a poorly developed herbaceous layer. Hardstem bulrush (*Schoenoplectus acutus*) or giant bulrush (*Schoenoplectus californicus*) typically contain greater than 50 percent relative cover in the herbaceous layer. Within the survey area, this community was observed adjacent to the coastline, within sloughs, and in tidally influenced areas that are semi-brackish. Species composition varied depending on the salinity of the water and proximity to the coastline, as hardstem bulrush is generally less tolerant of brackish conditions.

#### Schoenoplectus acutus/Rosa californica Association

Schoenoplectus acutus/Rosa Californica Association occurs on tidal sloughs that are seasonally or tidally inundated with brackish or semi-brackish water. This association contains greater than 50 percent relative cover of hardstem bulrush and giant bulrush with as low as 5 percent absolute cover of California wild rose. Within the survey area, this habitat occurred primarily on manmade earthen levees bordering sloughs adjacent to the coastline. California wild rose was observed in high quantities growing among stands of bulrush (Schoenoplectus spp.), sometimes achieving 20 to 30 percent relative percent cover.

#### 4.3.1 Special-Status Plants

Insignia biologists identified 152 plant species during botanical surveys. Of these, three special-status plant species were identified within the survey area. All plants observed within the survey area during the 2023 surveys are listed in Attachment D: Plant Species Observed. Photographs of

all three species of the special-status plants observed are provided in Attachment E: Special-Status Plant Photographs. The locations of special-status plant individuals/populations are depicted in Attachment A: Biological Resources Map. A summary of each special-status plant species observed during botanical surveys is provided in the subsequent subsections.

#### **Delta Tule Pea**

Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*) is a perennial herb endemic to California with a CRPR of 1B.2. Extensive populations of this species were observed along the southern edge of the survey area immediately adjacent to intertidal vegetation communities including *Rosa californica* Shrubland Alliance and *Schoenoplectus acutus/Rosa Californica* Association. Attachment E: Special-Status Plant Photographs provides photographs of select populations of Delta tule pea. CNDDB forms for the Delta tule pea populations identified in the survey area have been completed and are provided in Attachment F: CNDDB Submittal Forms.

#### Mason's Lilaeopsis

Mason's lileaopsis (*Lilaeopsis masonii*) is a perennial herb endemic to California with a CRPR of 1B.1. Extensive populations of this species were observed along the southern edge of the survey area within intertidal vegetation communities including *Schoenoplectus acutus* Herbaceous Alliance and *Juncus arcticus* (var. *balticus*, *mexicanus*) Herbaceous Alliance. Attachment E: Special-Status Plant Photographs provides photographs of select populations of Mason's lilaeopsis. CNDDB forms for the Mason's lilaeopsis populations have been completed and are provided in Attachment F: CNDDB Submittal Forms.

#### Welsh Mudwort

Welsh mudwort (*Limosella australis*) is a perennial herb native to California with a CRPR of 2B.1. The species was observed within the intertidal zone at the southern edge of the survey area and within the *Schoenoplectus acutus* Herbaceous Alliance. Attachment E: Special-Status Plant Photographs provides photographs of select populations of Welsh mudwort. CNDDB forms for the Welsh mudwort populations have been completed and are provided in Attachment F: CNDDB Submittal Forms.

#### 5 - DISCUSSION AND SUMMARY

During the botanical surveys conducted in May and July 2023, three rare plant species were observed: Delta tule pea, Mason's lilaeopsis, and Welsh mudwort. As shown in Attachment A: Biological Resources Map, all occurrences of these species were observed in the southern-most portions of the survey area immediately adjacent to the estuarine/wetland habitat. The vast majority of the upland habitats within the northern portion of the survey area are dominated by non-native and invasive plant species; these areas do not likely provide habitat for special-status plants.

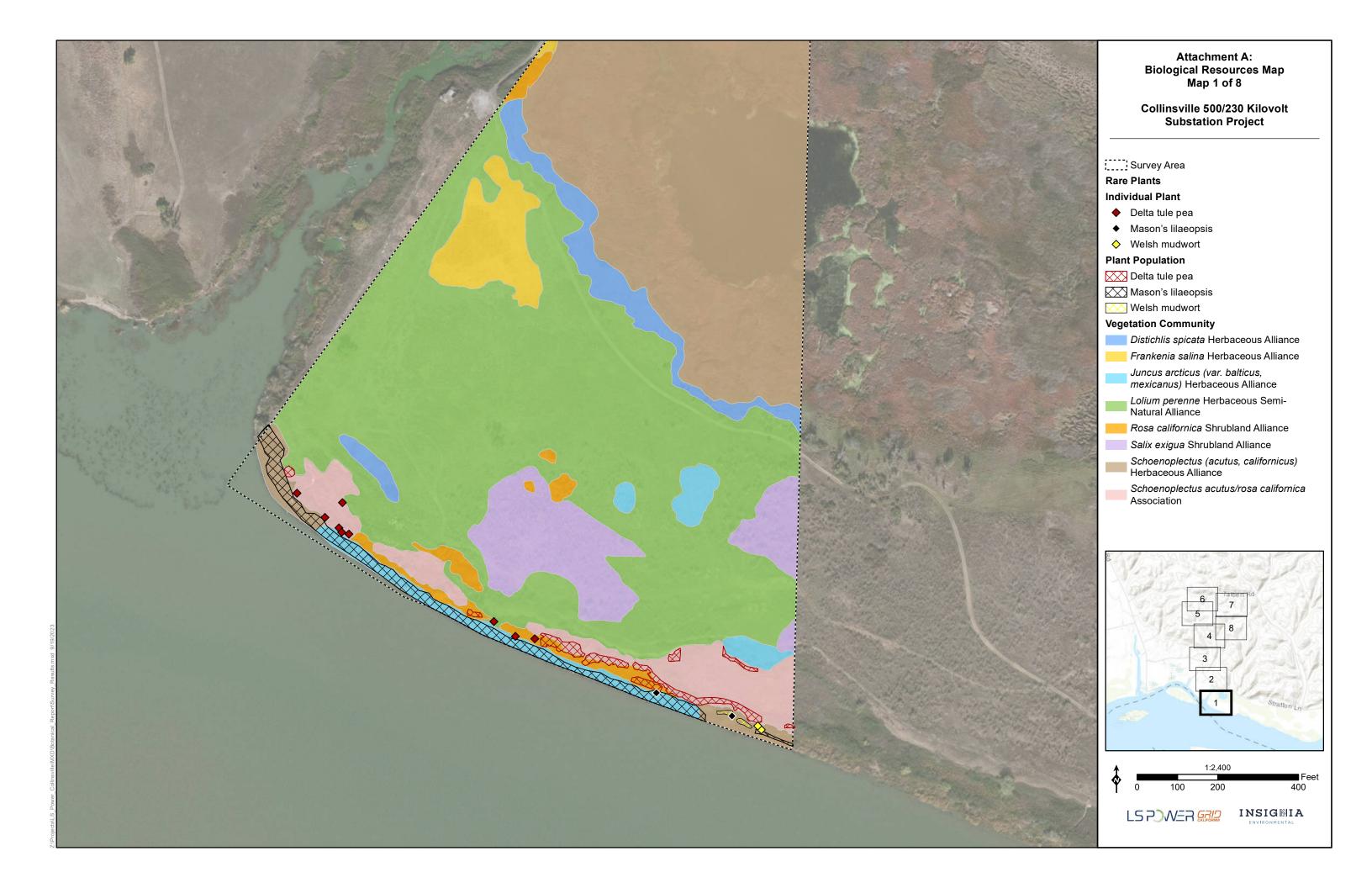
A supplemental survey is recommended in 2024 during the bloom period for diamond-petaled California poppy.

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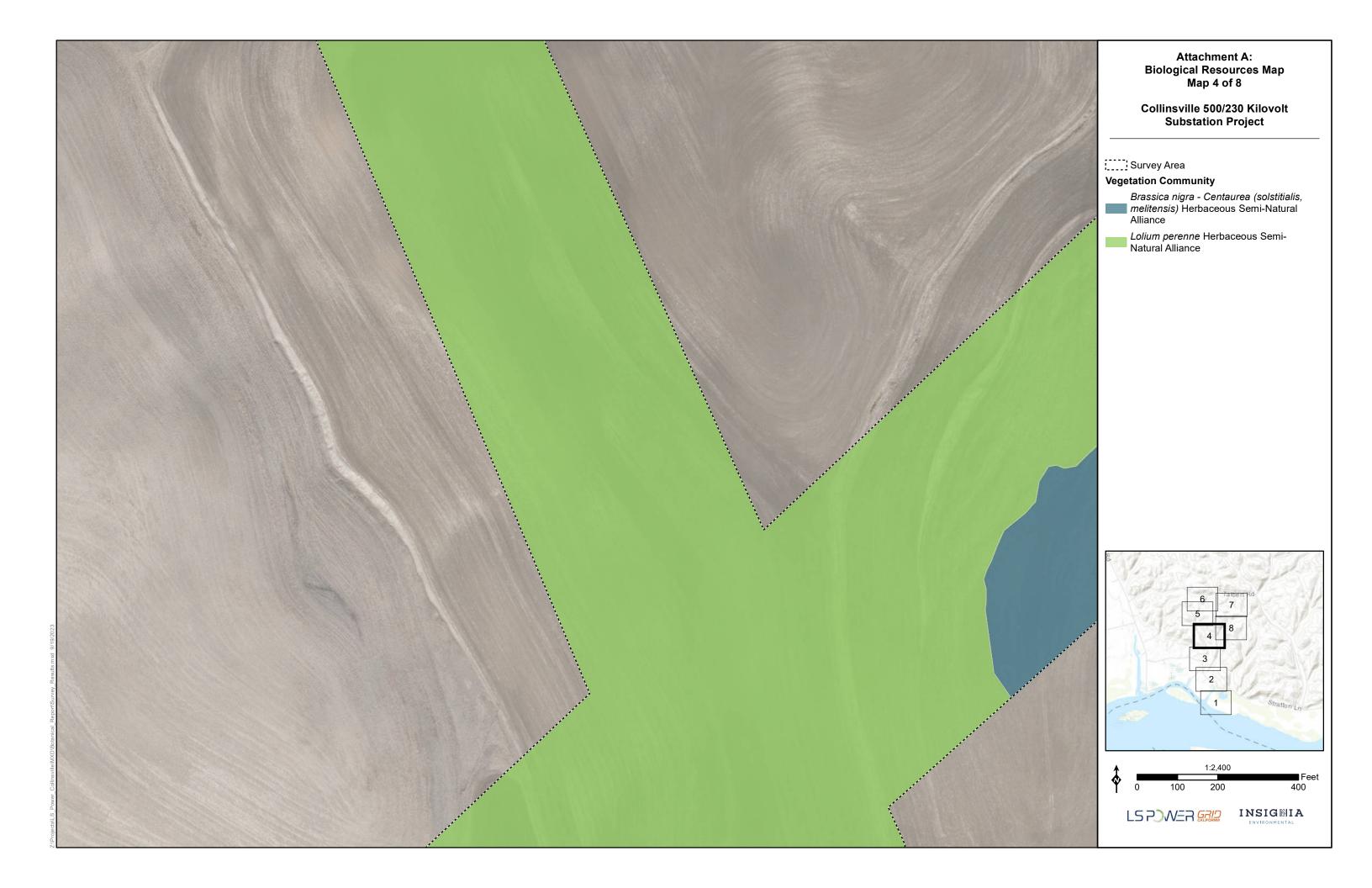
  <a href="http://www.fws.gov/ventura/docs/species/protocols/botanicalinventories.pdf">http://www.fws.gov/ventura/docs/species/protocols/botanicalinventories.pdf</a>. Site visited May 1, 2023.

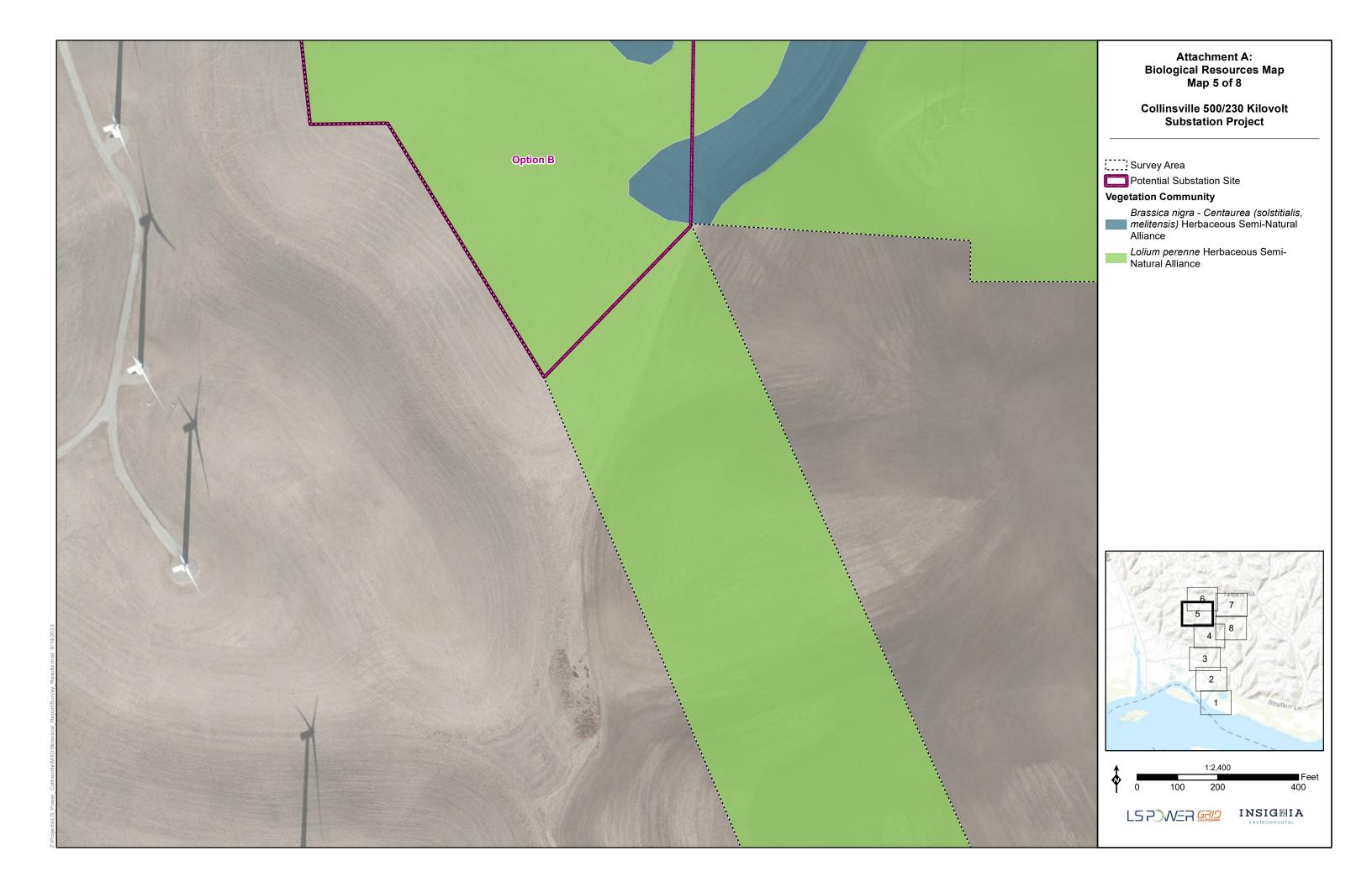
# ATTACHMENT A: BIOLOGICAL RESOURCES MAP

















ATTACHMENT B: SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR	

# ATTACHMENT B: SPECIAL-STATUS PLANT SPECIES WITH THE POTENTIAL TO OCCUR

Common Name	Scientific Name	Listing Status <sup>1</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Alkali Milkvetch	Astragalus tener var. tener	1B.2	This species occurs in alkali playa, valley and foothill grassland, vernal pool, and wetland habitats at elevations between 5 and 195 feet.	March to June	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Antioch Dunes Buckwheat	Eriogonum nudum var. psychicola	1B.1	This species occurs in interior dune habitats at elevations up to 65 feet.	July to October	Perennial herb	Suitable habitat and conditions for this species are not present within the survey area, and no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  No Potential
Antioch Dunes Evening-primrose	Oenothera deltoides ssp. howellii	FE, SE, 1B.1	This species occurs in interior dunes habitats at elevations up to 100 feet.	March to September	Perennial herb	Suitable habitat and conditions for this species are not present within the survey area, and no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 1 mile of the survey area.  Low Potential
Bearded Popcornflower	Plagiobothrys hystriculus	1B.1	This species occurs in valley and foothill grassland, vernal pool, and wetland habitats at elevations up to 900 feet.	April to May	Annual herb	Suitable habitat and conditions for this species are present within the survey area, and but observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Big Tarplant	Blepharizonia plumosa	1B.1	This species occurs in valley and foothill grassland habitats at elevations between 100 and 1,655 feet.	July to October	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area  Low Potential
Bolander's Water- hemlock	Cicuta maculata var. bolanderi	2B.1	This species occurs in marsh and swamp, salt marsh, and wetland habitats at elevations up to 655 feet.	July to September	Perennial herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 0.25 mile of the survey area.  High Potential
Brittlescale	Atriplex depressa	1B.2	This species occurs in alkali playa, chenopod scrub, meadow and seep, valley and foothill grassland, vernal pool, and wetland habitats at elevations between 5 and 1,050 feet.	April to October	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential

Federal listing code:
-FE: Federally listed as endangered

California Native Plant Society California Rare Plant Ranks (CRPRs):

-1A: Presumed Extinct

<sup>&</sup>lt;sup>1</sup> Explanation of federal and state listing codes:

<sup>-1</sup>B: Rare or endangered in California and elsewhere

<sup>-2</sup>B: Rare, threatened, or endangered in California, but more common elsewhere

<sup>-0.1:</sup> Seriously threatened in California (over 80 percent of occurrences threatened, high degree and immediacy of threat)

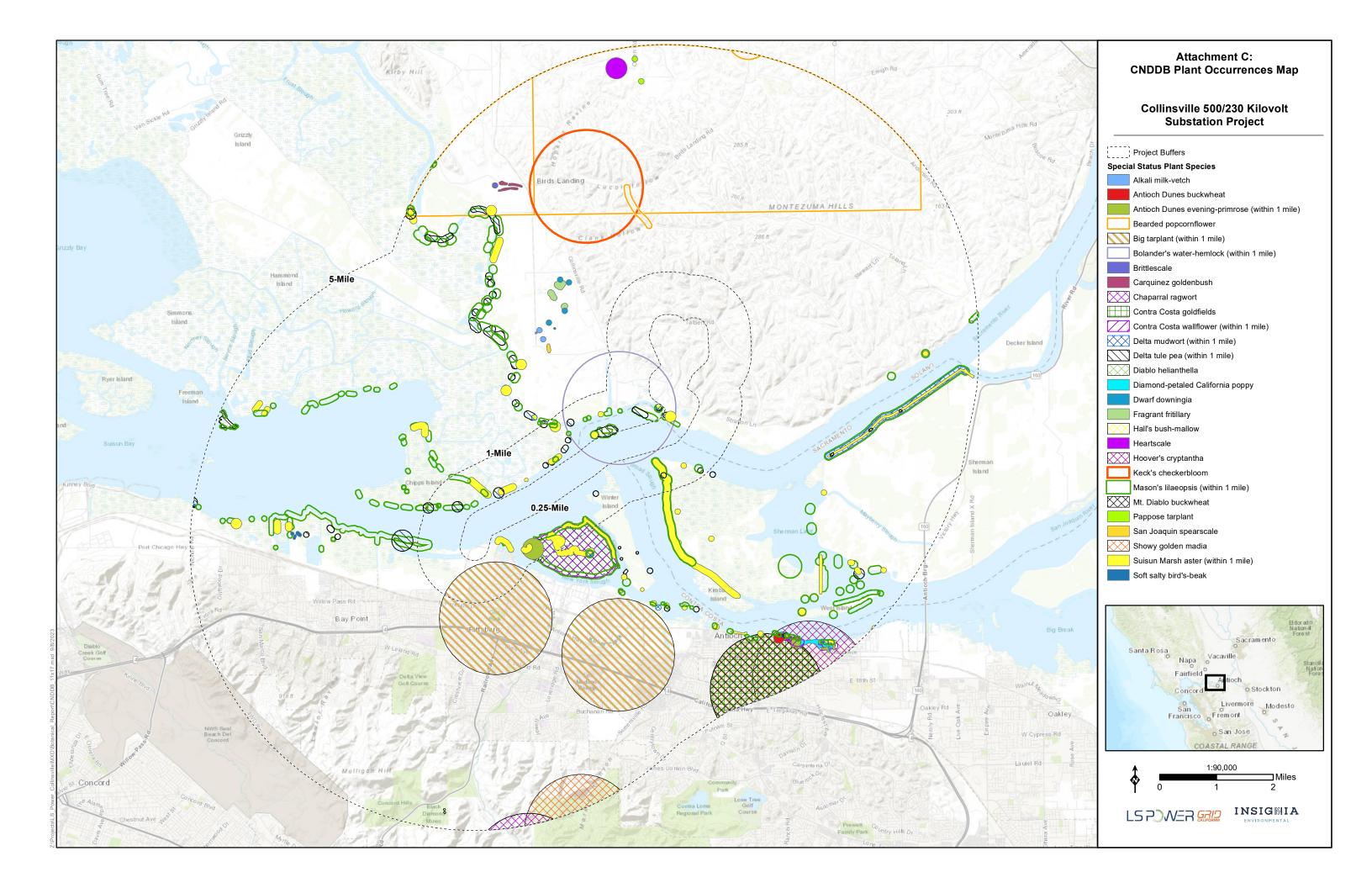
<sup>-0.2:</sup> Moderately threatened in California (20 to 80 percent of occurrences threatened, moderate degree and immediacy of threat)
-0.3: Not very threatened in California (less than 20 percent of occurrences threatened, low degree and immediacy of threat or no current threats known)

Common Name	Scientific Name	Listing Status <sup>1</sup>	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Carquinez Goldenbush	Isocoma arguta	1B.1	This species occurs in valley and foothill grassland habitats at elevations between 5 and 65 feet.	August to December	Perennial shrub	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. Surveys occurred outside of the bloom period for this species. This species has been documented within 5 miles of the survey area.  Low Potential
Chaparral Ragwort	Senecio aphanactis	2B.2	This species occurs in chaparral, cismontane woodland, and coastal scrub habitats at elevations between 50 and 2,625 feet.	January to April	Annual herb	Suitable habitat and conditions for this species are not present within the survey area, and no observations were recorded during fully floristic field surveys in May and July 2023. Surveys occurred outside of the bloom period for this species. This species has been documented within 5 miles of the survey area.  No Potential
Contra Costa Goldfields	Lasthenia conjugens	FE, 1B.1	This species occurs in alkali playa, cismontane woodland, valley and foothill grassland, vernal pool, and wetland habitats at elevations up to 1,540 feet.	March to June	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Contra Costa Wallflower	Erysimum capitatum var. angustatum	FE, SE, 1B.1	This species occurs in interior dunes habitats at elevations between 10 and 65 feet.	March to July	Perennial herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Welsh Mudwort	Limosella australis	2B.1	This species occurs in brackish marsh, freshwater marsh, marsh and swamp, riparian scrub, and wetland habitats at elevations up to 10 feet.	May to August	Perennial stoloniferous herb	Suitable habitat is present within the survey area. Multiple observations of this species were made during fully floristic field surveys.  Present
Delta Tule Pea	Lathyrus jepsonii var. jepsonii	1B.2	This species occurs in freshwater marsh, marsh and swamp, and wetland habitats at elevations up to 15 feet.	May to July	Perennial herb	Suitable habitat is present within the survey area. Multiple observations of this species were made during fully floristic field surveys.  Present
Diablo Helianthella	Helianthella castanea	1B.2	This species occurs in broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats at elevations between 195 and 4,265 feet.	March to June	Perennial herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Diamond-petaled California Poppy	Eschscholzia rhombipetala	1B.1	This species occurs in valley and foothill grassland habitats at elevations up to 3,200 feet.	March to April	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. Surveys occurred outside of the bloom period for this species. This species has been documented within 5 miles of the survey area.  Low Potential
Dwarf Downingia	Downingia pusilla	2B.2	This species occurs in valley and foothill grassland, vernal pool, and wetland habitats at elevations between 5 and 1,460 feet.	March to May	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential

Common Name	Scientific Name	Listing Status¹	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Fragrant Fritillary	Fritillaria liliacea	1B.2	This species occurs in cismontane woodland, coastal prairie, coastal scrub, ultramafic, and valley and foothill grassland habitats at elevations between 10 and 1,345 feet.	February to April	Perennial bulbiferous herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. Surveys occurred outside of the bloom period for this species. This species has been documented within 5 miles of the survey area.  Low Potential
Hall's Bush-mallow	Malacothamnus hallii	1B.2	This species occurs in chaparral, coastal scrub, and ultramafic habitats at elevations between 35 and 2,495 feet.	May to September	Perennial deciduous shrub	Suitable habitat and conditions for this species are not present within the survey area, and no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  No Potential
Heartscale	Atriplex cordulata var. cordulata	1B.2	This species occurs in chenopod scrub, meadow and seep, and valley and foothill grassland habitats at elevations up to 1,835 feet.	April to October	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Hoover's Cryptantha	Cryptantha hooveri	1A	This species occurs in interior dunes and valley and foothill grassland habitats at elevations between 30 to 490 feet.	April to May	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Keck's Checkerbloom	Sidalcea keckii	FE, 1B.1	This species occurs in cismontane woodland, ultramafic, and valley and foothill grassland habitats at elevations between 245 and 2,135 feet.	April to June	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Mason's Lilaeopsis	Lilaeopsis masonii	1B.1	This species occurs in freshwater marsh, marsh and swamp, riparian scrub, and wetland habitats at elevations up to 35 feet.	April to November	Perennial rhizomatous herb	Suitable habitat is present within the Project area. Multiple observations of this species were made during fully floristic field surveys.  Present
Mt. Diablo Buckwheat	Eriogonum truncatum	1B.1	This species occurs in chaparral, coastal scrub, and valley and foothill grassland habitats at elevations between 10 and 1,150 feet.	April to September	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Papoose Tarplant	Centromadia parryi ssp. parryi	1B.2	This species occurs in chaparral, coastal prairie, meadow and seep, marsh and swamp, and alley and foothill grassland habitats at elevations up to 1,380 feet.	May to November	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
San Joaquin Spearscale	Extriplex joaquinana	1B.2	This species occurs in alkali playa, chenopod scrub, meadow and seep, and valley and foothill grassland habitats at elevations between 5 and 2,740 feet.	April to October	Annual herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Showy Golden Madia	Madia radiata	1B.1	This species occurs in cismontane woodland and valley and foothill grassland habitats at elevations between 80 and 3,985 feet.	March to May	Annual herb	Suitable habitat and conditions for this species are present within the survey area, and no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential

Common Name	Scientific Name	Listing Status¹	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology	Life Form	Potential to Occur in the Survey Area
Soft Salty Bird's-beak	Chloropyron molle ssp. molle	FE, 1B.2	This species occurs in marsh and swamp, salt marsh, and wetland habitats at elevations up to 10 feet.	June to November	Annual herb (hemiparasitic)	Suitable habitat and conditions for this species are not present within the survey area, and no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 5 miles of the survey area.  Low Potential
Suisun Marsh Aster	Symphyotrichum lentum	1B.2	This species occurs in brackish marsh, freshwater marsh, marsh and swamp, and wetland habitats at elevations up to 10 feet.	April to November	Perennial rhizomatous herb	Suitable habitat and conditions for this species are present within the survey area, but no observations were recorded during fully floristic field surveys in May and July 2023. This species has been documented within 0.25 mile of the survey area.  High Potential

# ATTACHMENT C: CNDDB PLANT OCCURRENCES MAP



# ATTACHMENT D: PLANT SPECIES OBSERVED

# **ATTACHMENT D: PLANT SPECIES OBSERVED**

Family	Scientific Name	Common Name
Aizoaceae	Sesuvium verrucosum	Smooth Sea-Purslane
Alismataceae	Alisma gramineum	Slender Water Plantain
Alismataceae	Alisma triviale	Northern Water Plantain
Amaranthaceae	Atriplex prostrata	Spreading Saltbush
Amaranthaceae	Atriplex semibaccata	Australian Saltbush
Amaranthaceae	Atriplex suberecta	Desert Holly
Amaranthaceae	Chenopodium murale	Nettle-leaved Goosefoot
Amaranthaceae	Chenopodium vulvaria	Stinking Goosefoot
Amaranthaceae	Salicornia pacifica	Pacific Glasswort
Amaranthaceae	Salsola tragus	Russian Thistle
Anacardiaceae	Schinus molle	California Pepper Tree
Apiaceae	Apium graveolens	Wild Celery
Apiaceae	Conium maculatum	Poison Hemlock
Apiaceae	Foeniculum vulgare	Sweet Fennel
Apiaceae	Lilaeopsis masonii	Mason's Lilaeopsis
Apiaceae	Oenanthe sarmentosa	Water Parsley
Apiaceae	Sanolus parviflorus	Small-flowered Sanolus
Apocynaceae	Asclepias fasicularius	Narrow-leaved Milkweed
Araliaceae	Hydrocotyle verticillata	Whorled Pennywort
Asparagaceae	Asparagus officinalis	Wild Asparagus
Asteraceae	Achyrachaena mollis	Soft Blow Wives
Asteraceae	Ambrosia psilostachya	Western Ragweed
Asteraceae	Anthemis cotula	Mayweed
Asteraceae	Artemisia douglasiana	Mugwort
Asteraceae	Baccharis glutinosa	Sticky Baccharis
Asteraceae	Baccharis pilularis ssp. consanguinea	Coyote Brush
Asteraceae	Baccharis salicifolia	Mule Fat
Asteraceae	Carduus pycnocephalus	Italian Thistle
Asteraceae	Centaurea solstitialis	Yellow Starthistle
Asteraceae	Centromadia parryi	Pappose Tarweed
Asteraceae	Chondrilla juncea	Rush Skeletonweed

Family	Scientific Name	Common Name
Asteraceae	Cirsium vulgare	Bull Thistle
Asteraceae	Cotula cornopilfoila	Brass Buttons
Asteraceae	Erigeron philadelphicus	Philadelphia Fleabane
Asteraceae	Euthamia occidentalis	Western Goldenrod
Asteraceae	Grindelia stricta	Gumplant
Asteraceae	Helminthotheca echioides	Bristly Oxtongue
Asteraceae	Heterotheca grandiflora	Telegraph Weed
Asteraceae	Hoita macrostachya	Showy Goldeneye
Asteraceae	Hypochoeris glabra	Smooth Cat's Ear
Asteraceae	Iva axillaris	Poverty Weed
Asteraceae	Lactuca serriola	Prickly Lettuce
Asteraceae	Madia gracilis	Graceful Tarweed
Asteraceae	Matricaria occidentalis	Valley mayweed
Asteraceae	Senecio hydrophilus	Marsh Ragwort
Asteraceae	Senecio vulgaris	Common Groundsel
Asteraceae	Silybum marianum	Milk Thistle
Asteraceae	Sonchus asper	Prickly Sowthistle
Asteraceae	Xanthium spinosum	Spiny Cocklebur
Asteraceae	Xanthium strumarium	Common Cocklebur
Boraginaceae	Amsinckia intermedia	Common Fiddleneck
Boraginaceae	Eriodictyon crassifolium	Thick-leaved Yerba Santa
Boraginaceae	Heliotropium curassavicum	Salt Heliotrope
Brassicaceae	Brassica nigra	Black Mustard
Brassicaceae	Lepidium latifolium	Broadleaf Pepperweed
Brassicaceae	Raphanus sativus	Radish
Caryophyllaceae	Spergula marina	Salt Sandspurry
Caryophyllaceae	Spergularia arvensis	Corn Spurry
Convolvulaceae	Calystegia silvatica	Chaparral Dodder
Convolvulaceae	Convolvulus arvensis	Field Bindweed
Convolvulaceae	Cressa truxillensis	Alkaliweed
Cucurbitaceae	Marah fabacea	Wild Cucumber
Cyperaceae	Bolboschoenus robustus	California Bulrush

Family	Scientific Name	Common Name
Cyperaceae	Carex barbarae	Santa Barbara Sedge
Cyperaceae	Eleocharis acicularis var. acicularis	Needle Spikerush
Cyperaceae	Eleocharis macrostachya	Tall Spike-rush
Cyperaceae	Isolepis cernua	Nodding Centaury
Cyperaceae	Schoenoplectus acutus var. occidentalis	Common Tule
Cyperaceae	Schoenoplectus americanus	Three Square Bulrush
Cyperaceae	Schoenoplectus californicus	California Bulrush
Cyperaceae	Schoenoplectus pungens	Common Threesquare
Equisetaceae	Equistem hyemale ssp. affine	Scouring Rush
Euphorbiaceae	Croton setiger	Dove Weed
Fabaceae	Acmispon americanus var. americanus	American Bird's-foot
Fabaceae	Acmispon glaber var. glaber	Deerweed
Fabaceae	Acmispon strigosus	Strigose Bird's-foot Trefoil
Fabaceae	Lathyrus jepsonii var. jepsonii	Delta Tule Pea
Fabaceae	Lotus corniculatus	Bird's-foot Trefoil
Fabaceae	Lotus tenuis	Slender Lotus
Fabaceae	Lupinus bicolor	Miniature Lupine
Fabaceae	Lupinus succulentus	Arroyo Lupine
Fabaceae	Medicago polymorpha	California Burr Medic
Fabaceae	Melilotus indicus	Annual Yellow Sweetclover
Fabaceae	Sesbania punicea	Red Sesbania
Fabaceae	Trifolium hirtum	Rose Clover
Fabaceae	Trifolium hybridum	Alsike Clover
Fabaceae	Trifolium wormskioldii	Cow Clover
Fabaceae	Vicia sativa	Common Vetch
Fabaceae	Vicia villosa	Hairy Vetch
Frankeniaceae	Frankenia salina	Alkali Heath
Geraniaceae	Erodium botrys	Long-beaked Filaree
Geraniaceae	Erodium cicutarium	Redstem Filaree
Geraniaceae	Geranium dissectum	Cutleaf Geranium
Iridaceae	Iris pseudacorus	Yellow Flag Iris
Juncaceae	Juncus balticus	Baltic Rush

Family	Scientific Name	Common Name
Juncaceae	Juncus bufonius	Toad Rush
Juncaceae	Juncus gerardii ssp. gerardii	Salt Marsh Rush
Juncaceae	Juncus mexicanus	Mexican Rush
Lamiaceae	Marrubium vulgare	White Horehound
Lamiaceae	Mentha spicata	Spearmint
Lamiaceae	Pterostegia drymariodes	Fairy Mist
Lythraceae	Lythrum hyssopifolia	Hyssop Loosestrife
Malvaceae	Malva parviflora	Small-flowered Mallow
Malvaceae	Malvella leprosa	Round-leaved Mallow
Montiaceae	Claytonia perfoliata	Miner's Lettuce
Onagraceae	Epilobium ciliatum	Fringed Willowherb
Orobanchaceae	Castilleja exserta ssp. exserta	Purple Owl's Clover
Orobanchaceae	Bellardia trixago	Mediterranean Lineseed
Plantaginaceae	Plantago coronopus	Buckshorn Plantain
Plantaginaceae	Plantago lanceolata	English Plantain
Poaceae	Agrostis stolonifera	Creeping Bentgrass
Poaceae	Arundo donax	Giant Reed
Poaceae	Avena fatua	Wild Oat
Poaceae	Bromus berteroanus	Chilean Brome
Poaceae	Bromus diandrus	Ripgut Brome
Poaceae	Bromus hordeaceus	Soft Brome
Poaceae	Bromus madritensis ssp. rubens	Red Brome
Poaceae	Bromus tectorum	Cheatgrass
Poaceae	Cortaderia jubata	Purple Pampas Grass
Poaceae	Cynodon dactylon	Bermuda Grass
Poaceae	Cynosurus echinatus	Coast Bur Grass
Poaceae	Distichlis spicata	Saltgrass
Poaceae	Elymus triticoides	Beardless Wildrye
Poaceae	Festuca bromoides	Red Fescue
Poaceae	Festuca perennis	Meadow Fescue
Poaceae	Hordeum jubatum	Foxtail Barley
Poaceae	Hordeum murinum	Wall Barley

Family	Scientific Name	Common Name
Poaceae	Hordeum vulgare	Common Barley
Poaceae	Phalaris canariensis	Canary Grass
Poaceae	Phalaris paradoxa	Hairy Canarygrass
Poaceae	Phragmites australis	Common Reed
Polygonaceae	Persicaria spp.	Smartweeds
Polygonaceae	Polygonum argyrocoleon	Silverweed Knotweed
Polygonaceae	Polygonum aviculare	Prostrate Knotweed
Polygonaceae	Rumex acetosella	Sheep Sorrel
Polygonaceae	Rumex californicus	California Dock
Polygonaceae	Rumex crispus	Curly Dock
Ranunculaceae	Ranunculus sceleratus	Cursed Buttercup
Rosaceae	Potentilla anseriana ssp. pacifica	Silverweed
Rosaceae	Rosa californica	California Wild Rose
Rosaceae	Rubus armeniacus	Himalayan Blackberry
Salicaceae	Salix exigua	Narrowleaf Willow
Salicaceae	Salix exigua var. hindsiana	Sandbar Willow
Salicaceae	Salix gooddingii	Goodding's Willow
Salicaceae	Salix laevigata	Red Willow
Salviniaceae	Azolla filiculoides	Water Fern
Scrophulariaceae	Limosella australis	Delta Mudwort
Scrophulariaceae	Zeltnera muehlenbergii	Little Redstem
Solanaceae	Solanum americanum	American Nightshade
Themidaceae	Brodiaea elegans ssp. elegans	Elegant Brodiaea
Typhaceae	Typha latifolia	Common Cattail
Verbenaceae	Phyla nodiflora	Turkey Tangle Fogfruit

ATTACHMENT E: SPECIAL-STATUS PLANT PHOTOGRAPHS

# ATTACHMENT E: SPECIAL-STATUS PLANT PHOTOGRAPHS



Photograph 1: Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*).



Photograph 2: Mason's lilaeopsis (*Lilaeopsis* masonii).



Photograph 3: Welsh mudwort (*Limosella australis*).

# ATTACHMENT F: CNDDB SUBMITTAL FORMS

# **CNDDB Online Field Survey Form Report**



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



Source code_	CRO23F0003
Quad code	3812117
Occ. no	
EO index no	
Map index no.	

www.dfa.ca.gov/biogeodata/cnddb/

	vegetative	flowering	fruiting	
Phenology:	90 %	10 %	0 %	_
PLANT INFORMA	ATION			
	Museum	/Herbarium:		
Collection? No	Collectio	on number:		
Total number of i	ndividuals: 150-2	50		
Level of survey e	ffort: Fully botanion	cal survey		
-	es If not found, w	-		
	ofidence: Very con			
Identification exp		C. Land		
Other:				
By another perso	n: Deanna Giulian	0		
	ige in: Jepson Herb			
Compared w/ spe	cimen at:			
Keyed in: Jepson	Manual			
DETERMINATION	ı			
Other observers:	Deanna Giuliano			
Phone: (920) 544	-7989			
Email: bcropper@				
Address: 3028 Ju				
Affiliation: Insign	**			
Observer: Brian (				
OBSERVER INFO				
	field work date(s):			
Date of field work	(mm-dd-yyyy): 0:	5-24-2023		
Common name: I	Delta mudwort			
Scientific name:	Limosella austro	alis		

coastline. Associated species included predominantly Juncus.

Slope: 1-2 percent Land owner/manager:

Aspect:

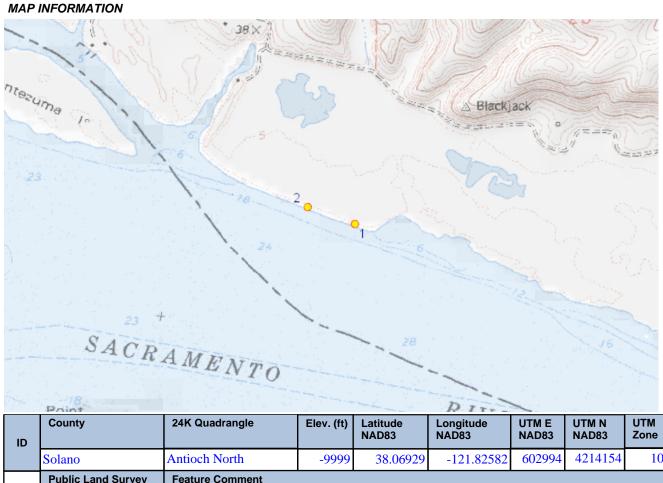
Site condition + population viability:

Immediate & surrounding land use: Potential grazing

Visible disturbances: Trash/debris, man-made berms, riprap.

Threats: Trash accumulation, grazing.

## **General comments:**



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	-9999	38.06929	-121.82582	602994	4214154	10
1	Public Land Survey	Feature Comment						
1	M T03N R01E 26	Spreads via rhizomes co	nsistent alo	ong coast				
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
ID	County	24K Quadrangle Antioch North	<b>Elev. (ft)</b> -9999		NAD83		<b>-</b>	
<b>ID</b> 2	·	,	( )	NAD83	NAD83	NAD83	NAD83	Zone

The mapped feature is accurate within:  $10\ m$ 

Source of mapped feature: Handheld submeter GPS unit

Mapping notes: Species spreads along coast in between mapped points.

Location/directions comments:

Attachment(s):

# **CNDDB Online Field Survey Form Report**



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



Source code_	CRO23F0001
Quad code	3812117
Occ. no	
EO index no	
Map index no.	

www.dfg.ca.gov/biogeodata/cnddb/

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

		1	•	• •		•	• •
Scientific name: 1	∡ati	hyrus	jе	psonu	var.	Jе	psonu

Common name: Delta tule pea

Date of field work (mm-dd-yyyy): 05-24-2023

Comment about field work date(s):

### **OBSERVER INFORMATION**

**Observer:** Brian Cropper

Affiliation: Insignia Environmental Address: 3028 Juniper St Apt 3 Email: bcropper@insigniaenv.com

Phone: (920) 544-7989

Other observers: Deanna Giuliano

### **DETERMINATION**

Keyed in: Jepson Manual Compared w/ specimen at:

Compared w/ image in: Jepson Herbarium, Calflora

By another person: Deanna Giuliano

Other:

Identification explanation:

Identification confidence: Very confident

Species found: Yes If not found, why not?
Level of survey effort: Fully botanical survey

Total number of individuals: 150-200

Collection? No Collection number:

Museum/Herbarium:

### **PLANT INFORMATION**

Phenology: 70 % 25 % 5 %

vegetative flowering fruiting

### SITE INFORMATION

**Habitat description:** Rosa californica and Schoenoplectus dominated habitat and associations. Delta tule pea was commonly found climbing up upland shrubs adjacent to sloughs approximately 15-20 feet from the coast.

Slope: 5 to 10% Land owner/manager:

Aspect:

Site condition + population viability: Fair

Immediate & surrounding land use: Agriculture/grazing

Visible disturbances: evidence of grazing, man-made berms, riprap along coastline.

Threats: Grazing, development

## General comments:

# MAP INFORMATION 38 X Blackjack

	SA	CRAMENT	0-	```	78			16		
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone		
	Solano	Antioch North	14	38.07143	-121.83111	602527	4214386	10		
1	Public Land Survey	Feature Comment								
1	M T03N R01E 26									
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone		
	Solano	Antioch North	20	38.06985	-121.82633	602949	4214216	10		
2	Public Land Survey	Feature Comment								
	M T03N R01E 26	Large polygon with 25+ individuals								
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone		
	Solano	Antioch North	20	38.07074	-121.82756	602839	4214314	10		
3	Public Land Survey	Feature Comment								
3	M T03N R01E 26	Large polygon with 20+ individuals								
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone		
	Solano	Antioch North	9	38.07058	-121.82917	602698	4214294	10		
4	Public Land Survey	Feature Comment								
4	M T03N R01E 26	Large polygon with 75+ individuals								

The mapped feature is accurate within:  $20\ m$ 

Source of mapped feature: Submeter handheld GPS device

Location/directions con	nments:			
Attachment(s):				

## **CNDDB Online Field Survey Form Report**



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



Source code_	CRO23F0002
Quad code	3812117
Occ. no	
EO index no	
Map index no.	

www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff
Scientific name: Lilaeopsis masonii
Common name: Mason's lilaeopsis
Date of field work (mm-dd-yyyy): 05-24-2023
Comment about field work date(s):
OBSERVER INFORMATION
Observer: Brian Cropper
Affiliation: Insignia Environmental
Address: 3028 Juniper St Apt 3
Email: bcropper@insigniaenv.com
<b>Phone:</b> (920) 544-7989
Other observers: Deanna Giuliano
DETERMINATION
Keyed in: Jepson Manual
Compared w/ specimen at:
Compared w/ image in: Jepson Herbarium, Calflora
December 1997

By another person: Deanna Giuliano

Other:

Identification explanation:

**Identification confidence:** Very confident

Species found: Yes If not found, why not? Level of survey effort: Fully botanical survey

Total number of individuals: 200-500

Collection? No Collection number:

Museum/Herbarium:

PLAN	I INF	ORMA	HON

Phenology: 15 % 85 % 0 % vegetative flowering fruiting

## SITE INFORMATION

**Habitat description:** Species were observed approximately 2-5 feet from the coast in tidally influenced saturated soils adjacent to riprap along coast. Dominant species and habitat included primarily Juneus.

**Slope:** 1-2 percent Land owner/manager:

Aspect:

Site condition + population viability: Good Immediate & surrounding land use: N/A

Visible disturbances: Riprap along coast, trash/debris, man-made berms.

Threats: Trash accumulation, potential grazing

## **General comments:**

# A Blackjack SACRAMENTO County 24K Quadrangle Elev. (ft) Latitude NADR3 N

ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	-9999	38.07129	-121.83182	602465	4214370	10
1	Public Land Survey	Feature Comment						
1	M T03N R01E 26	rhizomatous spreading aprox. 5 ft from coast						
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
ID	County	24K Quadrangle Antioch North	Elev. (ft) -9999		NAD83		<b>-</b>	Zone
ID 2	·	, and the second	, ,	NAD83	NAD83	NAD83	NAD83	Zone

The mapped feature is accurate within:  $10\ m$ 

Source of mapped feature: Handheld submeter GPS unit

Mapping notes: Species spreads along the coast and was found consistently between the two mapped points.

Location/directions comments:

Attac	hment(	(s):
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ATTACHMENT D: COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT BOTANICAL
SURVEY REPORT ADDENDUM



# LS POWER GRID CALIFORNIA, LLC COLLINSVILLE 500/230 KILOVOLT SUBSTATION PROJECT BOTANICAL SURVEY REPORT ADDENDUM

**NOVEMBER 2024** 

PREPARED FOR:



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## 1 - INTRODUCTION

LS Power Grid California, LLC (LSPGC) retained Insignia Environmental (Insignia) to conduct fully floristic botanical surveys for the Collinsville 500/230 Kilovolt (kV) Substation Project (Proposed Project). As depicted in Figure 1: Project Overview Map, the Proposed Project includes the construction of a new 500/230 kV substation (Collinsville Substation), the construction of two new 500 kV single-circuit transmission line segments that would loop Pacific Gas and Electric Company's (PG&E's) existing Vaca Dixon-Tesla 500 kV Transmission Line into the proposed LSPGC Collinsville Substation, and the construction of one new 230 kV double-circuit transmission line that would connect the proposed Collinsville Substation to PG&E's existing Pittsburg Substation. The Proposed Project has been designed to address overloads on the existing Contra Costa-Newark 230 kV corridor and provide an additional supply into the northern greater San Francisco Bay Area to increase reliability to the area and advance additional renewable generation.

The Botanical Survey Report (Report) (Insignia 2023) was prepared in October 2023 to identify special-status plant species that may be present within or adjacent to the Proposed Project's terrestrial survey area. The terrestrial survey area has since been expanded by approximately 184 acres, and fully floristic botanical surveys were required within the revised terrestrial survey area. Additionally, the 2023 surveys were conducted outside the blooming period for four special-status plant species. Therefore, 2024 surveys included fully floristic botanical surveys in the revised terrestrial survey area and targeted botanical surveys for four special-status plant species in the terrestrial survey area. This Botanical Survey Report Addendum (Report Addendum) details the findings of the 2024 targeted and fully floristic surveys within the terrestrial survey area and revised terrestrial survey area, respectively.

## 2 - PROJECT LOCATION

The location of the Proposed Project has not changed since the submission of the 2023 Report. As depicted in Figure 1: Project Overview Map, the proposed LSPGC Collinsville Substation would be located near the unincorporated community of Collinsville, located in the southwestern portion of Solano County. The revised terrestrial survey area is bordered on the south and southwest by the Sacramento River, where it debouches into Suisun Bay; on the west by the Montezuma Hills and Suisun Marsh; and to the north and east by agricultural lands. The Proposed Project would create a connection to PG&E's existing Pittsburg Substation, which is located in the City of Pittsburg in the northern portion of Contra Costa County.

<sup>&</sup>lt;sup>1</sup> The terrestrial survey area primarily consists of all terrestrial areas of the Proposed Project north of the Sacramento River, as well as an approximately 10-acre buffer. Terrestrial areas south of Suisun Bay, in the vicinity of PG&E's existing Pittsburg Substation, comprise a small portion of the terrestrial survey area.

## 3 - METHODS

## 3.0 DEFINITIONS

The following definitions were used to define special-status resources within the terrestrial survey area and revised terrestrial survey area.

## 3.0.0 Special-Status Plants

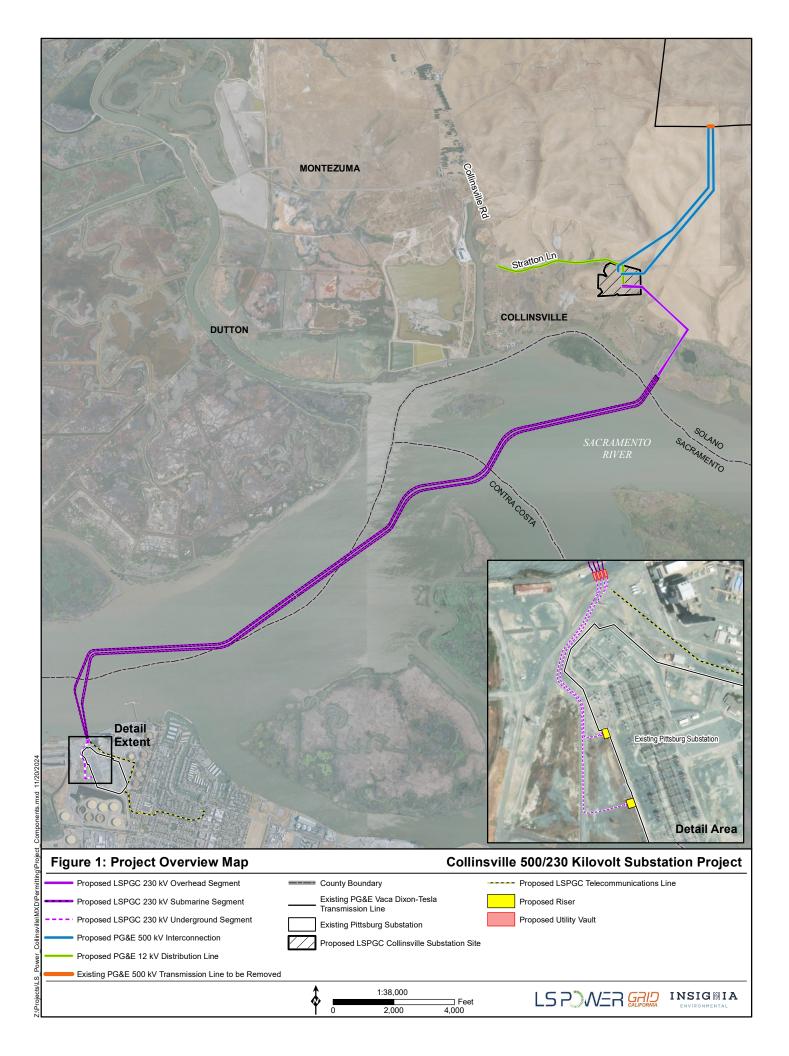
Plant species are considered special-status if they met one or more of the following criteria:

- Species listed or candidates for listing as threatened or endangered under the federal Endangered Species Act;
- Species listed or candidates for listing as threatened or endangered under the California Endangered Species Act;
- Species meeting the definition of endangered, rare, or threatened under the California Environmental Quality Act (CEQA) (14 California Code of Regulations Section 15380), which may include species not found on the federal or state endangered species lists; or
- Species considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered in California (i.e., California Rare Plant Ranks [CRPRs] 1A, 1B, 2A, 2B, and 3).

## 3.0.1 Sensitive Natural Communities and Habitats

Natural communities are considered sensitive if they met one or more of the following criteria:

- Sensitive vegetation communities/habitats identified in local or regional plans, policies, or regulations, or designated as sensitive by the California Department of Fish and Wildlife (CDFW) or United States (U.S.) Fish and Wildlife Service (USFWS) (including communities assigned a State Rarity Rank of S1 to S3 under the CDFW Vegetation Classification and Mapping Program);
- Areas that provide habitat for locally unique biotic species/communities (e.g., oak woodlands, grasslands, and forests);
- Habitat that contains or supports rare, endangered, or threatened wildlife or plant species as defined by the CDFW and USFWS;
- Habitat that supports one or more CDFW Species of Special Concern;
- Areas that provide habitat for rare or endangered species and that meet the definition in CEOA Guidelines Section 15380;
- Existing game and wildlife refuges and reserves;



- Lakes, wetlands, estuaries, lagoons, streams, and rivers; or
- Riparian corridors.

## 3.1 DESKTOP REVIEW

A literature and database review was conducted to identify special-status plant species with the potential to occur within the terrestrial survey area and revised terrestrial survey area. A geographic information system review of records from the California Natural Diversity Database (CNDDB) (CDFW 2023b), was conducted in the U.S. Geological Survey 7.5-minute quadrangles within and adjacent to the terrestrial survey area. Records for all known specialstatus plant species within 0.25 mile, 1 mile, and 5 miles of the Proposed Project were compiled and reviewed. The CNPS Inventory of Rare and Endangered Plants of California (CNPS 2023a) was reviewed with a nine-quadrangle search to obtain additional information regarding specialstatus plant species. The terrestrial survey area overlaps significantly with the Sacramento Municipal Utility District's (SMUD's) Solano 4 Wind Project, for which a final Environmental Impact Report is available (SMUD 2021); this document was referenced during the preliminary desktop review to identify special-status plant species and their potential to occur within the terrestrial survey area. Attachment B: Special-Status Species with the Potential to Occur in the 2023 Report contains a list of special-status plants with the potential to occur in the terrestrial survey area. Aerial imagery (Google Earth 2024) and the Vegetation Community and Mapping Program (VegCAMP) (CDFW 2023c) were used to assess land cover and habitat types within the terrestrial survey area and revised terrestrial survey area.

## 3.2 REFERENCE POPULATION SEARCH

Reference population checks were conducted in accordance with the CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities guidelines (CDFW 2018). Known occurrences and populations of special-status plants within 12 miles of the revised terrestrial survey area were investigated concurrent with the botanical surveys to confirm the blooming status and obtain a visual image of the special-status plant species. Further, local botanists working in areas adjacent to the Proposed Project were consulted to determine if special-status plants were observed to be blooming prior to field surveys dates.

## 3.3 FIELD SURVEY

## 3.3.0 Fully Floristic Survey

The geographical boundaries of the fully floristic survey, as depicted in Attachment A: Biological Resources Map, were limited to the revised terrestrial survey area and included approximately 184 acres of previously unsurveyed land associated with the land-based portions of the Proposed LSPGC Collinsville Substation Site, the Proposed LSPGC 230 kV Overhead Segment, the Proposed PG&E 500 kV Interconnection, and the Proposed PG&E 12 kV Distribution Line. While PG&E's existing Pittsburg Substation, located at the southern terminus of the Proposed Project in Contra Costa County, is situated adjacent to marsh habitat suitable for marsh-dependent special-status plant species, the substation site does not provide suitable habitat for special-status plant species because the facility is located entirely within developed land (e.g.,

graveled or paved), and unvegetated rip-rap is present along much of the shoreline. Because Proposed Project activities at PG&E's existing Pittsburg Substation site are not anticipated to occur within or result in impacts to suitable habitat for special-status plant species, the revised terrestrial survey area in the vicinity of PG&E's existing Pittsburg Substation site was excluded from fully floristic surveys.

Insignia biologists conducted fully floristic plant surveys that covered 100 percent of the revised terrestrial survey area. Transect spacing between surveyors was less than or equal to 10 meters. The surveys were conducted in accordance with guidelines published by the CNPS (2001), the CDFW (2018), and the USFWS (2000), which state the following:

- Surveys should be conducted at the proper time of year when locally significant plants are both evident and identifiable.
- Surveys must be floristic in nature, and the species, subspecies, or variety must be identified for every observed plant to determine the rarity status.
- Surveys must be conducted in a manner that is consistent with conservation ethics and accepted plant collection and documentation techniques.

## 3.3.1 Targeted Survey

The geographical boundaries of the targeted survey, depicted as the terrestrial survey area in Attachment A: Biological Resources Map of the 2023 Report, were limited to the terrestrial survey area from the 2023 Report and include the land-based portions of the Proposed LSPGC Collinsville Substation Site, the Proposed LSPGC 230 kV Overhead Segment, the Proposed PG&E 500 kV Interconnection, and the Proposed PG&E 12 kV Distribution Line. As described in Section 3.3.0 Fully Floristic Survey, PG&E's existing Pittsburg Substation site was excluded from the targeted surveys.

Insignia biologists conducted targeted surveys during appropriate blooming periods for three of four special-status plant species that covered 100 percent of the terrestrial survey area. The fourth species, Carquinez goldenbush, is a perennial shrub and is identifiable year-round.

Transect spacing between surveyors was less than or equal to 10 meters. The targeted surveys were focused on the following special-status plant species:

- diamond-petaled California poppy (Eschscholzia rhombipetala),
- fragrant fritillary (Fritillaria liliacea),
- Carquinez goldenbush (Isocoma arguta), and
- chaparral ragwort (Senecio aphanactisii).

## 4 - RESULTS

## 4.0 GEOGRAPHY, CLIMATE, AND HYDROLOGY

The Proposed Project area receives an average of 16.6 inches of rainfall per year, with the majority of precipitation falling between November and March (Weather Spark 2024). Average annual temperatures range from 48 to 73 degrees Fahrenheit (National Oceanic and Atmospheric

Administration [NOAA] 2023). The elevation of the Proposed Project area ranges from 3 to 250 feet above sea level.

## 4.1 DESKTOP REVIEW

Similar to the results of the initial desktop analysis, upland areas around the proposed LSPGC Collinsville Substation site and transmission line route within the revised terrestrial survey area are mainly composed of grassland habitat and agricultural areas. The southern edge of the revised terrestrial survey area along the Sacramento River appeared to support native riparian habitat areas and freshwater wetlands.<sup>2</sup> No special-status plant species were observed in portions of the terrestrial survey area and the revised terrestrial survey area that overlap with the Solano 4 Winds Project. PG&E's existing Pittsburg Substation site in Contra Costa County may have some fringe marsh habitat near the shoreline outside of the revised terrestrial survey area, but the majority of the facility appeared to be developed (e.g., graveled or paved) with rip-rap present along much of the revised terrestrial survey area shoreline.

Insignia compiled a list of 28 special-status plant species that have potential to occur within 5 miles of the revised terrestrial survey area and terrestrial survey area. A list of these species and further details about their listing status, life history, blooming period, and a brief assessment of their potential to occur within the terrestrial survey area and revised terrestrial survey area are described in Attachment B: Special-Status Species with the Potential to Occur of the Report. Attachment B: CNDDB Plant Occurrences Map depicts the locations of all special-status plant occurrences in the CNDDB within 5 miles of the terrestrial survey area and the revised terrestrial survey area. No USFWS-designated critical habitat for federally listed plants was found within or adjacent to the terrestrial survey area or the revised terrestrial survey area.

## 4.2 REFERENCE POPULATION SEARCH

Prior to fully floristic botanical surveys in 2023, reference checks were attempted at eight locations within 5 miles of the terrestrial survey area. Many of these locations have historically documented occurrences of special-status plants but have since been converted to active agriculture use. This cover type is extensive and is the primary land use within 5 miles of the terrestrial survey area. Further, the reference populations for many special-status plant species in the Report were located on private property and were inaccessible to the survey team. None of the eight reference sites checked in 2023 were revisited in 2024.

To increase the chances of observing reference populations of special-status plant species, three additional locations up to 12 miles from the revised terrestrial survey area were assessed. Two of the three reference sites visited in 2024 were located on private property with limited access; however, one special-status plant species, Contra Costa goldfields (*Lasthenia conjugens*), was observed blooming abundantly at the third reference site.

To supplement field reference checks, local botanists working in areas adjacent to the Proposed Project were consulted. The following six special-status plant species were observed in leaf or in

LS Power Grid California, LLC Collinsville 500/230 Kilovolt Substation Project

<sup>&</sup>lt;sup>2</sup> Formal wetland and waters delineations were conducted between May 6, 2024 and July 10, 2024 in the Proposed Project area. Attachment A: Biological Resources Map depicts wetland boundaries from the formal delineations.

bloom in habitats adjacent to the Proposed Project before or during the April survey period (Bartosh 2024):

- Alkali milk-vetch (Astralagus tener var. tener) was observed in bloom during April.
- Mt. Diablo buckwheat (*Eriogonum truncatum*) was observed in leaf before April.
- Diamond-petaled California poppy was observed in leaf before April.
- San Joaquin spearscale (Extriplex joaquinana) was observed in leaf during April.
- Fragrant fritillary was observed in bloom before April.
- Diablo helianthella (Helianthella castanea) was observed in bloom during April.

Findings from reference population checks and additional outreach with local botanists prompted the initiation of the field surveys and confirmed that they would be conducted within the appropriate blooming periods for the applicable species.

## 4.3 FIELD SURVEY

From April 22 to 26, 2024, Insignia biologists conducted fully floristic botanical surveys and targeted surveys within the revised terrestrial survey area and terrestrial survey area, respectively. All observed special-status plant species were photographed and recorded using a submeter-accurate Global Positioning System unit. The following subsections describe the results of the field surveys.

## 4.3.0 Vegetation Communities

The following 11 vegetation community alliances and land cover types were identified within the terrestrial survey area and revised terrestrial survey area:

- Brassica nigra Centaurea (solstitialis, melitensis) Herbaceous Semi-Natural Alliance
- Distichlis spicata Herbaceous Alliance
- Frankenia salina Herbaceous Alliance\*3
- Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance
- Lolium perenne Herbaceous Semi-Natural Alliance
- Open water
- Road
- Rosa californica Shrubland Alliance\*
- Salix exigua Shrubland Alliance
- Schoenoplectus (acutus, californicus) Herbaceous Alliance\*
- Schoenoplectus acutus/Rosa californica Association\*

The vegetation community and land cover locations are documented in Attachment A: Biological Resources Map. Four of the nine natural communities observed are considered sensitive natural communities by the CDFW (CDFW 2023a). Descriptions of each vegetation community identified within the terrestrial survey area and revised terrestrial survey area are provided in the 2023 Report.

<sup>&</sup>lt;sup>3</sup> The asterisks refer to a CDFW-designated sensitive natural community (State Rarity Rank S1-S3).

## 4.3.1 Special-Status Plants

Insignia biologists identified a total of 208 plant species during the 2023 and 2024 fully floristic botanical surveys in the terrestrial survey area and revised terrestrial survey area. An additional 56 plant species were identified within the revised terrestrial survey area that had not been previously observed within the terrestrial survey area. The addition of the revised terrestrial survey area did not change any determinations on Attachment B: Special-Status Plant Species with the Potential to Occur in the 2023 Report because there were no changes in suitable habitat within the revised terrestrial survey area and the terrestrial survey area. One special-status plant species—Delta tule pea (Lathyrus jepsonii var. jepsonii)—was identified within the revised terrestrial survey area. Several new populations of Delta mudwort (Limosella australis) were observed within the terrestrial survey area. All plants observed within the terrestrial survey area and revised terrestrial survey area are listed in Attachment C: Plant Species Observed; species not previously observed within the terrestrial survey area are noted with asterisks. Photographs of the special-status plants observed within the revised terrestrial survey area are provided in Attachment D: Special-Status Plant Photographs. The locations of all special-status plants observed within the terrestrial survey area and revised terrestrial survey area are depicted in Attachment A: Biological Resources Map. A summary of the special-status plant species observed during fully floristic surveys and targeted surveys is provided in the following subsections.

## **Delta Tule Pea**

Delta tule pea is a perennial herb endemic to California with a CRPR of 1B.2. Two populations of this species were observed within the revised terrestrial survey area. One of the two populations is located adjacent to an inlet along the north shore of the Sacramento River within *Rosa californica* Shrubland Alliance and *Schoenoplectus acutus/Rosa Californica* Association vegetation communities. The second population is located on the south shore of the Sacramento River within *Schoenoplectus* (*acutus*, *californicus*) Herbaceous Alliance nearby Delta tule pea populations found during 2023 surveys. Populations found in 2023 were observed and confirmed to be present in 2024. These areas are depicted on maps 1 and 13 in Attachment A: Biological Resources Map. Attachment D: Special-Status Plant Photographs provides photographs of select populations of Delta tule pea. CNDDB forms for the Delta tule pea populations identified in the terrestrial survey area have been completed and are provided in Attachment E: CNDDB Submittal Forms.

## Mason's Lilaeopsis

Mason's lilaeopsis (*Lilaeopsis masonii*) is a perennial herb endemic to California with a CRPR of 1B.1. During the 2023 surveys, extensive populations of this species were observed along the southern edge of the terrestrial survey area within intertidal vegetation communities, including the *Schoenoplectus acutus* Herbaceous Alliance and *Juncus arcticus* (var. *balticus*, *mexicanus*) Herbaceous Alliance. During the 2024 surveys, this species was observed in bloom and confirmed to be present within the same areas of the terrestrial survey area mapped in 2023. These areas are depicted in map 1 of Attachment A: Biological Resources Map. No additional populations were observed during the 2024 surveys.

## Welsh Mudwort

Welsh mudwort is a perennial herb native to California with a CRPR of 2B.1. During the 2023 surveys, this species was observed within the intertidal zone at the southern edge of the terrestrial survey area and within the *Schoenoplectus acutus* Herbaceous Alliance. During the 2024 surveys, this species was observed in bloom and confirmed to be present within the areas of the terrestrial survey area mapped in 2023. Additional populations of this species were observed and recorded within the same intertidal zone in 2024. These areas are depicted in map 1 of Attachment A: Biological Resources Map.

## **5 – DISCUSSION AND SUMMARY**

During the fully floristic surveys conducted in April 2024, one special-status plant species—Delta tule pea—was observed in the revised terrestrial survey area on both the north and south shores of the Sacramento River, as shown in Attachment A: Biological Resources Map. Additionally, during targeted surveys, incidental observations of Delta mudwort and Mason's lilaeopsis were mapped in the terrestrial survey area adjacent to the populations that were previously mapped during the 2023 surveys. These populations are depicted in Attachment A: Biological Resources Map. No additional special-status species were observed in the terrestrial survey area or the revised terrestrial survey area during the 2024 surveys.

The vast majority of the upland habitats in the northern portions of the terrestrial survey area and revised terrestrial survey area are dominated by non-native and invasive plant species and therefore likely do not provide suitable habitat for the special-status plants with potential to occur. Additionally, some upland habitat in the northern portion of the terrestrial survey area and revised terrestrial survey area was observed to have been disturbed and subsequently hydroseeded with a native seed mix as a part of construction on the Solano 4 Wind Project.

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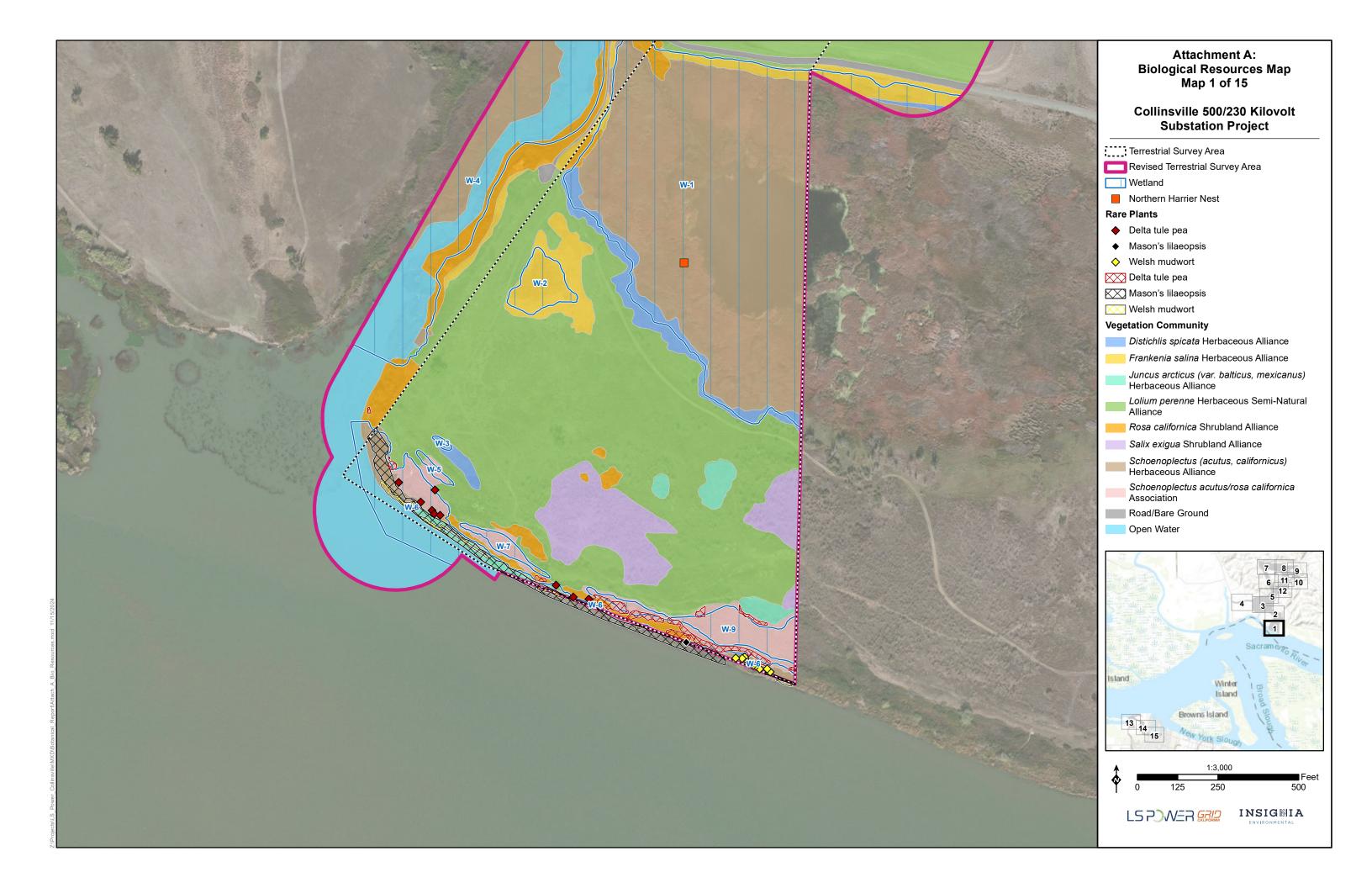
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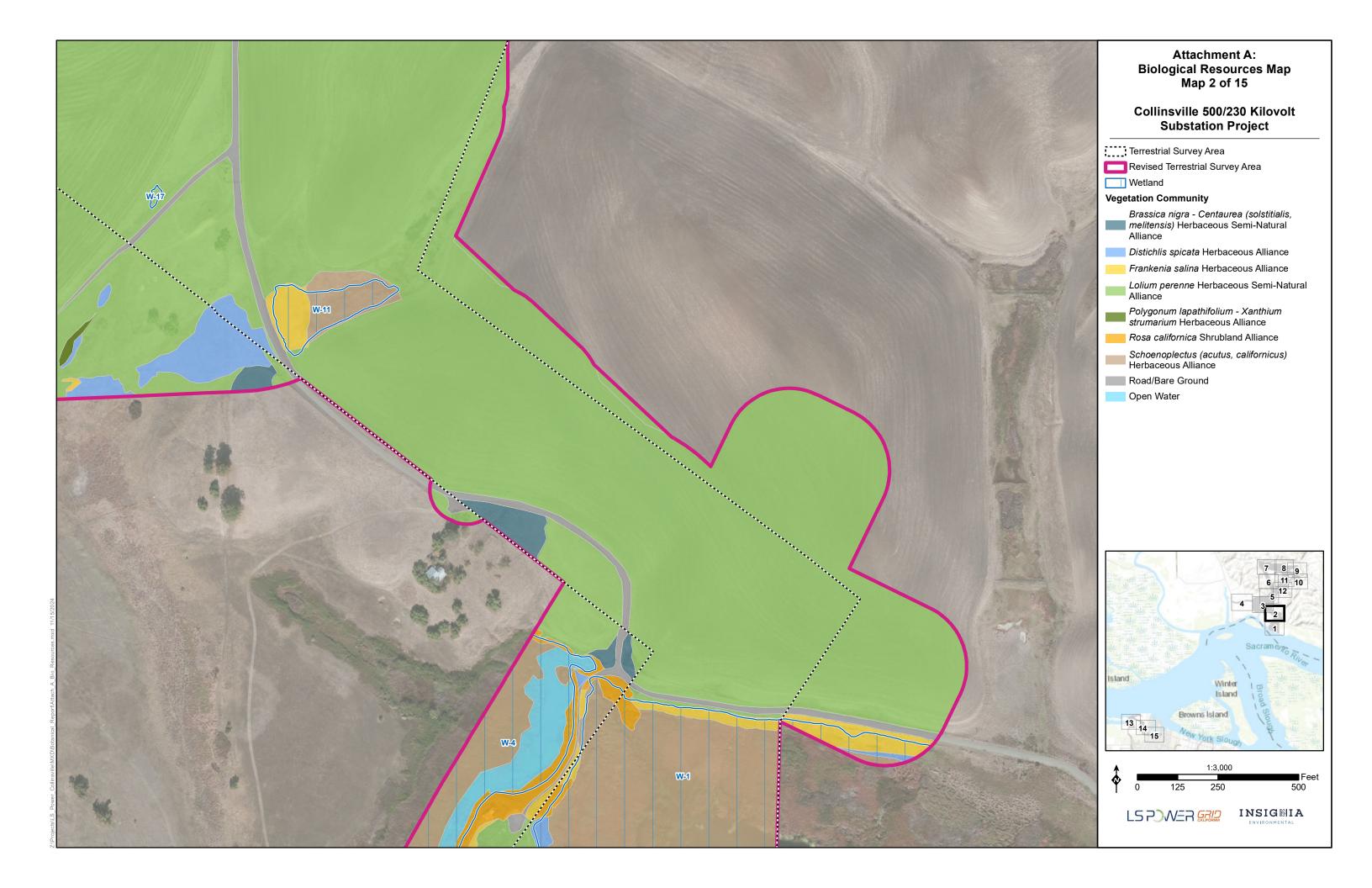
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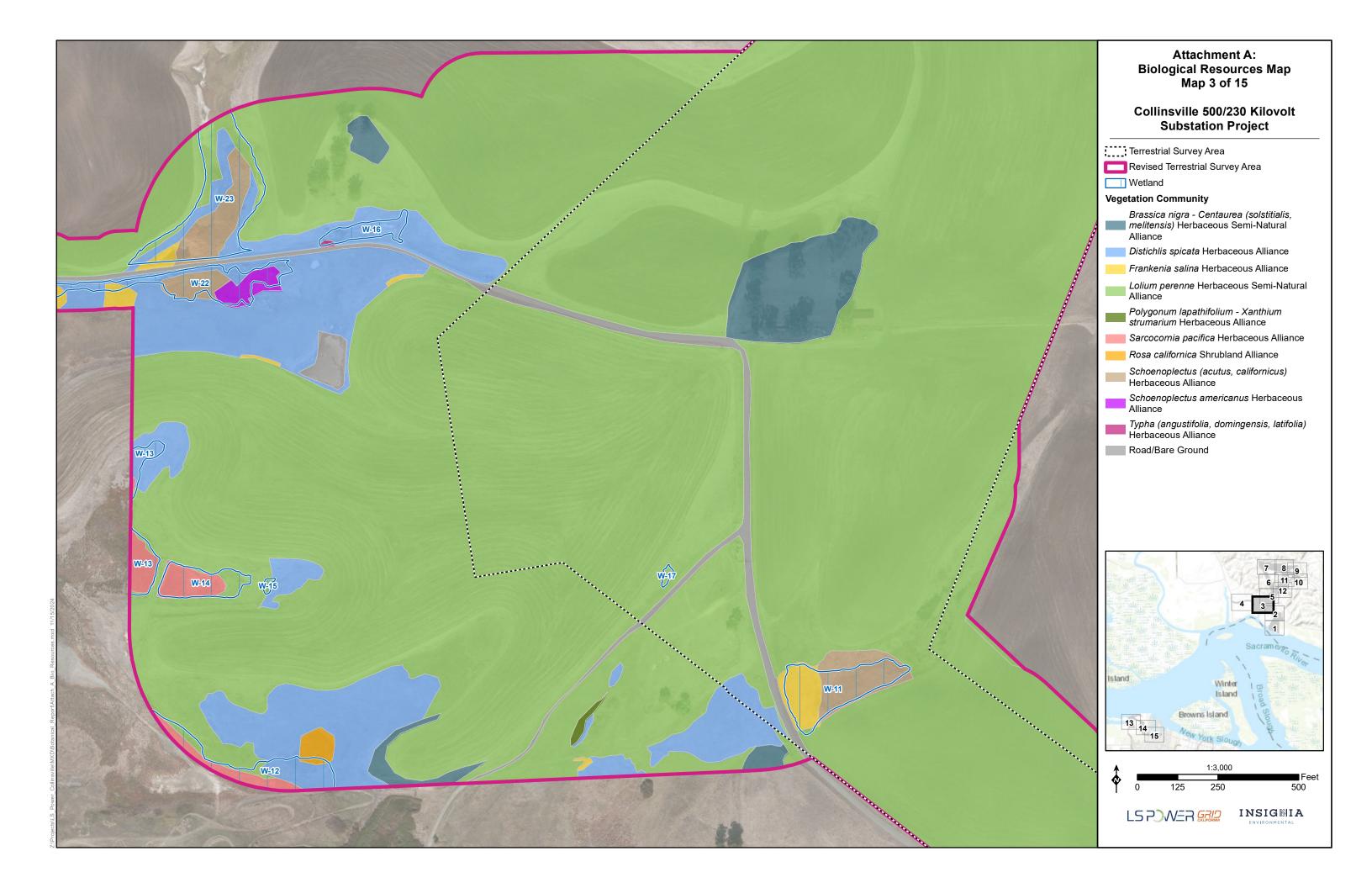
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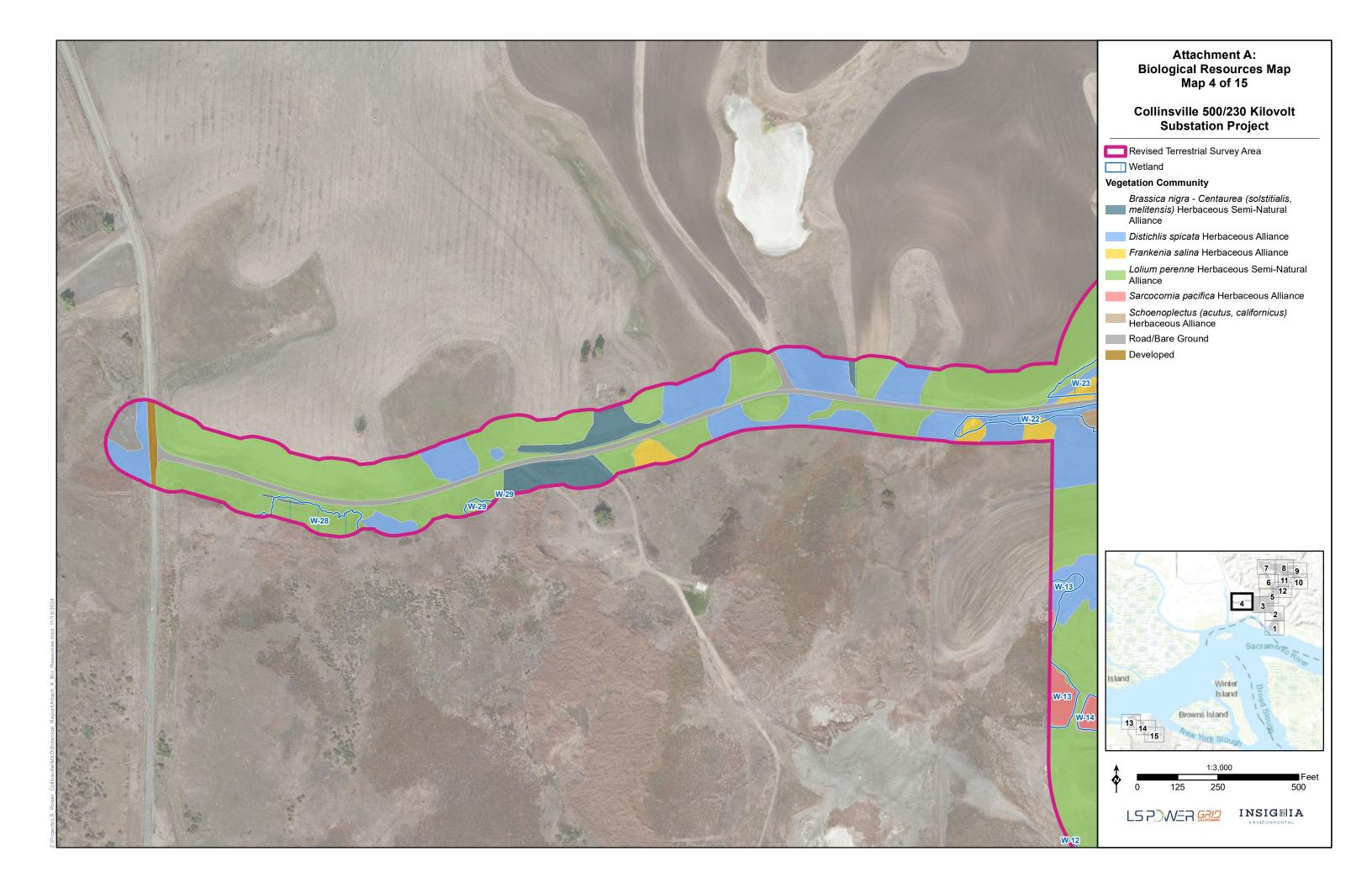
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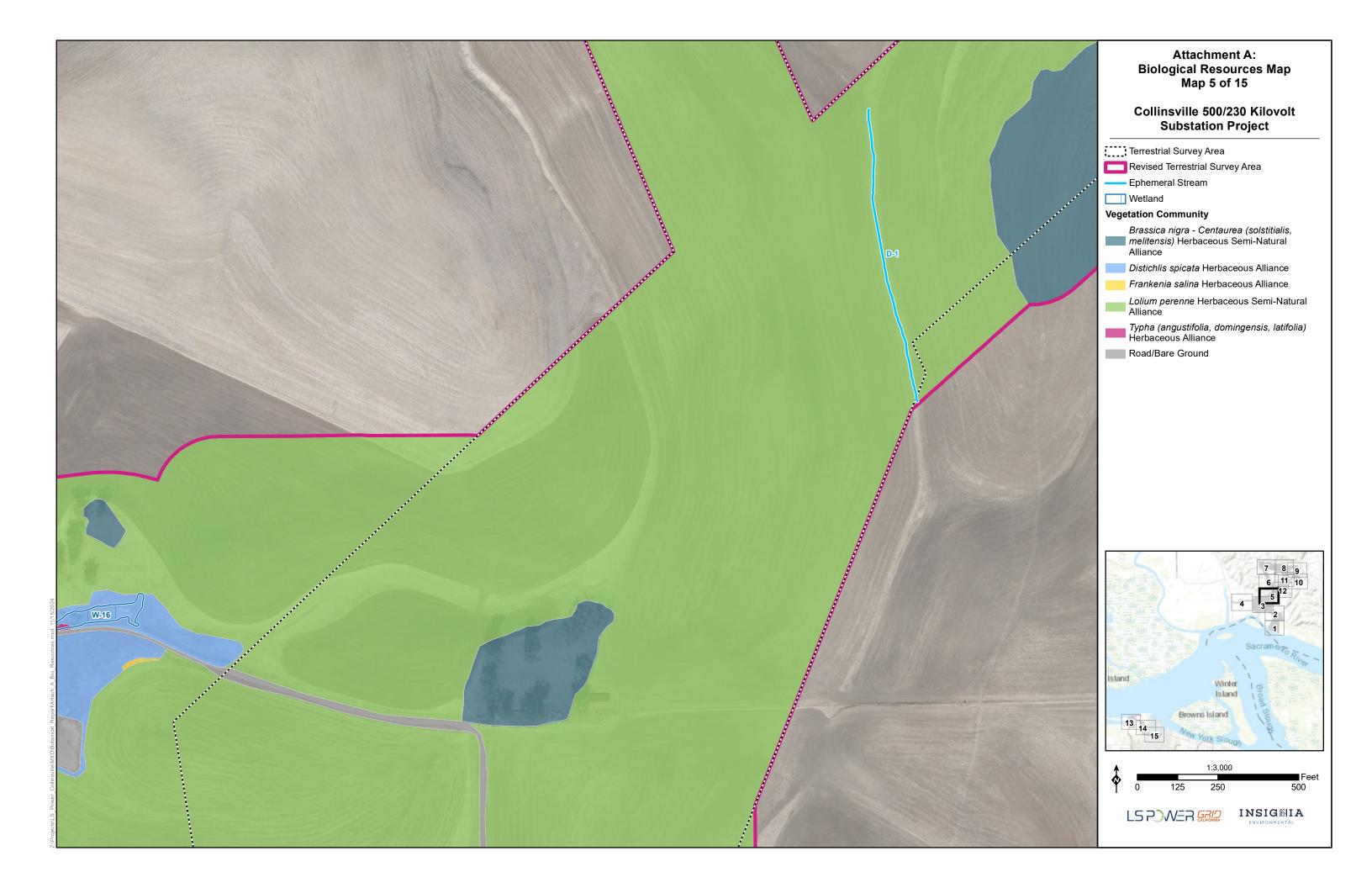
## ATTACHMENT A: BIOLOGICAL RESOURCES MAP



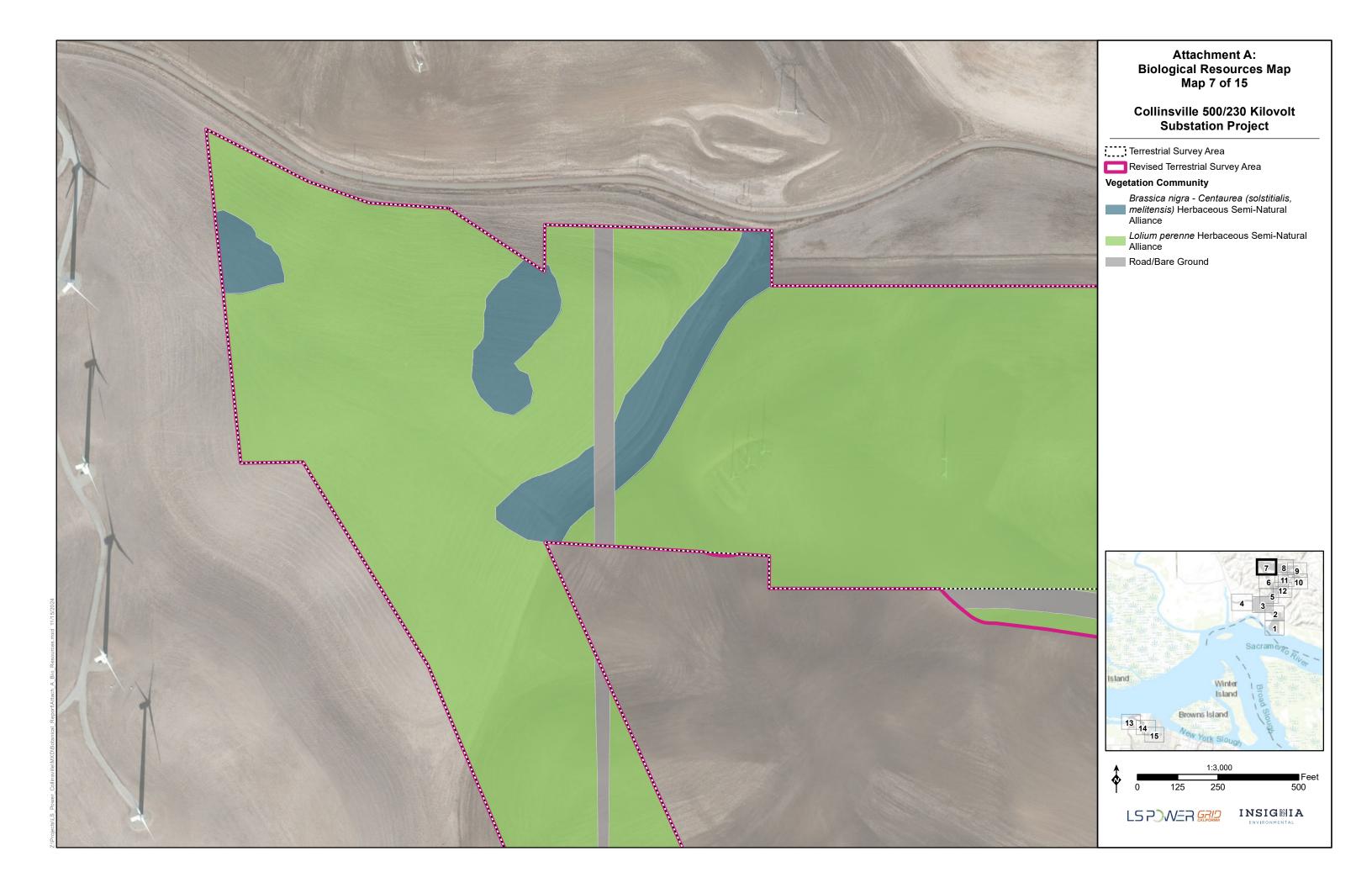


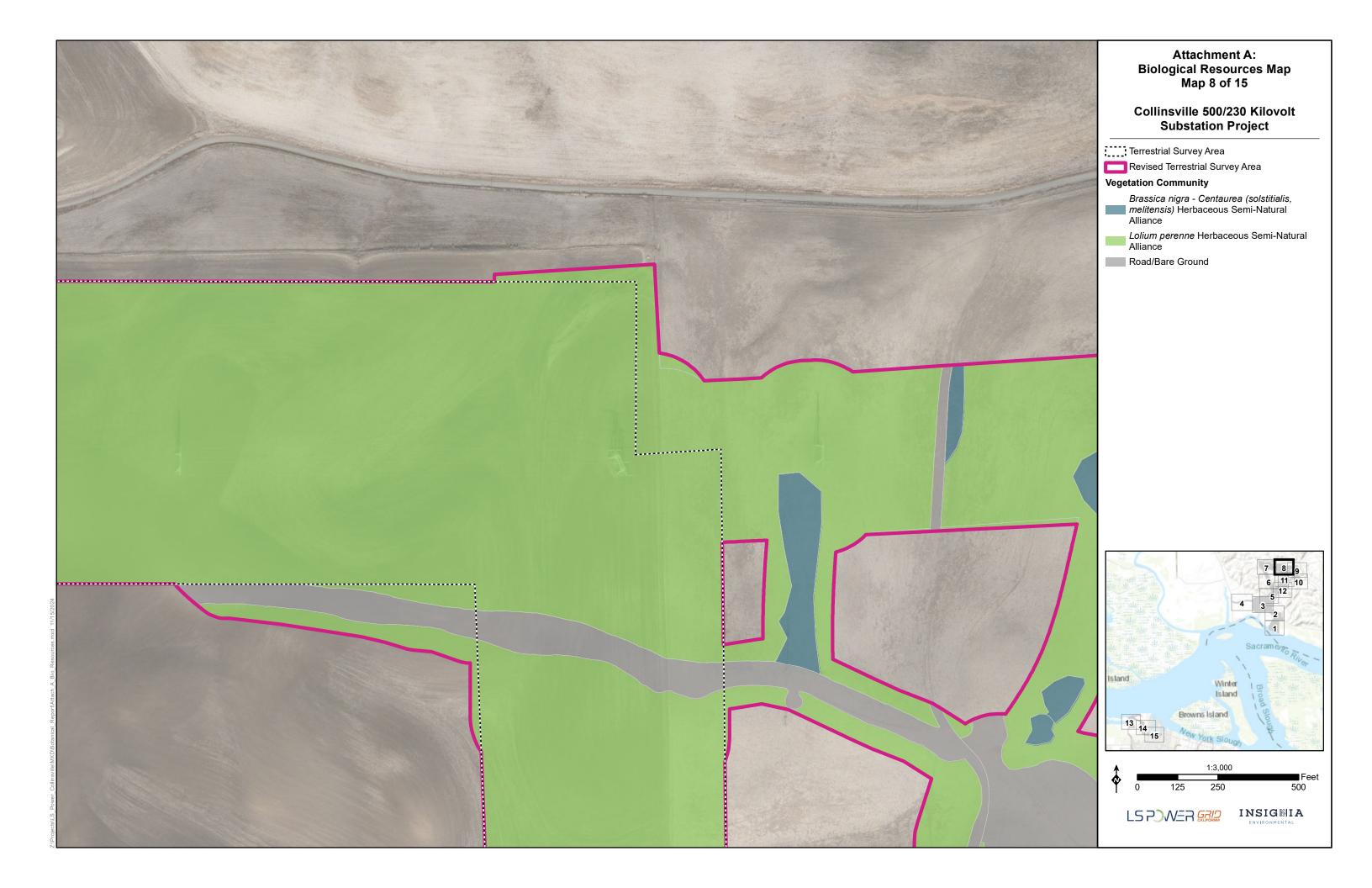


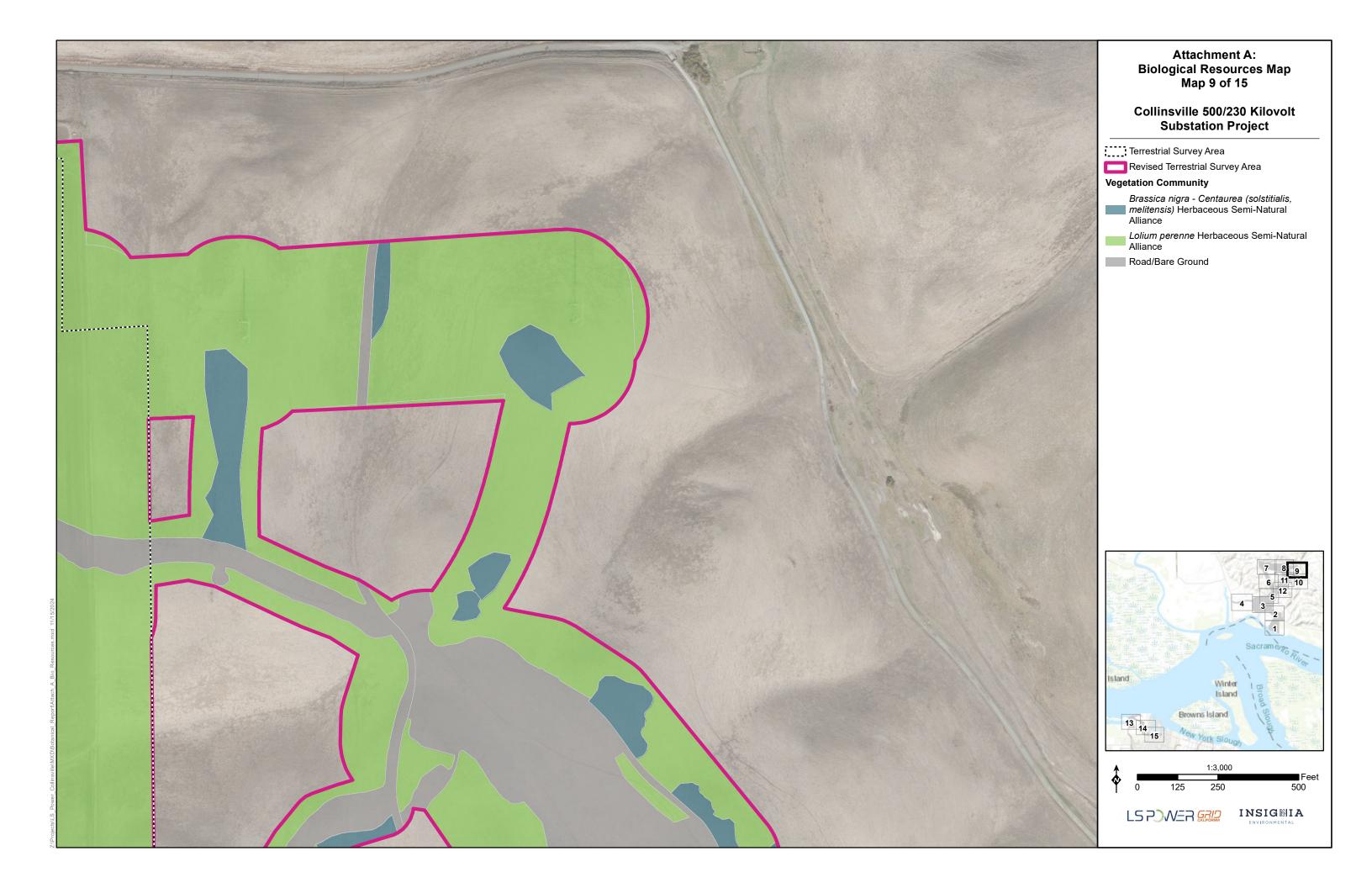


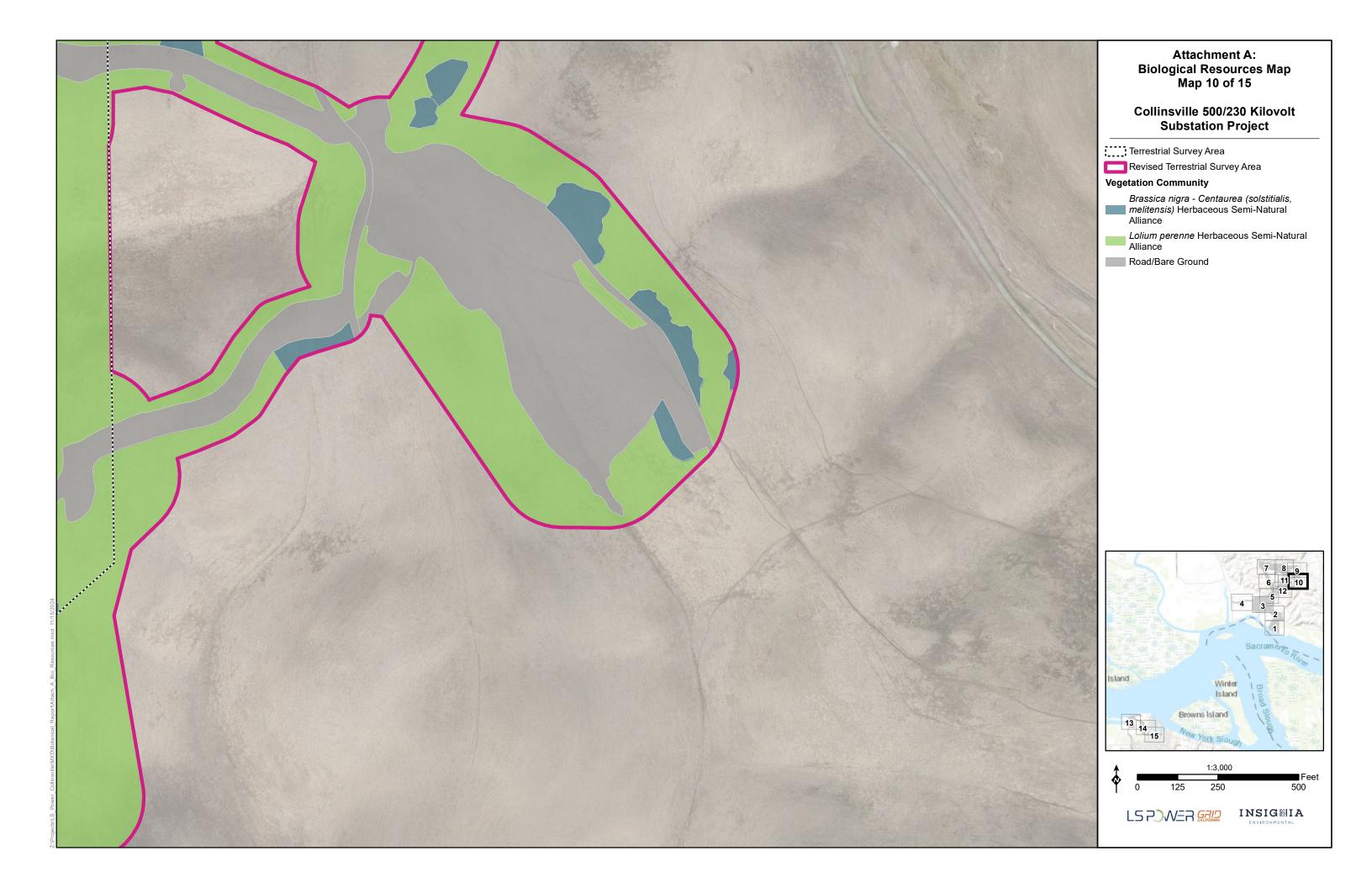




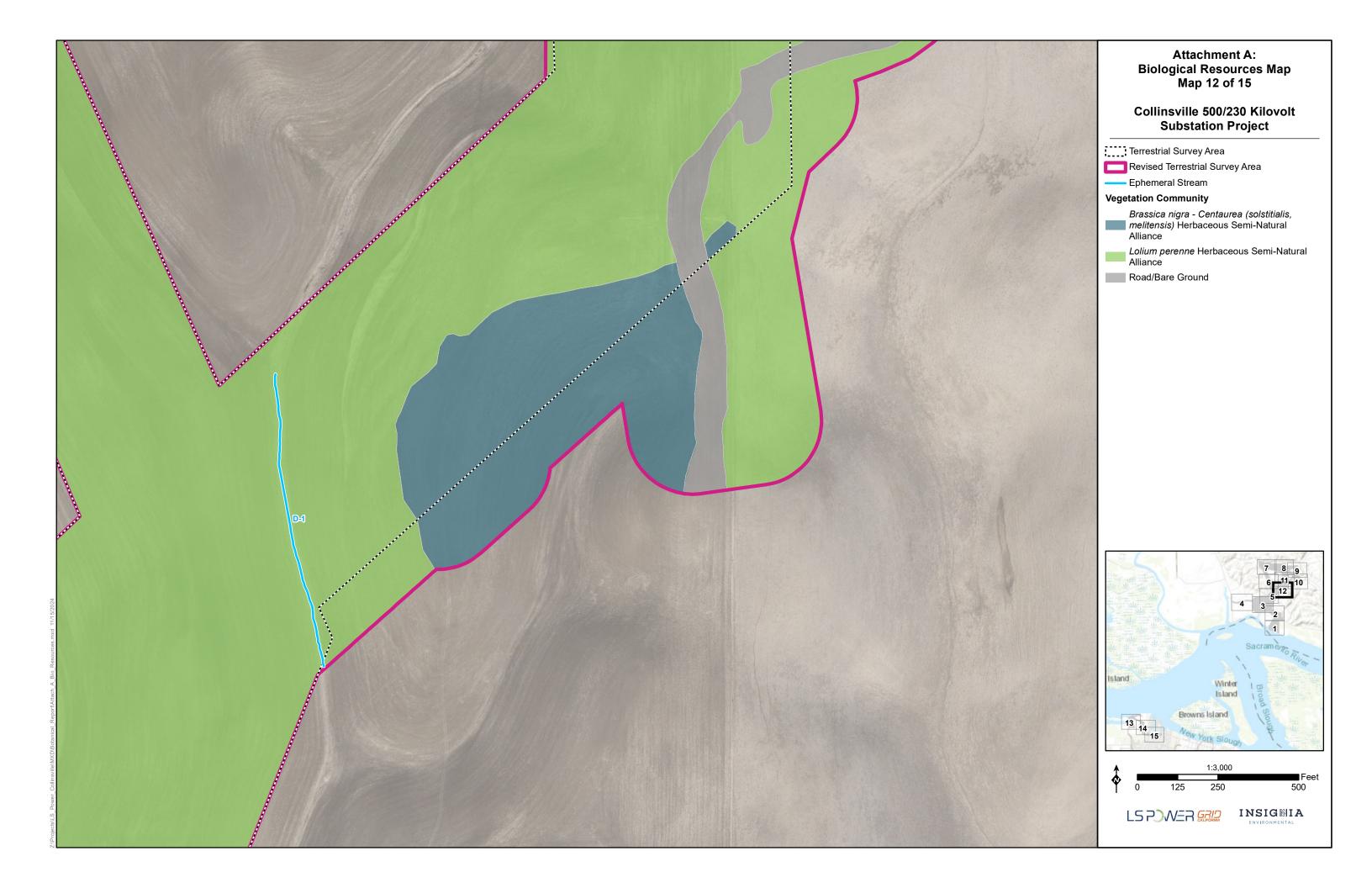


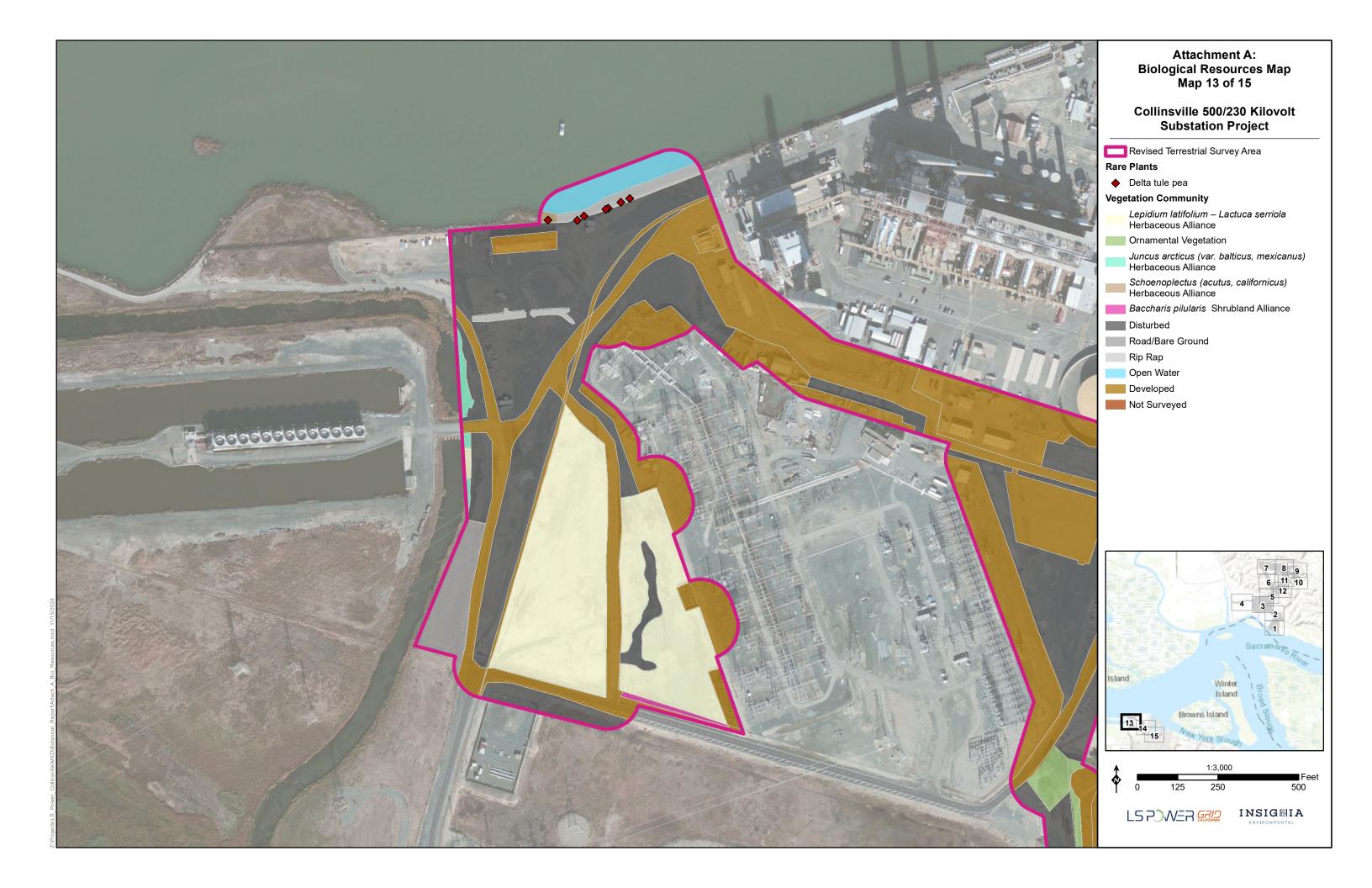


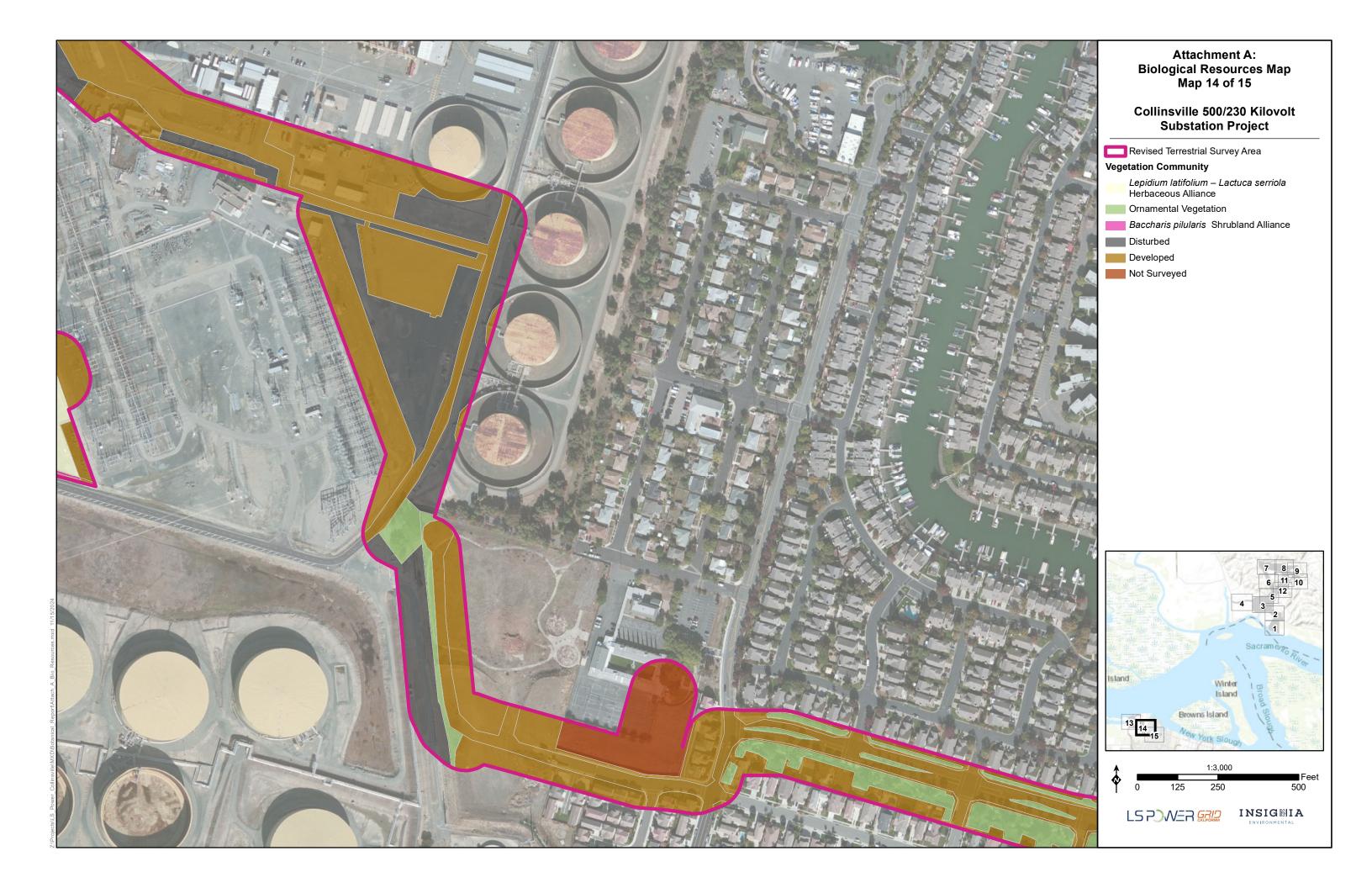


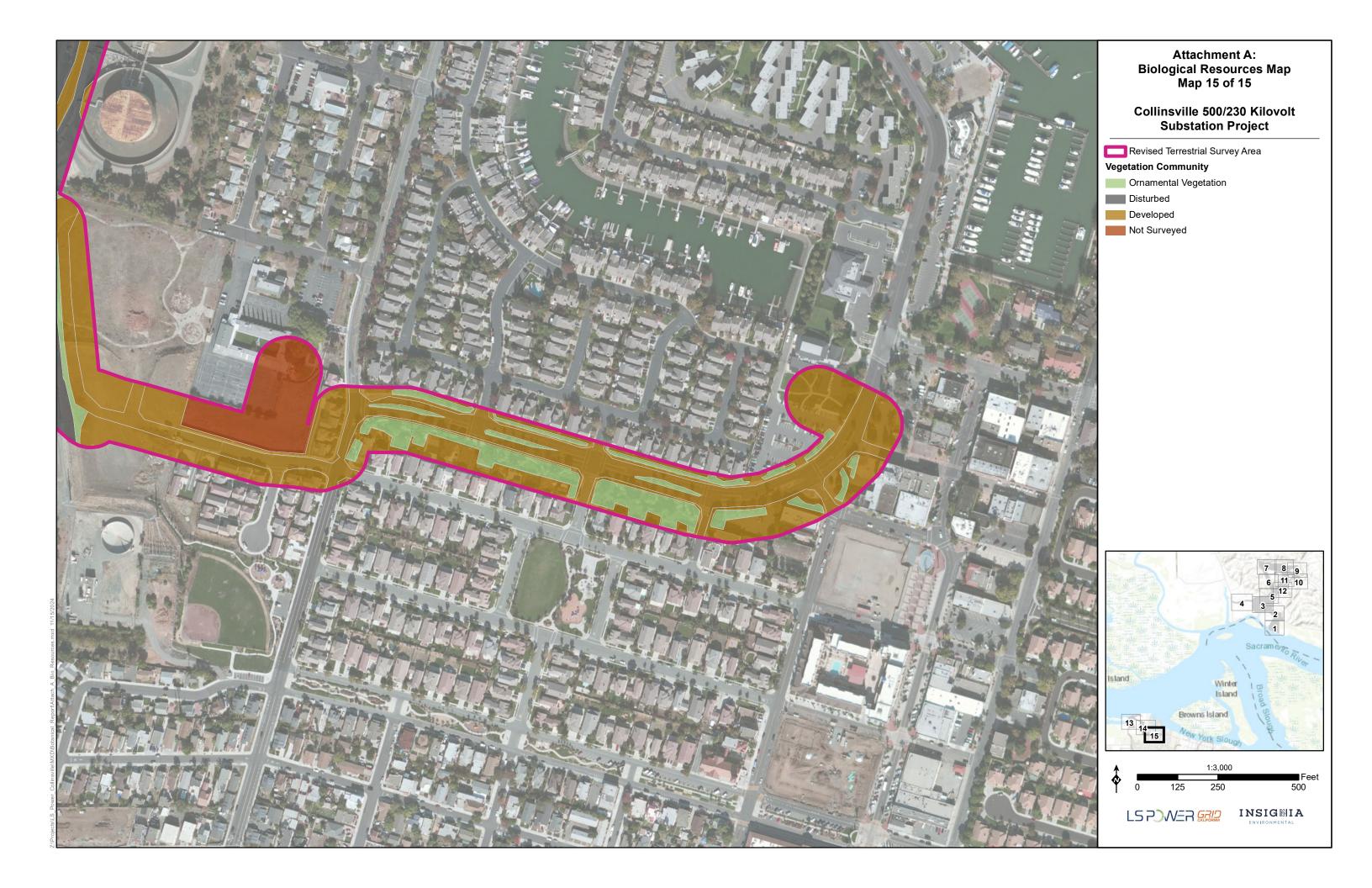




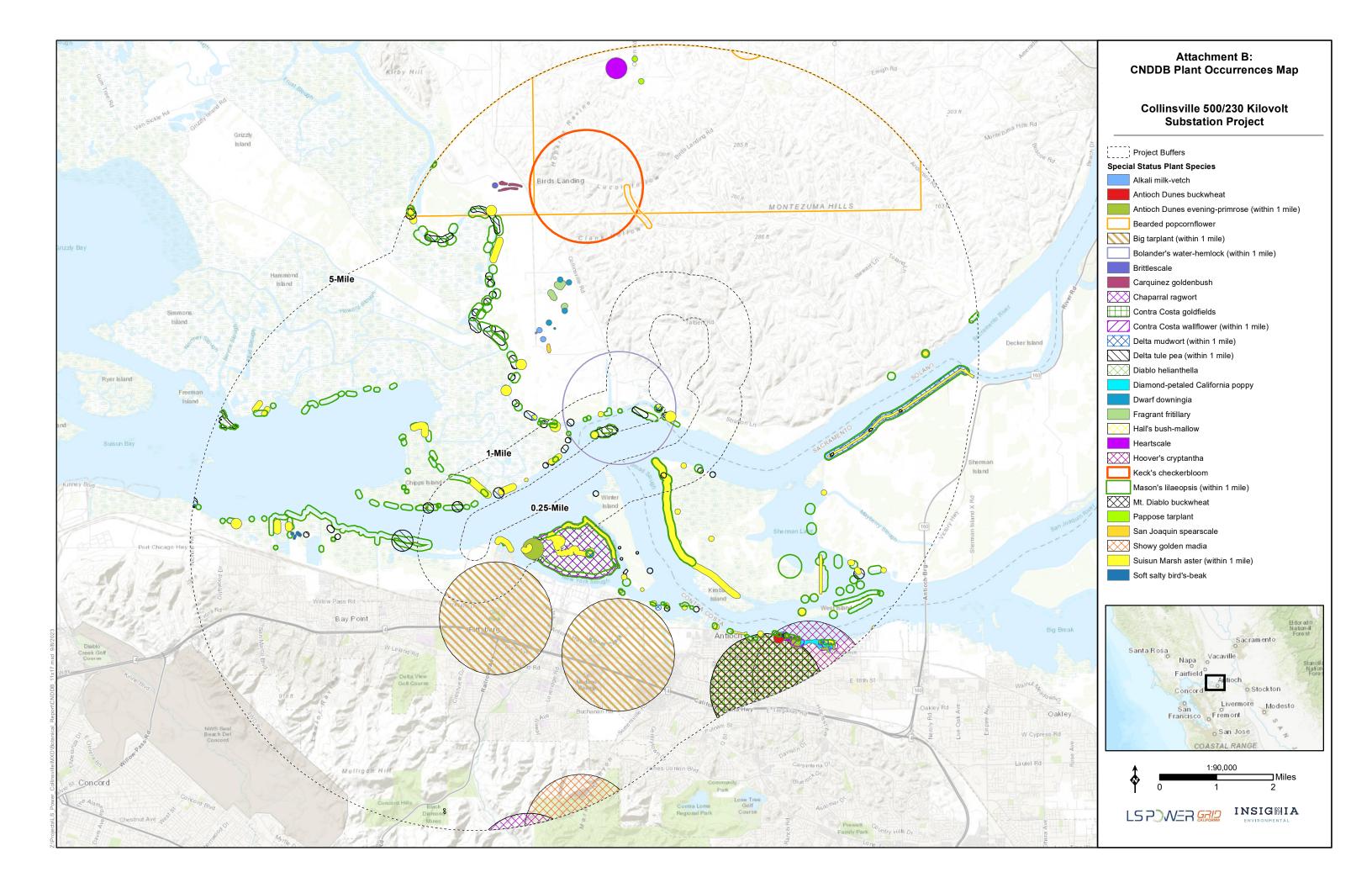








### ATTACHMENT B: CNDDB PLANT OCCURRENCES MAP



### ATTACHMENT C: PLANT SPECIES OBSERVED

### **ATTACHMENT C: PLANT SPECIES OBSERVED**

Family	Scientific Name	Common Name
Aizoaceae	Sesuvium verrucosum	Smooth Sea-Purslane
Alismataceae	Alisma gramineum	Slender Water Plantain
Alismataceae	Alisma triviale	Northern Water Plantain
Amaranthaceae	Alternanthera philoxeroides*/	Alligator Weed
Amaranthaceae	Atriplex prostrata*	Spreading Saltbush
Amaranthaceae	Atriplex semibaccata	Australian Saltbush
Amaranthaceae	Atriplex suberecta	Desert Holly
Amaranthaceae	Chenopodium murale	Nettle-leaved Goosefoot
Amaranthaceae	Chenopodium vulvaria	Stinking Goosefoot
Amaranthaceae	Salicornia pacifica	Pacific Glasswort
Amaranthaceae	Salsola tragus	Russian Thistle
Anacardiaceae	Schinus molle	California Pepper Tree
Anacardiaceae	Pistacia atlantica*	Pistachio
Apiaceae	Anthriscus caucalis*	Bur Parsley
Apiaceae	Apium graveolens	Wild Celery
Apiaceae	Conium maculatum	Poison Hemlock
Apiaceae	Foeniculum vulgare	Sweet Fennel
Apiaceae	Lilaeopsis masonii	Mason's Lilaeopsis
Apiaceae	Oenanthe sarmentosa	Water Parsley
Apiaceae	Sanolus parviflorus	Small-Flowered Sanolus
Apiaceae	Torilis nodosa	Wild Parsley
Apocynaceae	Asclepias fasicularius	Narrow-Leaved Milkweed
Araliaceae	Hydrocotyle verticillata	Whorled Pennywort
Arecaceae	Phoenix canariensis*	Canary Island Date Palm
Asparagaceae	Asparagus officinalis	Wild Asparagus
Asteraceae	Achillea millefolium*	Common Yarrow
Asteraceae	Achyrachaena mollis	Soft Blow Wives
Asteraceae	Ambrosia psilostachya	Western Ragweed

<sup>&</sup>lt;sup>1</sup> Species that were observed in the revised terrestrial survey area and were not observed in the terrestrial survey area during 2023 surveys are marked with an asterisk.

Family	Scientific Name	Common Name
Asteraceae	Anaphalis margaritacea*	Pearly Everlasting
Asteraceae	Anthemis cotula	Mayweed
Asteraceae	Artemisia douglasiana	Mugwort
Asteraceae	Baccharis glutinosa	Sticky Baccharis
Asteraceae	Baccharis pilularis ssp. consanguinea	Coyote Brush
Asteraceae	Baccharis salicifolia	Mule Fat
Asteraceae	Carduus pycnocephalus	Italian Thistle
Asteraceae	Centaurea calcitrapa*	Purple Star Thistle
Asteraceae	Centaurea solstitialis	Yellow Starthistle
Asteraceae	Centromadia parryi	Pappose Tarweed
Asteraceae	Centromadia pungens ssp. pungens*	Common Tarweed
Asteraceae	Chondrilla juncea	Rush Skeletonweed
Asteraceae	Cirsium vulgare	Bull Thistle
Asteraceae	Cotula comopilfoila	Brass Buttons
Asteraceae	Cynara cardunculus ssp. cardunculus*	Artichoke
Asteraceae	Erigeron philadelphicus	Philadelphia Fleabane
Asteraceae	Euthamia occidentalis	Western Goldenrod
Asteraceae	Grindelia camporum*	Common Gumplant
Asteraceae	Grindelia stricta	Gumplant
Asteraceae	Helenium puberulum*	Sneezeweed
Asteraceae	Helminthotheca echioides	Bristly Oxtongue
Asteraceae	Heterotheca grandiflora	Telegraph Weed
Asteraceae	Hoita macrostachya	Showy Goldeneye
Asteraceae	Hypochoeris glabra	Smooth Cat's Ear
Asteraceae	Iva axillaris	Poverty Weed
Asteraceae	Lactuca serriola	Prickly Lettuce
Asteraceae	Madia gracilis	Graceful Tarweed
Asteraceae	Matricaria discoidea*	Pineapple Weed
Asteraceae	Matricaria occidentalis	Valley Mayweed
Asteraceae	Pseudognaphalium stramineum*	Cottonbatting Plant
Asteraceae	Senecio hydrophilus	Marsh Ragwort
Asteraceae	Senecio vulgaris	Common Groundsel

Family	Scientific Name	Common Name
Asteraceae	Silybum marianum	Milk Thistle
Asteraceae	Sonchus asper	Prickly Sowthistle
Asteraceae	Tragopogon porrifolius*	Purple Salsify
Asteraceae	Xanthium spinosum	Spiny Cocklebur
Asteraceae	Xanthium strumarium	Common Cocklebur
Bataceae	Batis maritima*	Saltwort
Betulaceae	Alnus rhombifolia*	White Alder
Boraginaceae	Amsinckia intermedia	Common Fiddleneck
Boraginaceae	Eriodictyon crassifolium	Thick-leaved Yerba Santa
Boraginaceae	Heliotropium curassavicum	Salt Heliotrope
Brassicaceae	Brassica nigra	Black Mustard
Brassicaceae	Cakile edentula*	Sea Rocket
Brassicaceae	Capsella bursa-pastoris*	Shepherd's Purse
Brassicaceae	Lepidium latifolium	Broadleaf Pepperweed
Brassicaceae	Raphanus sativus	Radish
Caryophyllaceae	Silene gallica*	Common Catchfly
Caryophyllaceae	Spergula marina	Salt Sandspurry
Caryophyllaceae	Spergularia arvensis	Corn Spurry
Caryophyllaceae	Stellaria media*	Chickweed
Chenopodiaceae	Bassia scoparia*	Burningbush
Chenopodiaceae	Salicornia depressa*	Annual Pickleweed
Convolvulaceae	Calystegia silvatica	Chaparral Dodder
Convolvulaceae	Convolvulus arvensis	Field Bindweed
Convolvulaceae	Cressa truxillensis	Alkaliweed
Crassulaceae	Crassula tillaea*	Mediterranean Pygmy Weed
Cucurbitaceae	Marah fabacea	Wild Cucumber
Cyperaceae	Bolboschoenus maritimus*	Alkali Bulrush
Cyperaceae	Bolboschoenus maritimus ssp. paludosus*	Saltmarsh Bulrush
Cyperaceae	Bolboschoenus robustus	California Bulrush
Cyperaceae	Carex barbarae	Santa Barbara Sedge
Cyperaceae	Eleocharis acicularis var. acicularis	Needle Spikerush
Cyperaceae	Eleocharis macrostachya	Tall Spike-rush

Family	Scientific Name	Common Name
Cyperaceae	Isolepis cernua	Nodding Centaury
Cyperaceae	Schoenoplectus acutus var. occidentalis	Common Tule
Cyperaceae	Schoenoplectus americanus	Three Square Bulrush
Cyperaceae	Schoenoplectus californicus	California Bulrush
Cyperaceae	Schoenoplectus pungens	Common Threesquare
Equisetaceae	Equistem hyemale ssp. affine	Scouring Rush
Euphorbiaceae	Croton setiger	Dove Weed
Fabaceae	Acmispon americanus var. americanus	American Bird's-Foot
Fabaceae	Acmispon glaber var. glaber	Deerweed
Fabaceae	Acmispon strigosus	Strigose Bird's-Foot Trefoil
Fabaceae	Lathyrus jepsonii var. jepsonii	Delta Tule Pea
Fabaceae	Lotus corniculatus	Bird's-Foot Trefoil
Fabaceae	Lotus tenuis	Slender Lotus
Fabaceae	Lupinus bicolor	Miniature Lupine
Fabaceae	Lupinus microcarpus*	Chick Lupine
Fabaceae	Lupinus succulentus	Arroyo Lupine
Fabaceae	Medicago polymorpha	California Burr Medic
Fabaceae	Melilotus indicus	Annual Yellow Sweetclover
Fabaceae	Sesbania punicea	Red Sesbania
Fabaceae	Trifolium hirtum	Rose Clover
Fabaceae	Trifolium hybridum	Alsike Clover
Fabaceae	Trifolium incarnatum*	Crimson Clover
Fabaceae	Trifolium wormskioldii	Cow Clover
Fabaceae	Vicia sativa	Common Vetch
Fabaceae	Vicia villosa	Hairy Vetch
Frankeniaceae	Frankenia salina	Alkali Heath
Gentianaceae	Centaurium tenuiflorum*	Slender Centaury
Geraniaceae	Erodium botrys	Long-Beaked Filaree
Geraniaceae	Erodium cicutarium	Redstem Filaree
Geraniaceae	Geranium dissectum	Cutleaf Geranium
Hydrocharitaceae	Limnobium laevigatum*	West Indian Spongeplant
Iridaceae	Iris pseudacorus	Yellow Flag Iris

Family	Scientific Name	Common Name
Juglandaceae	Juglans hindsii*	Northern California Black Walnut
Juncaceae	Juncus balticus	Baltic Rush
Juncaceae	Juncus bufonius	Toad Rush
Juncaceae	Juncus effusus*	Common Bog Rush
Juncaceae	Juncus gerardii ssp. gerardii	Salt Marsh Rush
Juncaceae	Juncus mexicanus	Mexican Rush
Juncaginaceae	Triglochin striata*	Three Ribbed Arrow Grass
Lamiaceae	Lamium amplexicaule*	Giraffe Head
Lamiaceae	Marrubium vulgare	White Horehound
Lamiaceae	Mentha spicata	Spearmint
Lamiaceae	Pterostegia drymariodes	Fairy Mist
Lythraceae	Lythrum hyssopifolia	Hyssop Loosestrife
Malvaceae	Malva multiflora*	Cretan Mallow
Malvaceae	Malva parviflora	Small-Flowered Mallow
Malvaceae	Malvella leprosa	Round-Leaved Mallow
Montiaceae	Calandrinia menziesii*	Red Maids
Montiaceae	Claytonia perfoliata	Miner's Lettuce
Onagraceae	Epilobium brachycarpum*	Annual Fireweed
Onagraceae	Epilobium ciliatum	Fringed Willowherb
Onagraceae	Ludwigia grandiflora*	Large-Flowered Primrose-Willow
Onagraceae	Ludwigia peploides*	Floating Primrose Willow
Orobanchaceae	Castilleja exserta ssp. exserta	Purple Owl's Clover
Orobanchaceae	Bellardia trixago	Mediterranean Lineseed
Oxalidaceae	Oxalis pes-caprae*	Bermuda Buttercup
Papaveraceae	Eschscholzia californica*	California Poppy
Phrymaceae	Erythranthe grandis*	Magnificent Seep Monkeyflower
Plantaginaceae	Plantago coronopus	Buckshorn Plantain
Plantaginaceae	Plantago lanceolata	English Plantain
Plantaginaceae	Veronica persica*	Birdeye Speedwell
Poaceae	Agrostis stolonifera	Creeping Bentgrass
Poaceae	Arundo donax	Giant Reed
Poaceae	Avena fatua	Wild Oat

Family	Scientific Name	Common Name
Poaceae	Bromus berteroanus	Chilean Brome
Poaceae	Bromus diandrus	Ripgut Brome
Poaceae	Bromus hordeaceus	Soft Brome
Poaceae	Bromus madritensis ssp. rubens	Red Brome
Poaceae	Bromus tectorum	Cheatgrass
Poaceae	Cortaderia jubata	Purple Pampas Grass
Poaceae	Cynodon dactylon	Bermuda Grass
Poaceae	Cynosurus echinatus	Coast Bur Grass
Poaceae	Distichlis spicata	Saltgrass
Poaceae	Elymus triticoides	Beardless Wildrye
Poaceae	Festuca bromoides	Red Fescue
Poaceae	Festuca perennis	Meadow Fescue
Poaceae	Hordeum jubatum	Foxtail Barley
Poaceae	Hordeum marinum	Seaside Barley
Poaceae	Hordeum murinum	Wall Barley
Poaceae	Hordeum vulgare	Common Barley
Poaceae	Phalaris canariensis	Canary Grass
Poaceae	Phalaris paradoxa	Hairy Canarygrass
Poaceae	Phragmites australis	Common Reed
Poaceae	Polypogon monspeliensis*	Rabbitsfoot Grass
Poaceae	Triticum aestivum*	Common Wheat
Polygonaceae	Persicaria spp.	Smartweeds
Polygonaceae	Polygonum argyrocoleon	Silverweed Knotweed
Polygonaceae	Polygonum aviculare	Prostrate Knotweed
Polygonaceae	Rumex acetosella	Sheep Sorrel
Polygonaceae	Rumex californicus	California Dock
Polygonaceae	Rumex crispus	Curly Dock
Polygonaceae	Rumex pulcher*	Fiddle Dock
Pontederiaceae	Eichhornia crassipes*	Common Water Hyacinth
Portulacaceae	Portulaca oleracea*	Common Purslane
Ranunculaceae	Ranunculus sceleratus	Cursed Buttercup
Rosaceae	Potentilla anseriana ssp. pacifica	Silverweed

Family	Scientific Name	Common Name
Rosaceae	Rosa californica	California Wild Rose
Rosaceae	Rubus armeniacus	Himalayan Blackberry
Rosaceae	Rubus ursinus*	California Blackberry
Salicaceae	Salix exigua	Narrowleaf Willow
Salicaceae	Salix exigua var. hindsiana	Sandbar Willow
Salicaceae	Salix gooddingii	Goodding's Willow
Salicaceae	Salix laevigata	Red Willow
Salicaceae	Salix lasiolepis*	Arroyo Willow
Salviniaceae	Azolla filiculoides	Water Fern
Scrophulariaceae	Limosella australis	Delta Mudwort
Scrophulariaceae	Zeltnera muehlenbergii	Little Redstem
Simaroubaceae	Ailanthus altissima*	Tree of Heaven
Solanaceae	Solanum americanum	American Nightshade
Tamaricaceae	Tamarix parviflora*	Fourstamen Tamarisk
Themidaceae	Brodiaea elegans ssp. elegans	Elegant Brodiaea
Themidaceae	Triteleia laxa*	Ithuriel's Spear
Typhaceae	Sparganium erectum*	Simplestem Bur Reed
Typhaceae	Typha latifolia	Common Cattail
Urticaceae	Urtica urens*	Annual Stinging Nettle
Verbenaceae	Phyla nodiflora	Turkey Tangle Fogfruit

### ATTACHMENT D: SPECIAL-STATUS PLANT PHOTOGRAPHS

# ATTACHMENT D: SPECIAL-STATUS PLANT PHOTOGRAPHS



Photograph 1: Delta tule pea (*Lathyrus jepsonii* var. *jepsonii*).

# ATTACHMENT E: CNDDB SUBMITTAL FORMS

# **CNDDB Online Field Survey Form Report**



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



CRO23F0003 Source code\_ 3812117 Quad code Occ. no. \_ EO index no.\_ Map index no.

www.dfg.ca.gov/biogeodata/cnddb/

	vegetative	flowering	fruiting	
Phenology: —	90 %	10 %	0 %	
PLANT INFORMA	ATION			
	Museum	/Herbarium:		
Collection? No	Collectio	on number:		
	ndividuals: 150-23			
	ffort: Fully botanic	-		
-	es If not found, w	-		
	-			
_	nanation: nfidence: Very con	afident		
Other: Identification exp	lanation:			
	n: Deanna Giulian	O		
	ge in: Jepson Herb			
Compared w/ spe		. 0.15		
Keyed in: Jepson				
DETERMINATION				
Other observers:				
Phone: (920) 544	-7989			
Email: bcropper@	insigniaenv.com			
Address: 3028 Ju	niper St Apt 3			
Affiliation: Insign	ia Environmental			
Observer: Brian (	Cropper			
OBSERVER INFO	RMATION			
Comment about f	ield work date(s):			
Date of field work	(mm-dd-yyyy): 0	5-24-2023		
Common name: I	Delta mudwort			
Scientific name:	Limosella austro	alis		

coastline. Associated species included predominantly Juncus.

Slope: 1-2 percent Land owner/manager:

Aspect:

Site condition + population viability:

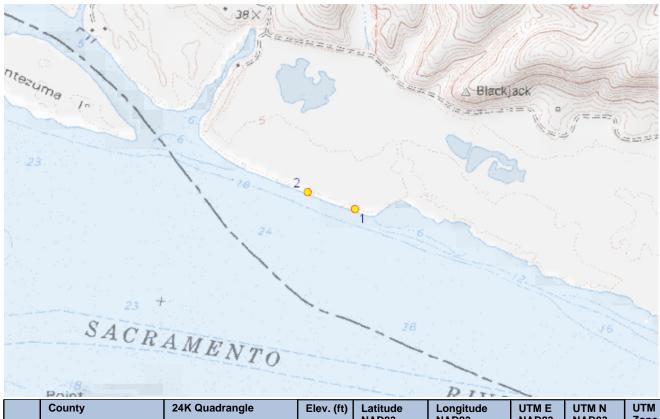
Immediate & surrounding land use: Potential grazing

Visible disturbances: Trash/debris, man-made berms, riprap.

Threats: Trash accumulation, grazing.

### **General comments:**

### MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	-9999	38.06929	-121.82582	602994	4214154	10
1	Public Land Survey	Feature Comment						
1	M T03N R01E 26	Spreads via rhizomes co	Spreads via rhizomes consistent along coast					
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
ID	County Solano	24K Quadrangle Antioch North	Elev. (ft) -9999		NAD83		•	_
<b>ID</b> 2	·		, ,	NAD83	NAD83	NAD83	NAD83	Zone

The mapped feature is accurate within:  $10\ m$ 

Source of mapped feature: Handheld submeter GPS unit

Mapping notes: Species spreads along coast in between mapped points.

Location/directions comments:

Attachment(s):

## **CNDDB Online Field Survey Form Report**



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



Source code_	CRO23F0001
Quad code	3812117
Occ. no	
EO index no	
Map index no.	

www.dfg.ca.gov/biogeodata/cnddb/

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

	r .1	•			•	• •
Scientific name:	Lathyrus	jeps	onu	var.	jeps	onu

Common name: Delta tule pea

Date of field work (mm-dd-yyyy): 05-24-2023

Comment about field work date(s):

### **OBSERVER INFORMATION**

**Observer:** Brian Cropper

Affiliation: Insignia Environmental Address: 3028 Juniper St Apt 3 Email: bcropper@insigniaenv.com

Phone: (920) 544-7989

Other observers: Deanna Giuliano

### **DETERMINATION**

Keyed in: Jepson Manual Compared w/ specimen at:

Compared w/ image in: Jepson Herbarium, Calflora

By another person: Deanna Giuliano

Other:

Identification explanation:

**Identification confidence:** Very confident

Species found: Yes If not found, why not?

Level of survey effort: Fully botanical survey

Total number of individuals: 150-200

Collection? No Collection number:

Museum/Herbarium:

### **PLANT INFORMATION**

Phenology: 70 % 25 % 5 %

vegetative flowering fruiting

### SITE INFORMATION

**Habitat description:** Rosa californica and Schoenoplectus dominated habitat and associations. Delta tule pea was commonly found climbing up upland shrubs adjacent to sloughs approximately 15-20 feet from the coast.

Slope: 5 to 10% Land owner/manager:

Aspect:

Site condition + population viability: Fair

Immediate & surrounding land use: Agriculture/grazing

Visible disturbances: evidence of grazing, man-made berms, riprap along coastline.

Threats: Grazing, development

### General comments:

# Monteuma SACRAMENTO County 24K Quadrangle Elev. (ft) Latitude NAD83 NAD83 NAD83 Zone

ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	14	38.07143	-121.83111	602527	4214386	10
1	Public Land Survey	Feature Comment						
1	M T03N R01E 26							
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	20	38.06985	-121.82633	602949	4214216	10
	Public Land Survey	Feature Comment						
2	M T03N R01E 26	Large polygon with 25+	individual	S				
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	20	38.07074	-121.82756	602839	4214314	10
2	Public Land Survey	Feature Comment						
3								
	M T03N R01E 26	Large polygon with 20+	individual	S				
ID	M T03N R01E 26  County	Large polygon with 20+  24K Quadrangle	individual	S Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
ID		5 7 75		Latitude			•	
ID 4	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	NAD83	NAD83	NAD83	Zone

The mapped feature is accurate within:  $20\ m$ 

Source of mapped feature: Submeter handheld GPS device

Mapping notes: Location/directions cor	nments:		
Attachment(s):	michto.		
Attachment(3).			

# **CNDDB Online Field Survey Form Report**



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



Source code_	CRO23F0002
Quad code	3812117
Occ. no	
EO index no	
Map index no.	

www.dfg.ca.gov/biogeodata/cnddb/

nfident  hyn not?  cal survey  00  on number:  //Herbarium:  85 %  flowering	0 %
vhy not? cal survey 00 on number:	
vhy not? cal survey 00 on number:	
vhy not? cal survey	
vhy not? cal survey	
vhy not? cal survey	
hy not?	
o	
parium, Calflora	
5-24-2023	
sis	
nii	
	oarium, Calflora

Habitat description: Species were observed approximately 2-5 feet from the coast in tidally influenced saturated soils adjacent to riprap along coast. Dominant species and habitat included primarily Juncus.

Slope: 1-2 percent Land owner/manager:

Aspect:

Site condition + population viability: Good Immediate & surrounding land use: N/A

Visible disturbances: Riprap along coast, trash/debris, man-made berms.

Threats: Trash accumulation, potential grazing

### **General comments:**

# Monte-uma Is Black ack

	S	ACRAMEN	To		28			
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	-9999	38.07129	-121.83182	602465	4214370	10
1	Public Land Survey	Feature Comment						
1	M T03N R01E 26	rhizomatous spreading a	prox. 5 ft f	rom coast				
ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Solano	Antioch North	-9999	38.06968	-121.82733	602861	4214196	10
2	Public Land Survey	Feature Comment						
2	M T03N R01E 26	Rhizomatous spreading a	along coas	t				

The mapped feature is accurate within:  $10\ m$ 

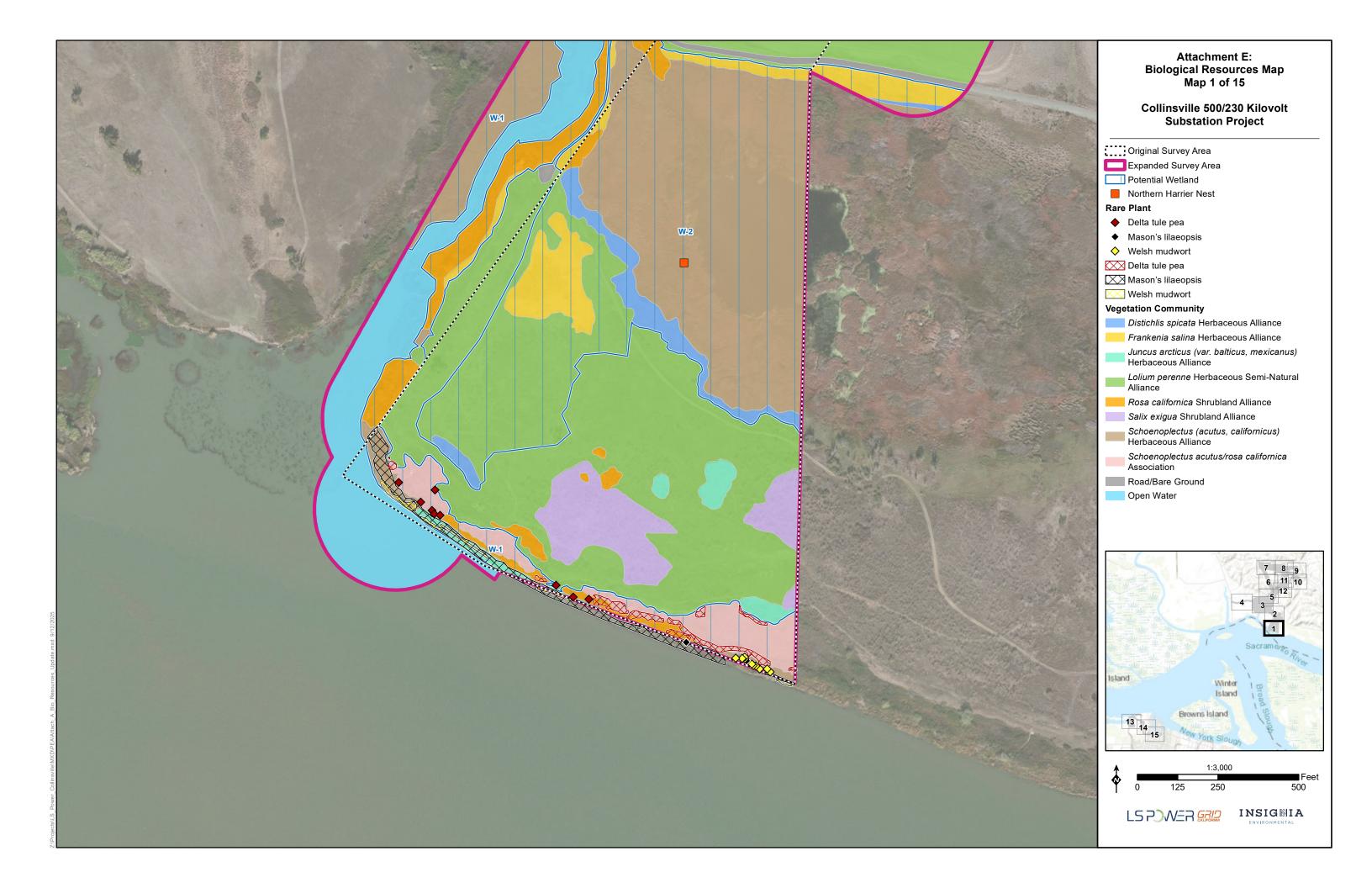
Source of mapped feature: Handheld submeter GPS unit

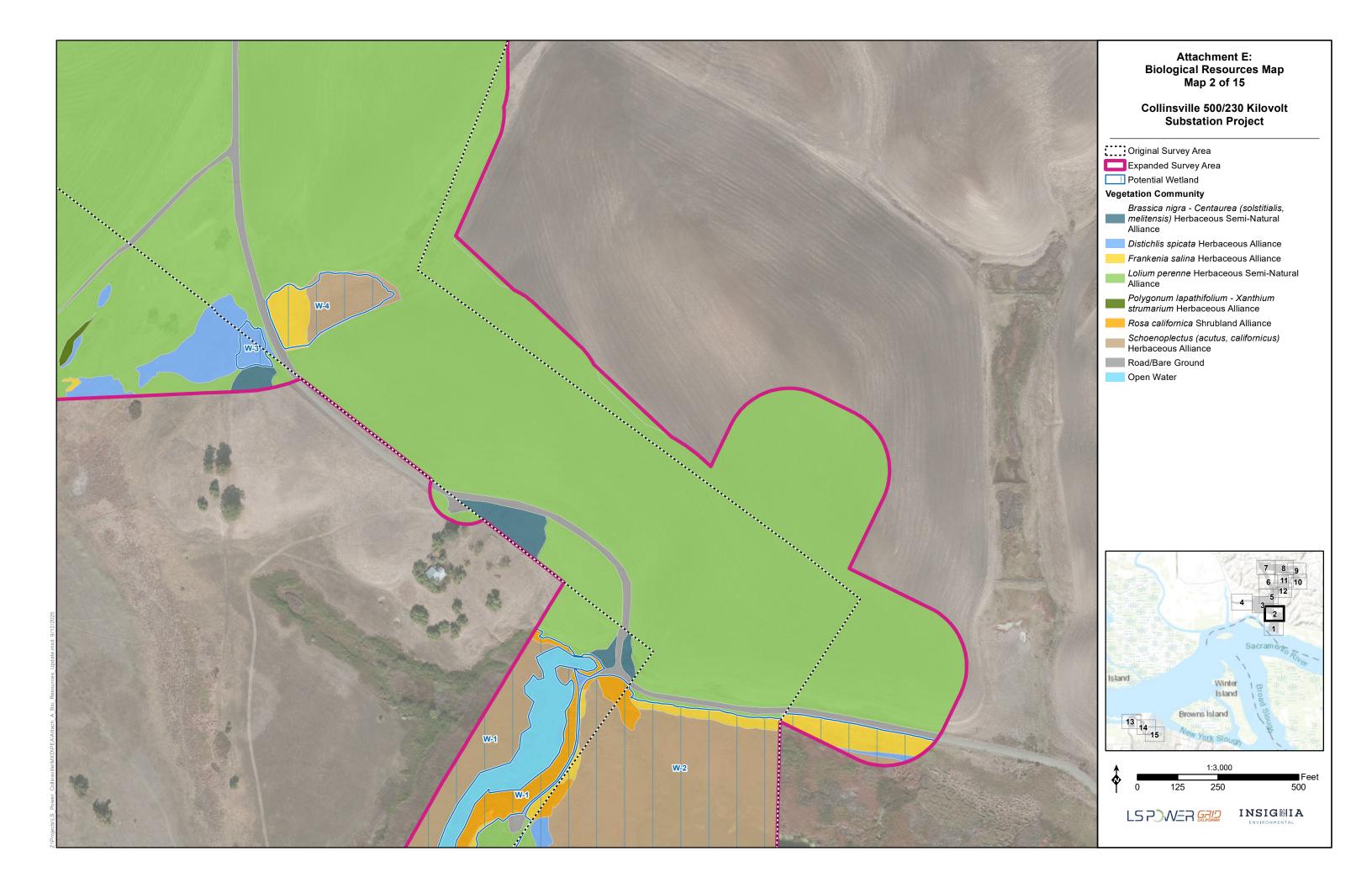
Mapping notes: Species spreads along the coast and was found consistently between the two mapped points.

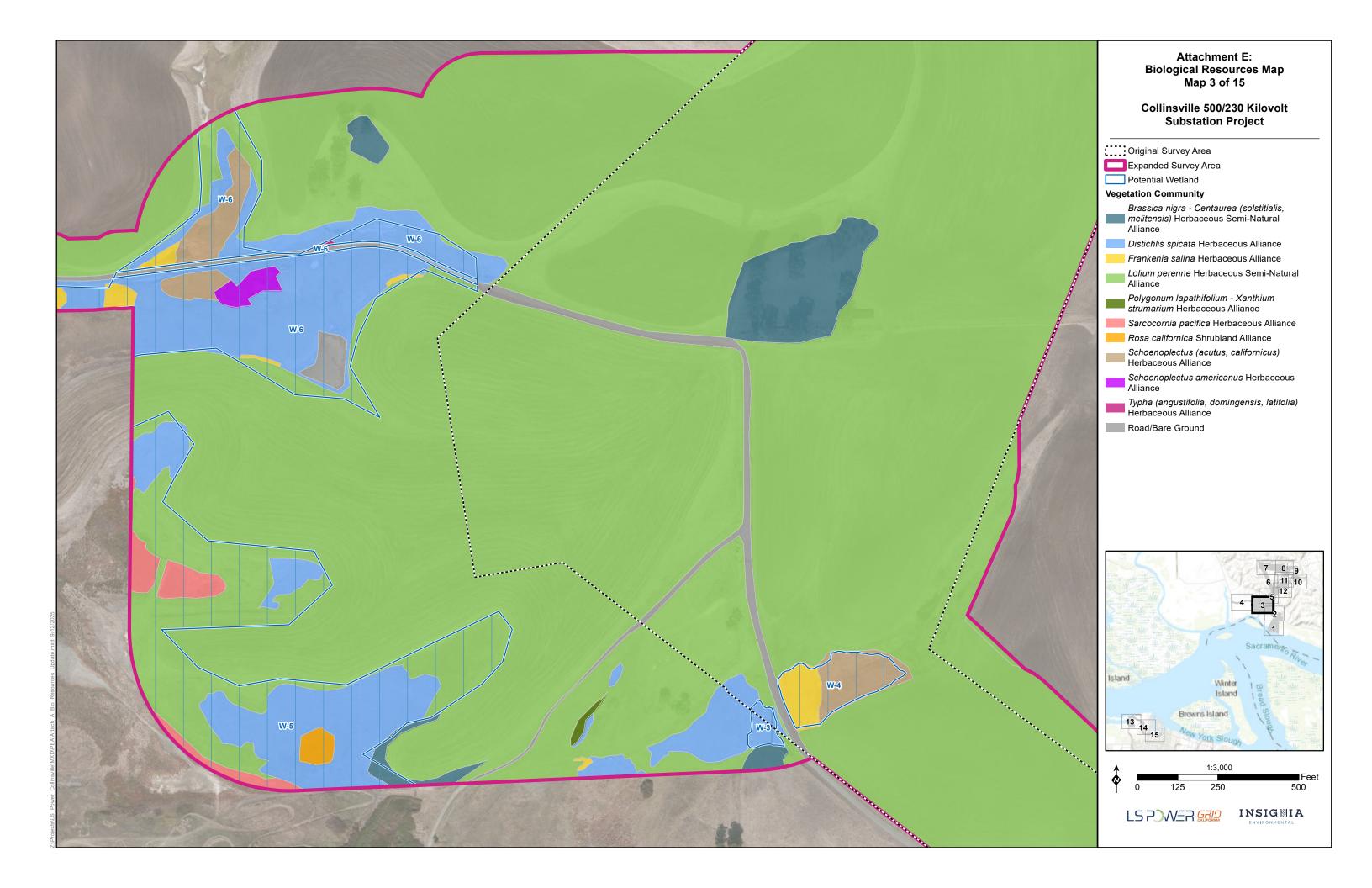
Location/directions comments:

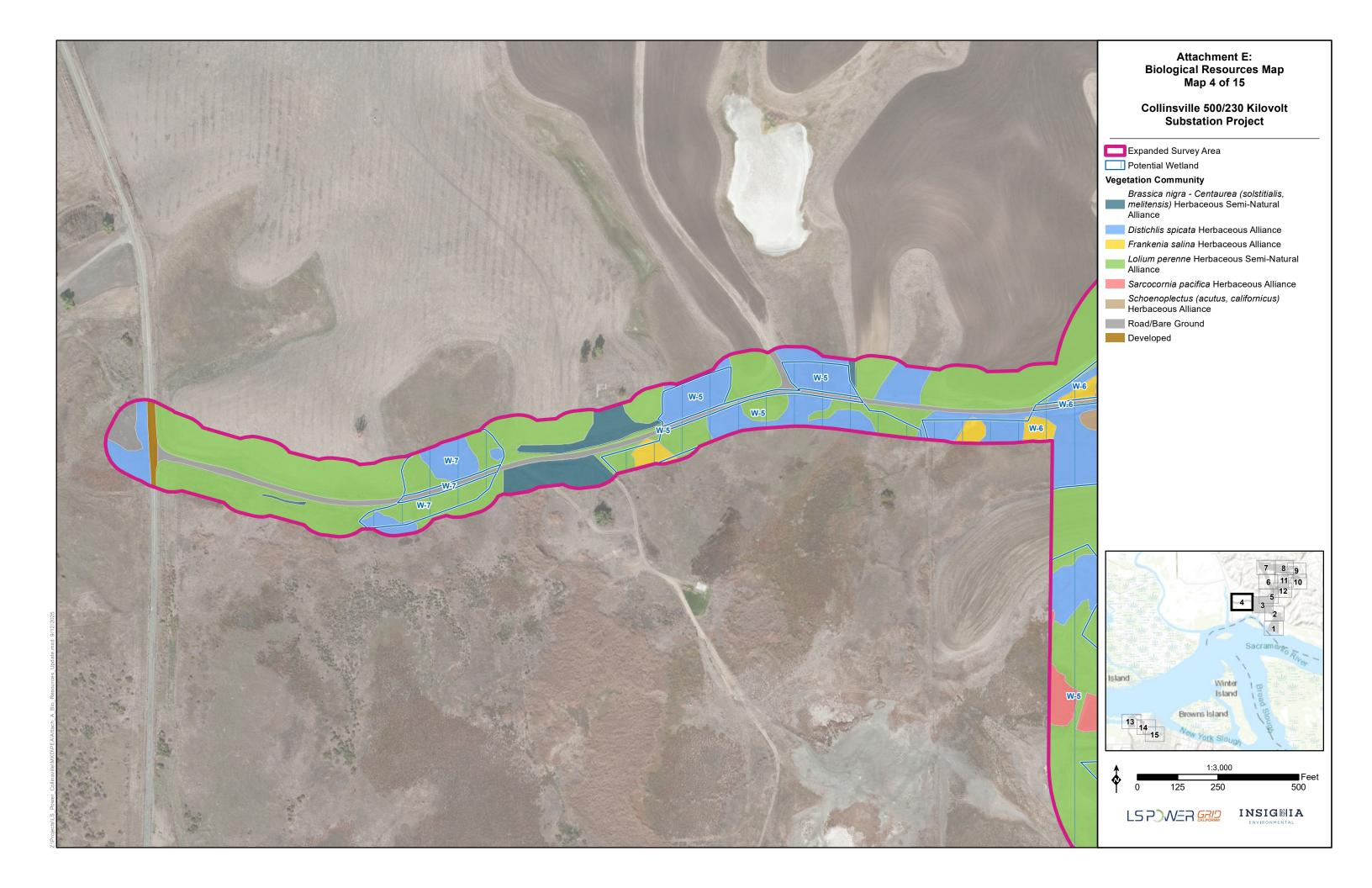
Attachment(s):





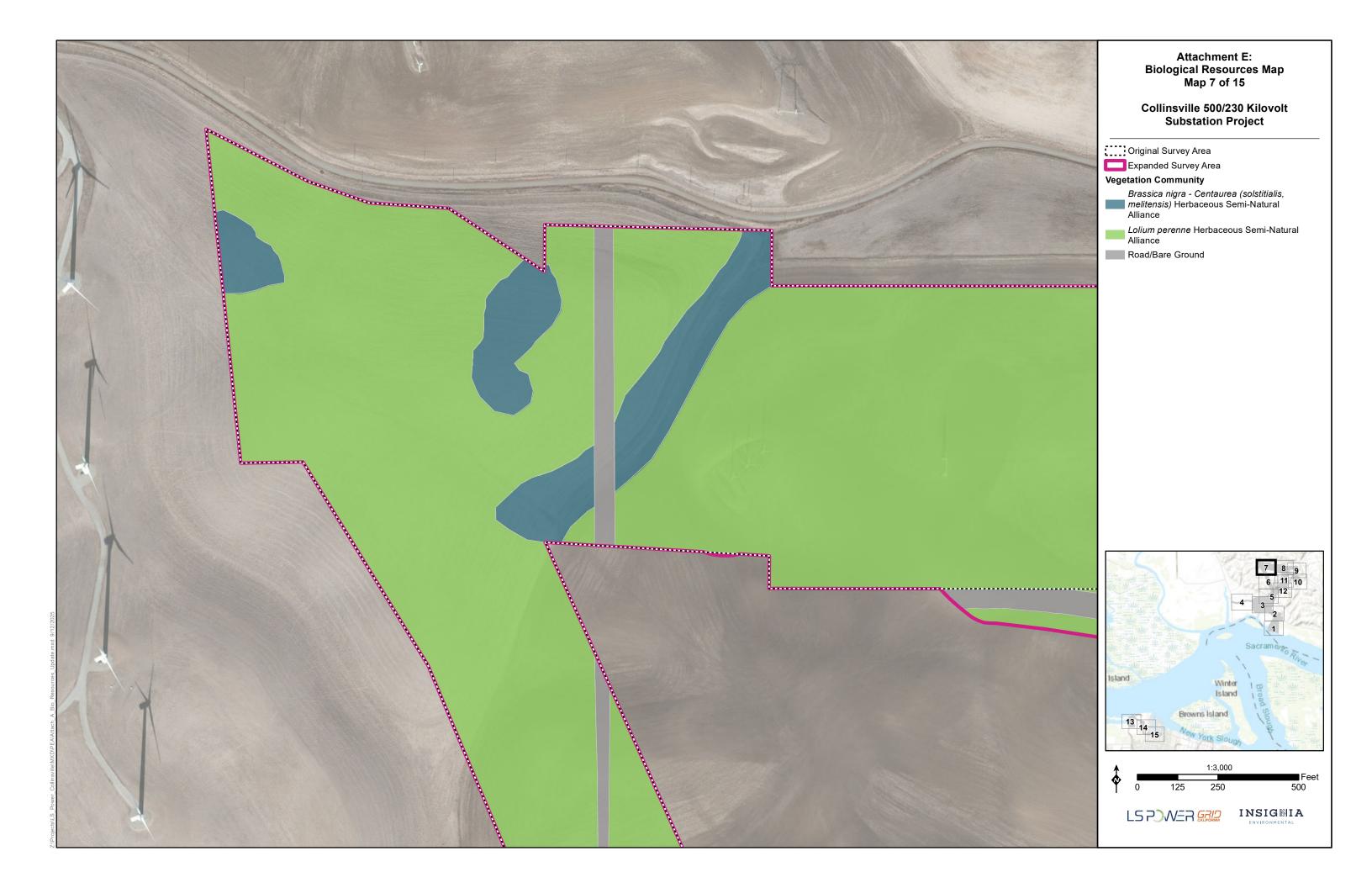


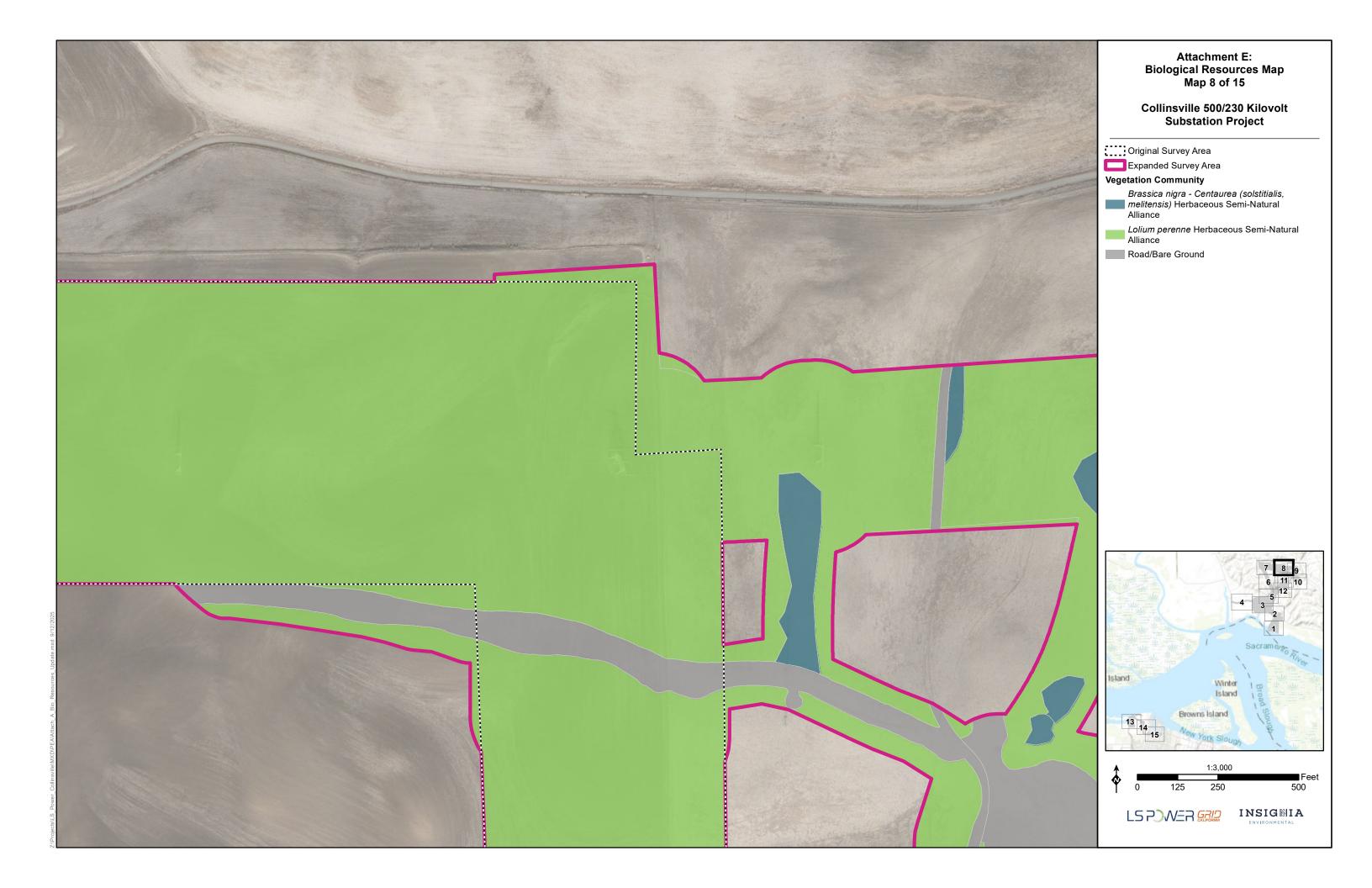


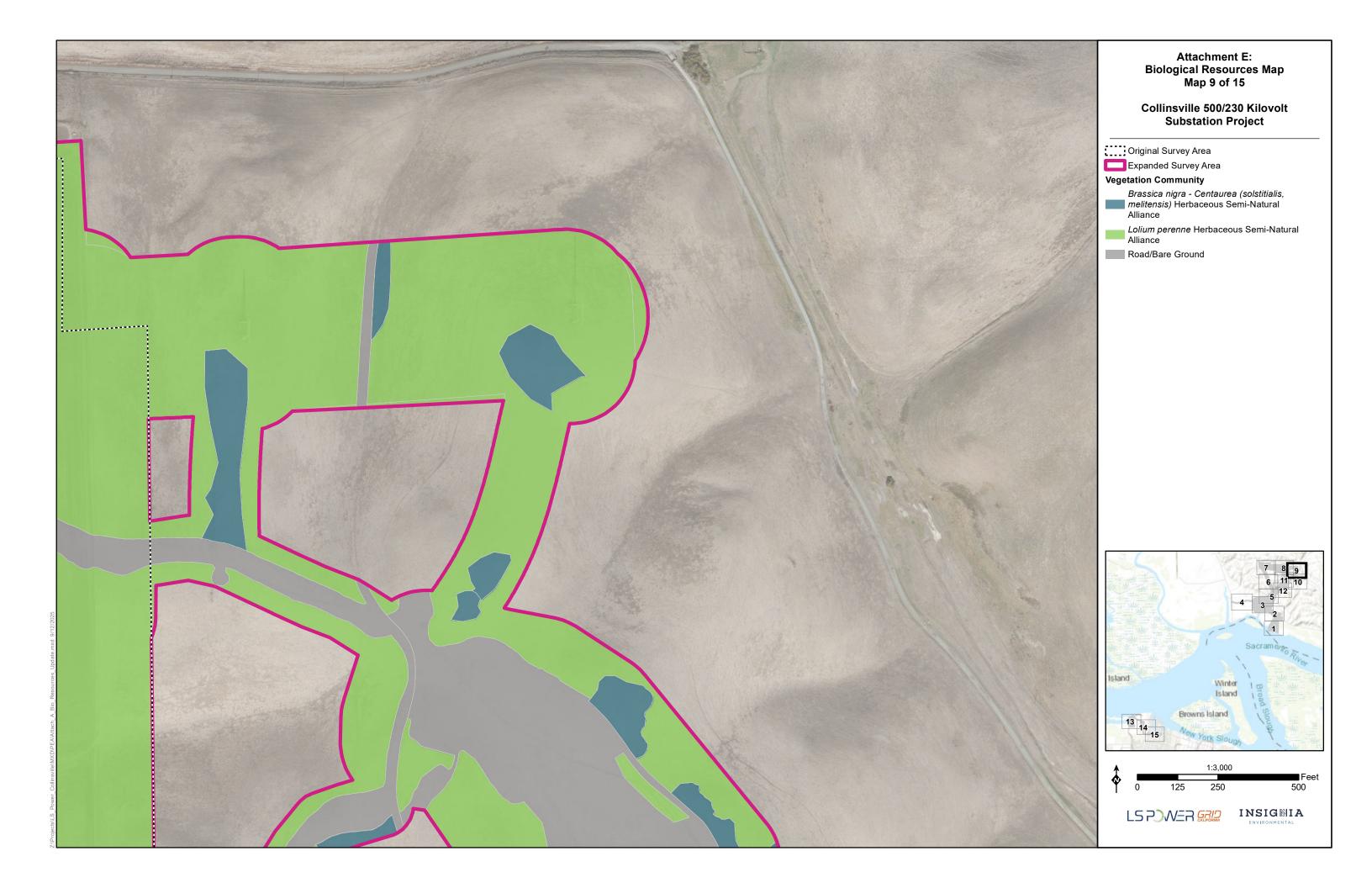


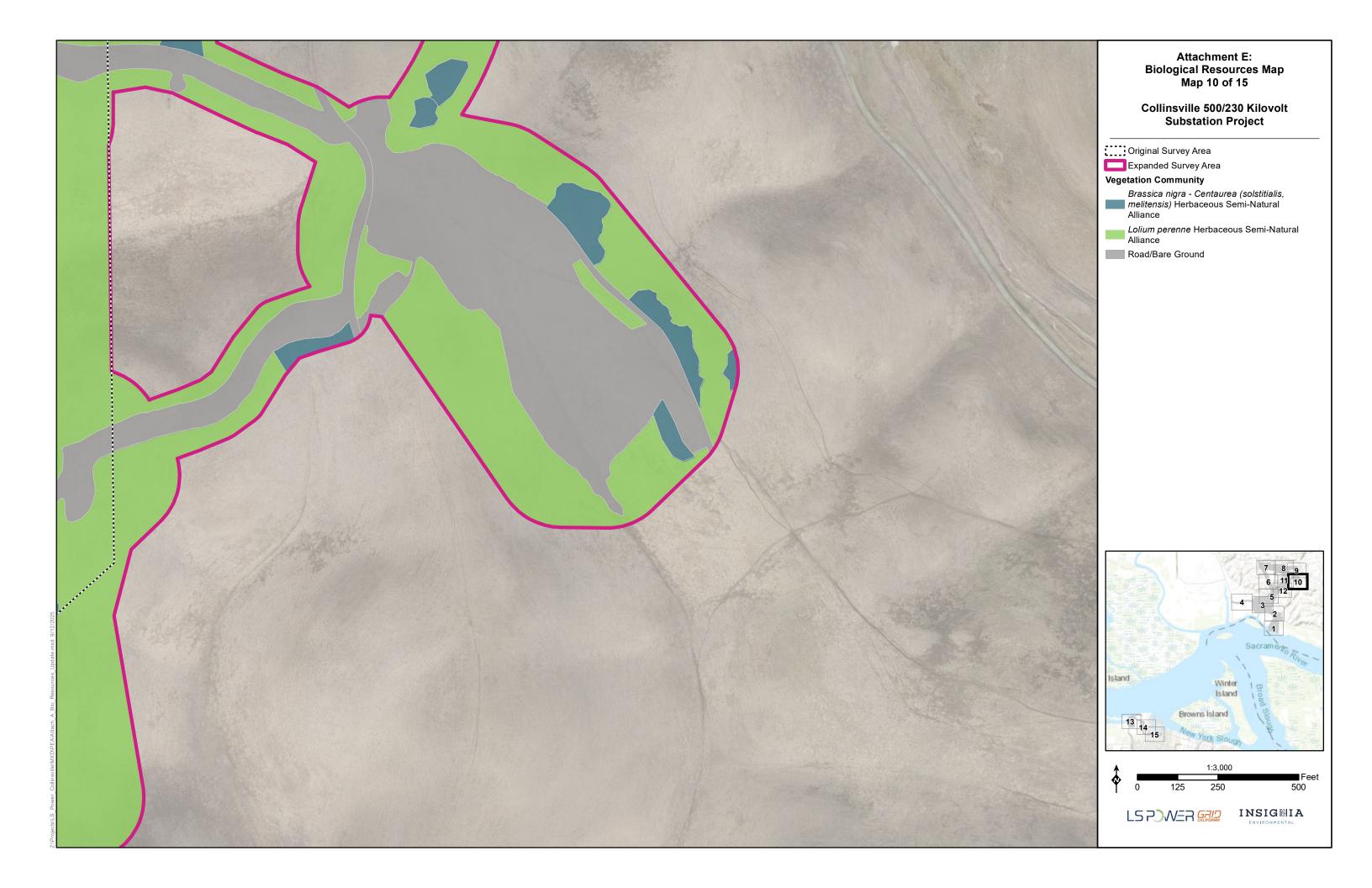




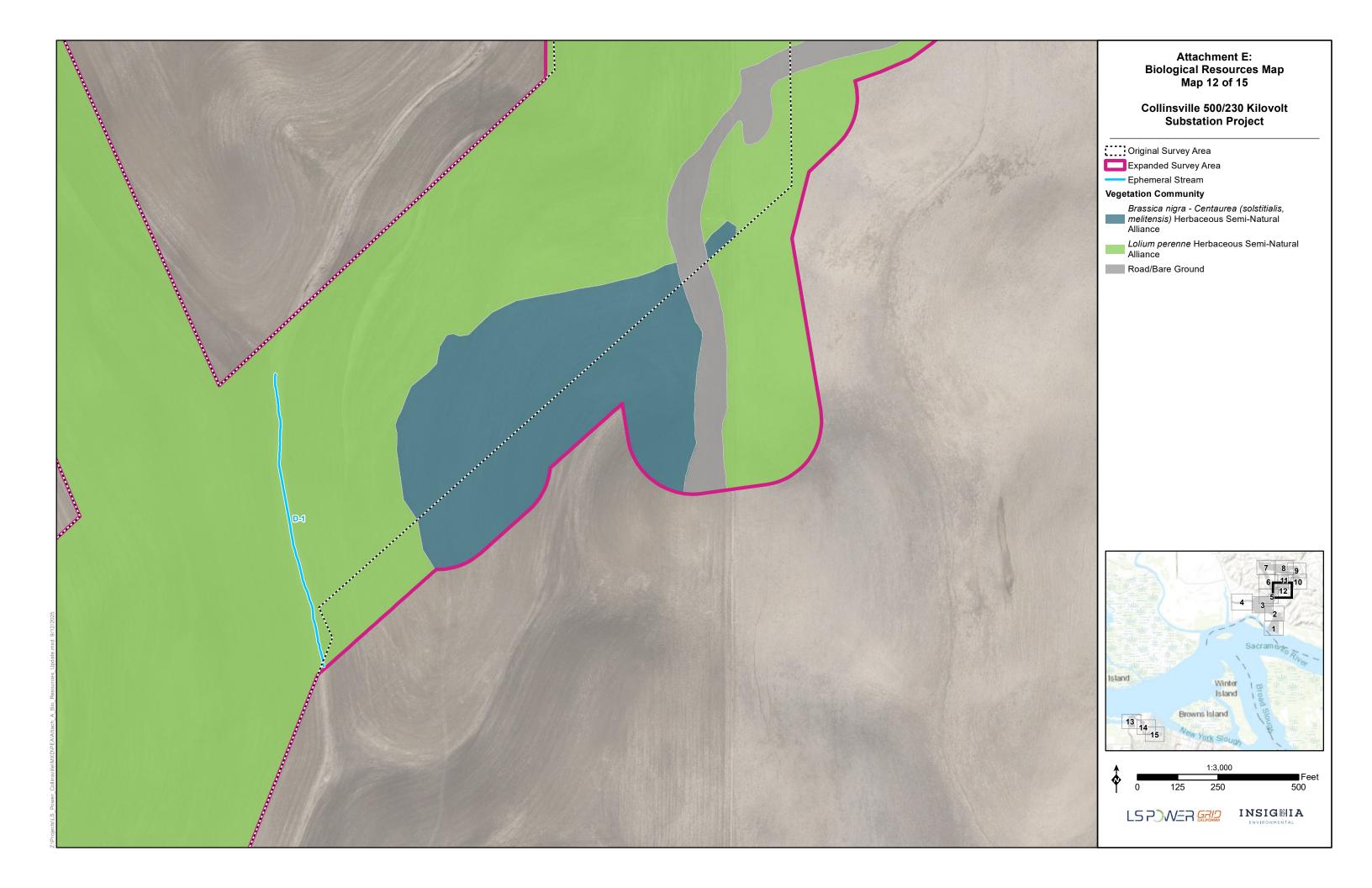


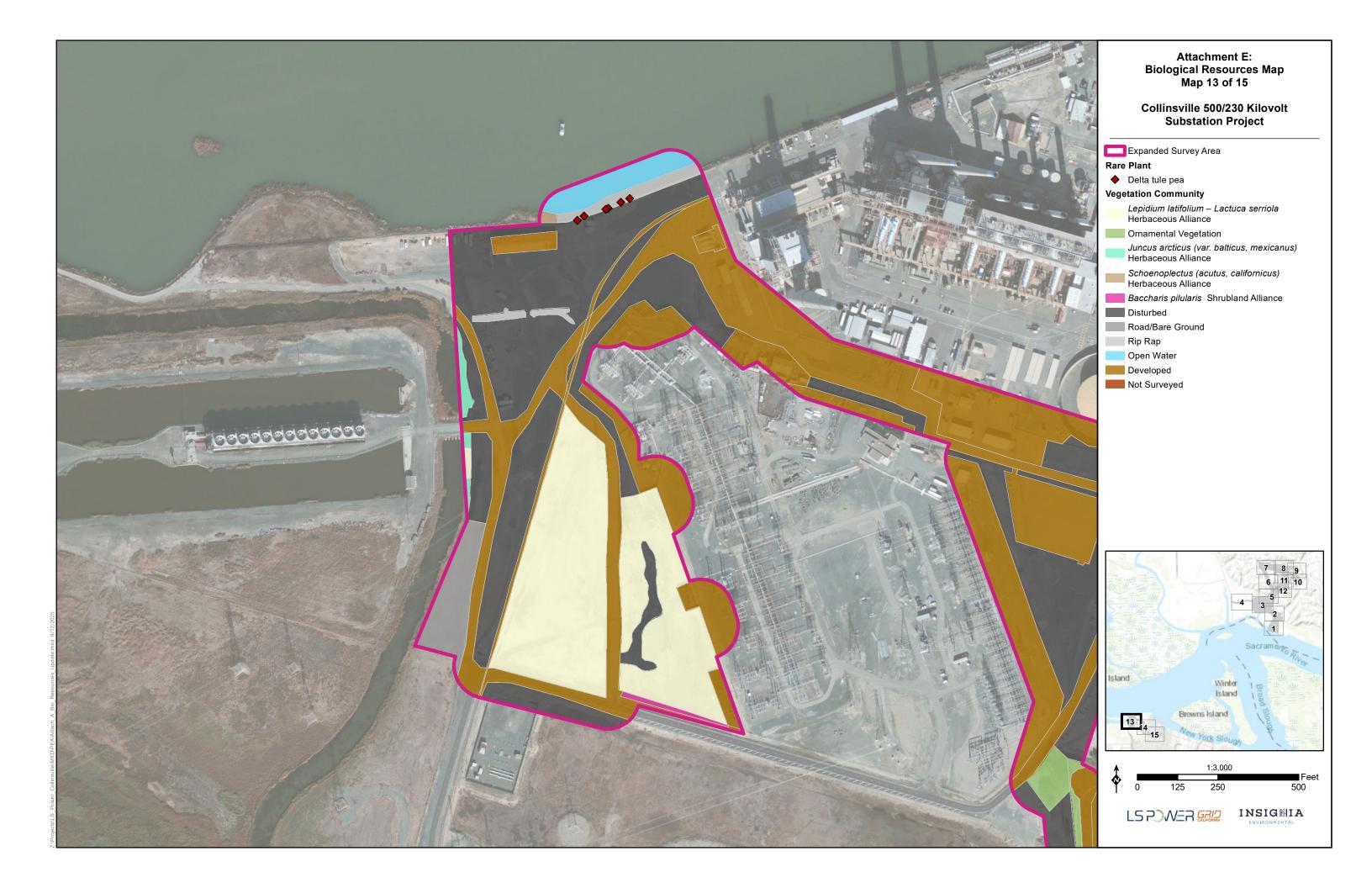


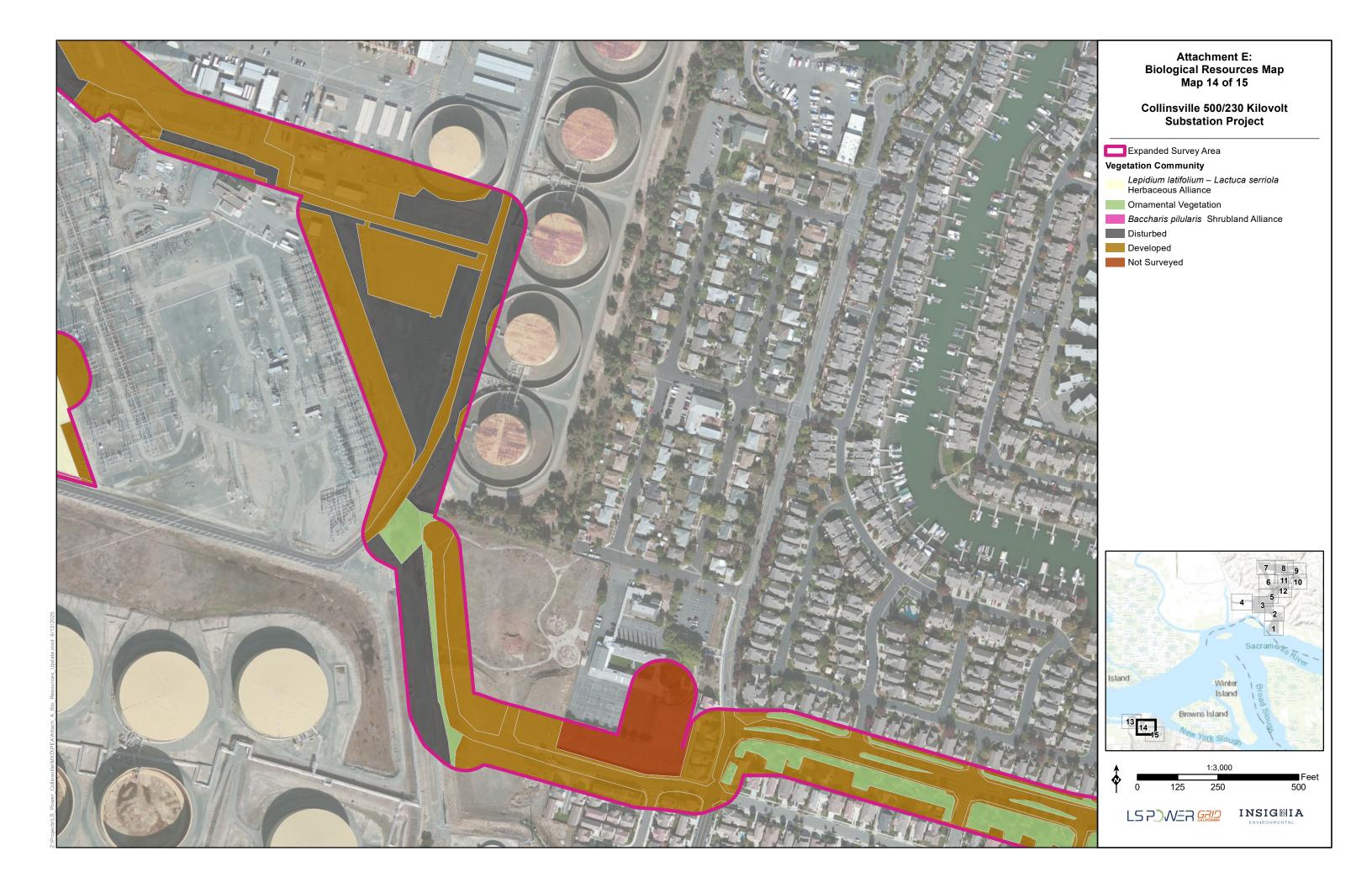


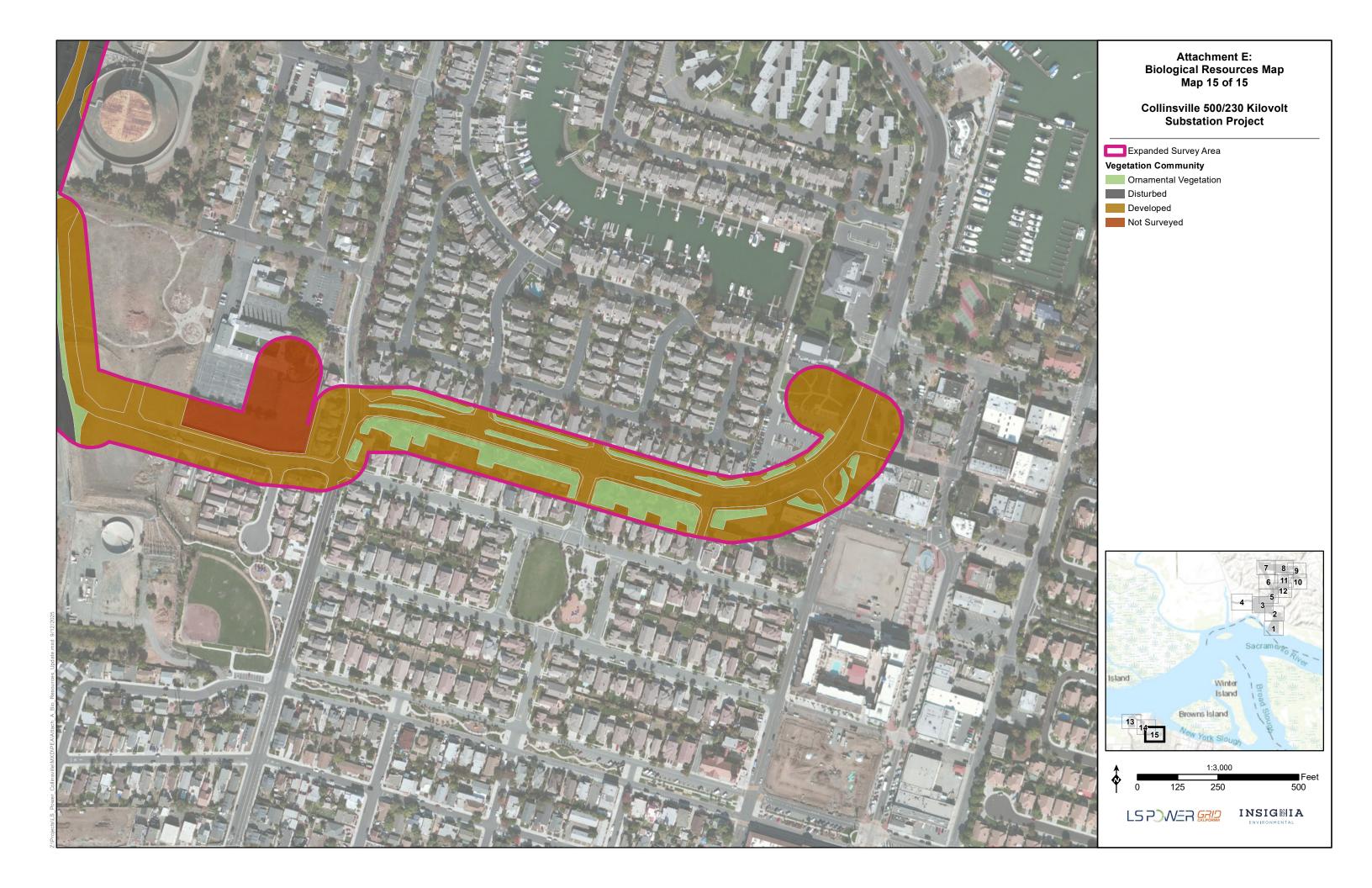












ATTACHMENT F: HABITAT ASSESSMENT PHOTOGRAPHS

## ATTACHMENT F: HABITAT ASSESSMENT PHOTOGRAPHS



Photograph 1: Lolium perenne
Herbaceous
Semi-Natural
Alliance, facing
west.



Photograph 2: Rosa Californica Shrubland Alliance, facing east.



Photograph 3: Brassica nigra - Centaurea (solstitialis, melitensis)
Herbaceous
Semi-Natural
Alliance, facing east.



Photograph 4: Juncus Arcticus (var. balticus, mexicanus)
Herbaceous
Alliance, facing south.



Photograph 5: Frankenia Salina
Herbaceous
Alliance, facing south.



Photograph 6: Distichlis Spicata Herbaceous Alliance, facing northeast.



Photograph 7: Salix Exigua
Shrubland
Alliance, facing east.



Photograph 8: Sarcocornia pacifica (Salicornia depressa) Herbaceous Alliance, facing northwest.



Photograph 9: Schoenoplectus (acutus, californicus)
Herbaceous
Alliance, facing east.



Photograph 10: Schoenoplectus Acutus/Rosa Californica Association, facing west.



Photograph 11: Lepidium latifolium – Lactuca serriola Herbaceous Semi-Natural Alliance, facing northeast.



Photograph 12: Delta tule pea (*Lathyrus jepsonii jepsonii*).

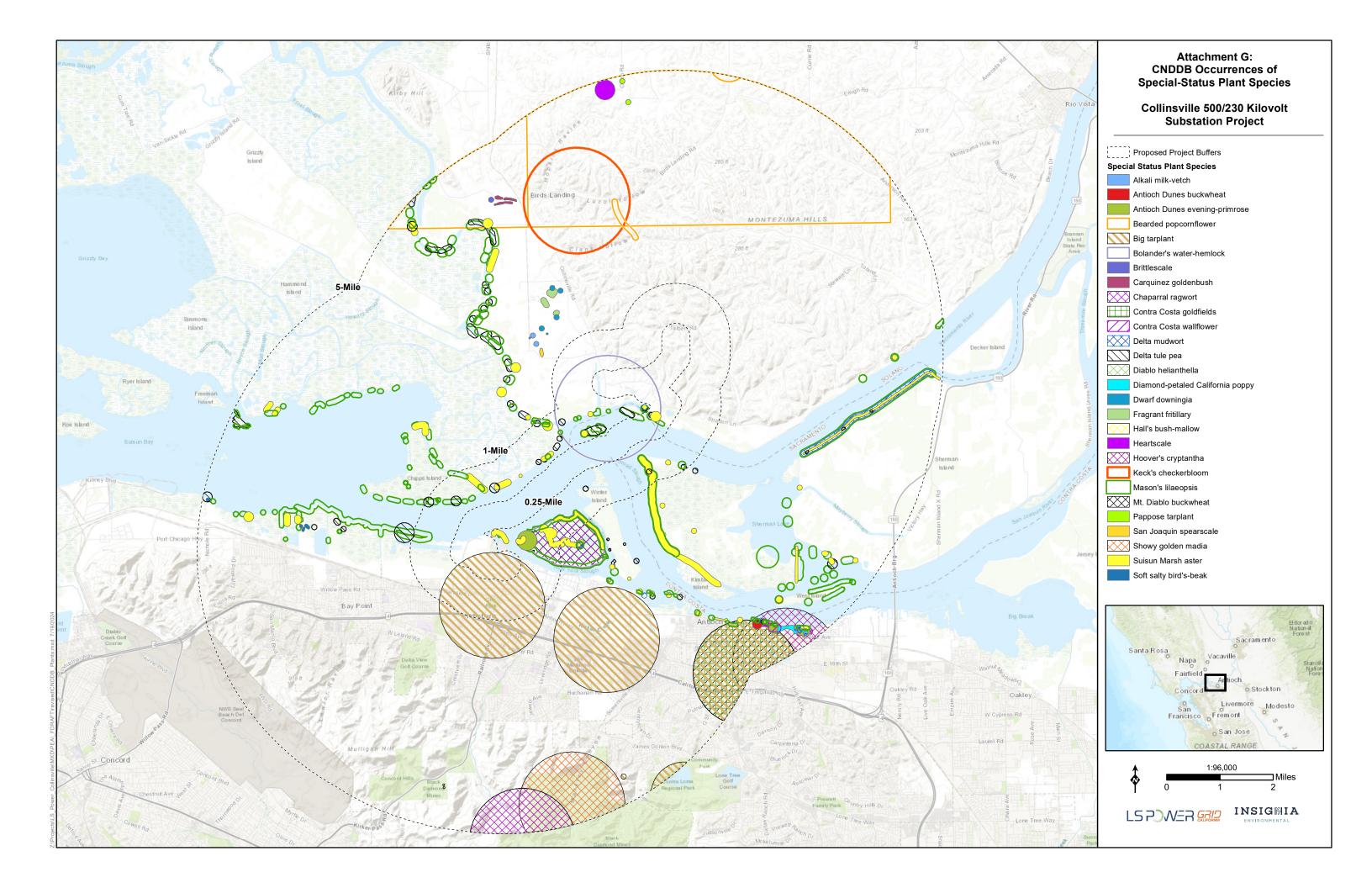


Photograph 13: Mason's lilaeopsis (*Lilaeopsis* masonii).

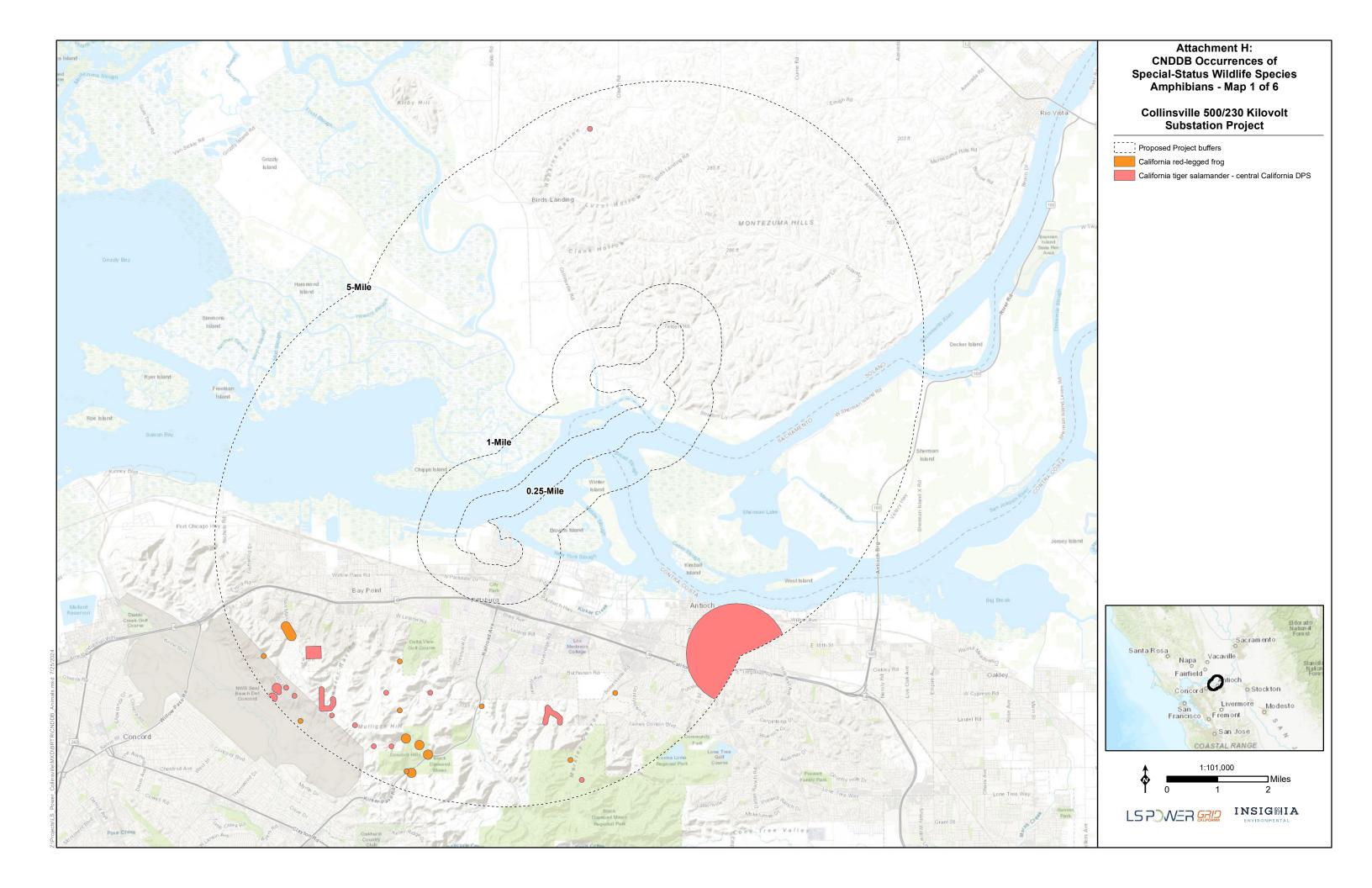


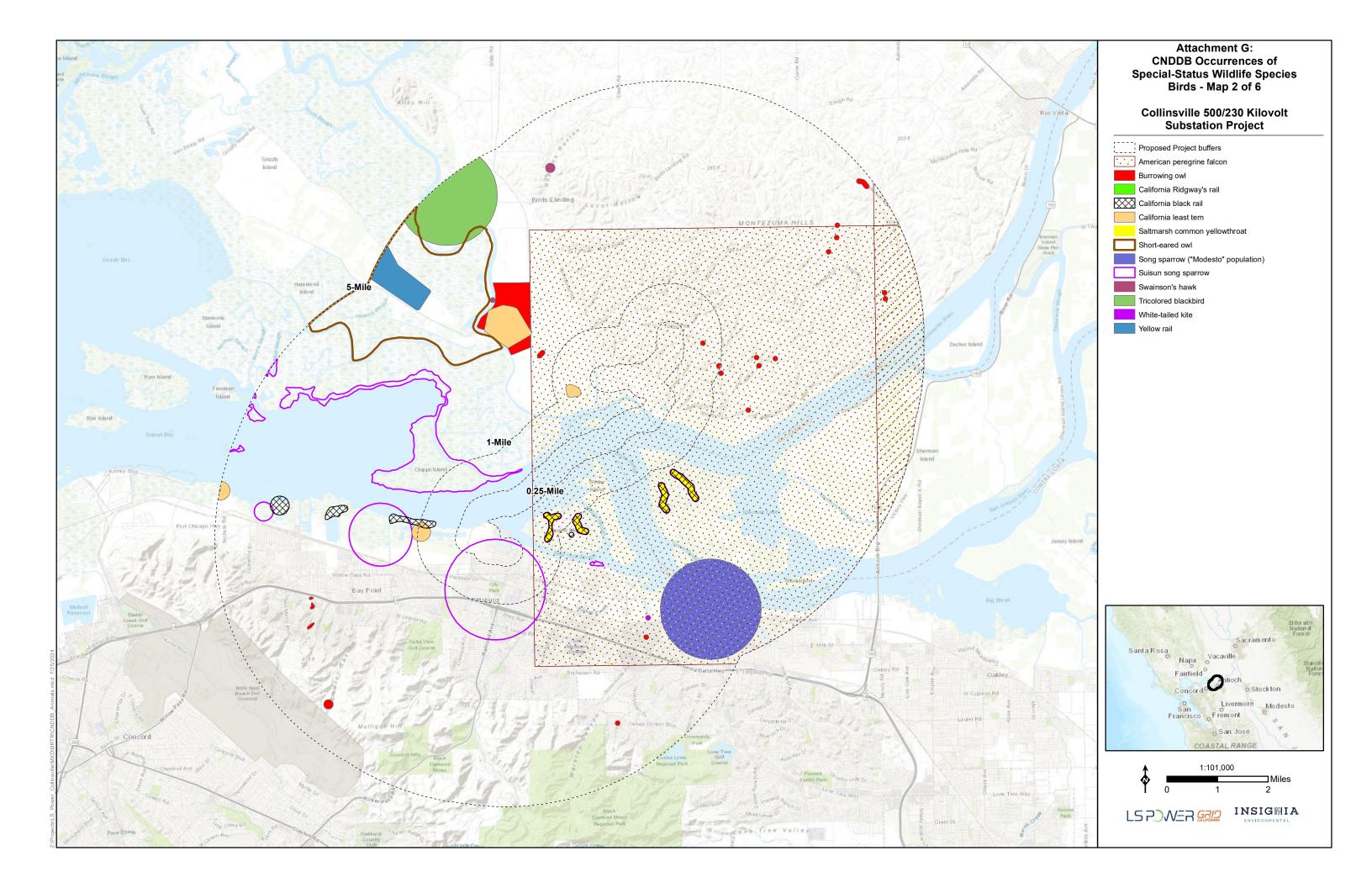
Photograph 14: Welsh mudwort (Limosella australis).

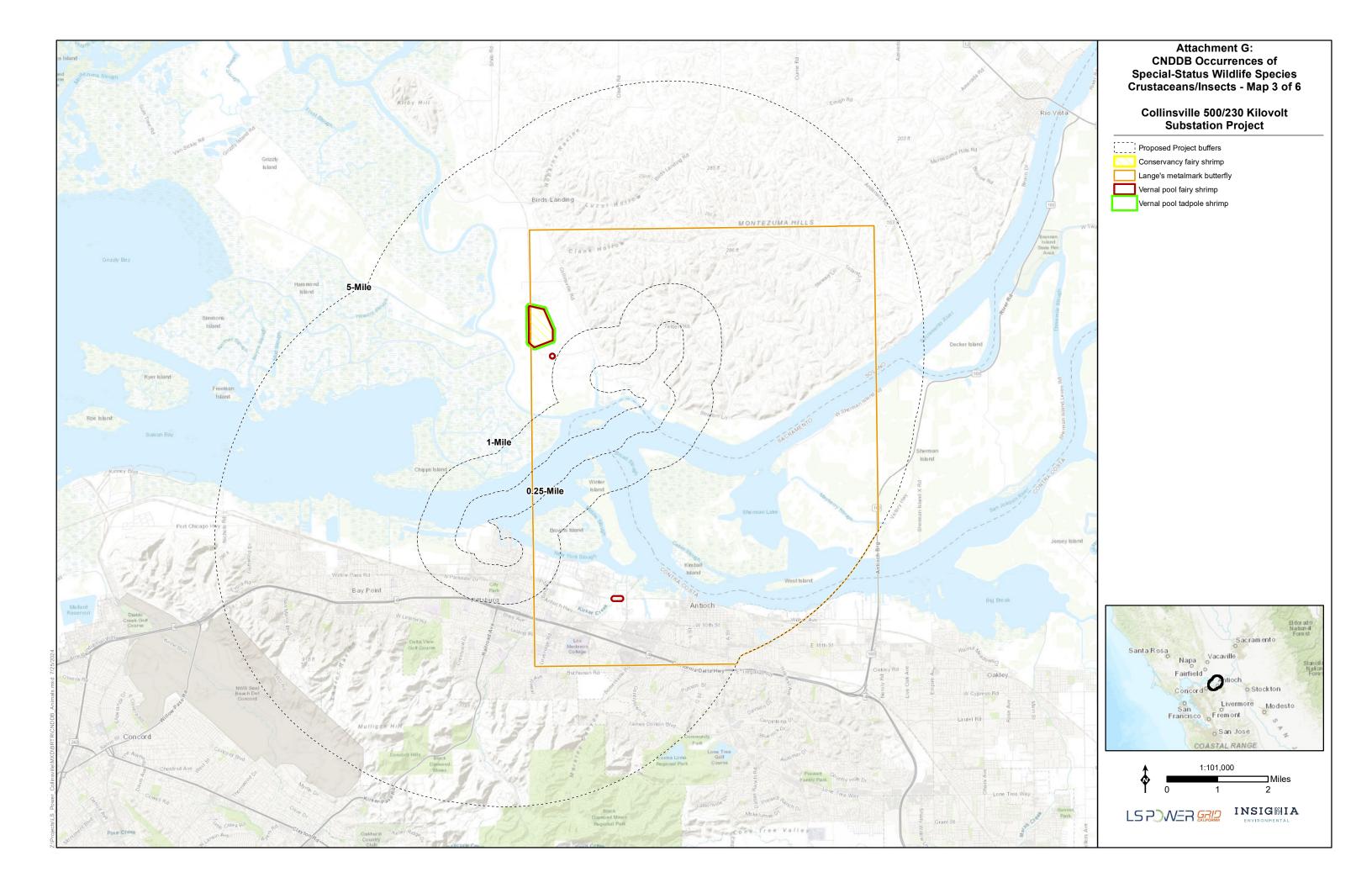
ATTACHMENT G: CNDDB OCCURRENCES OF SPECIAL-STATUS PLANT SP	PECIES

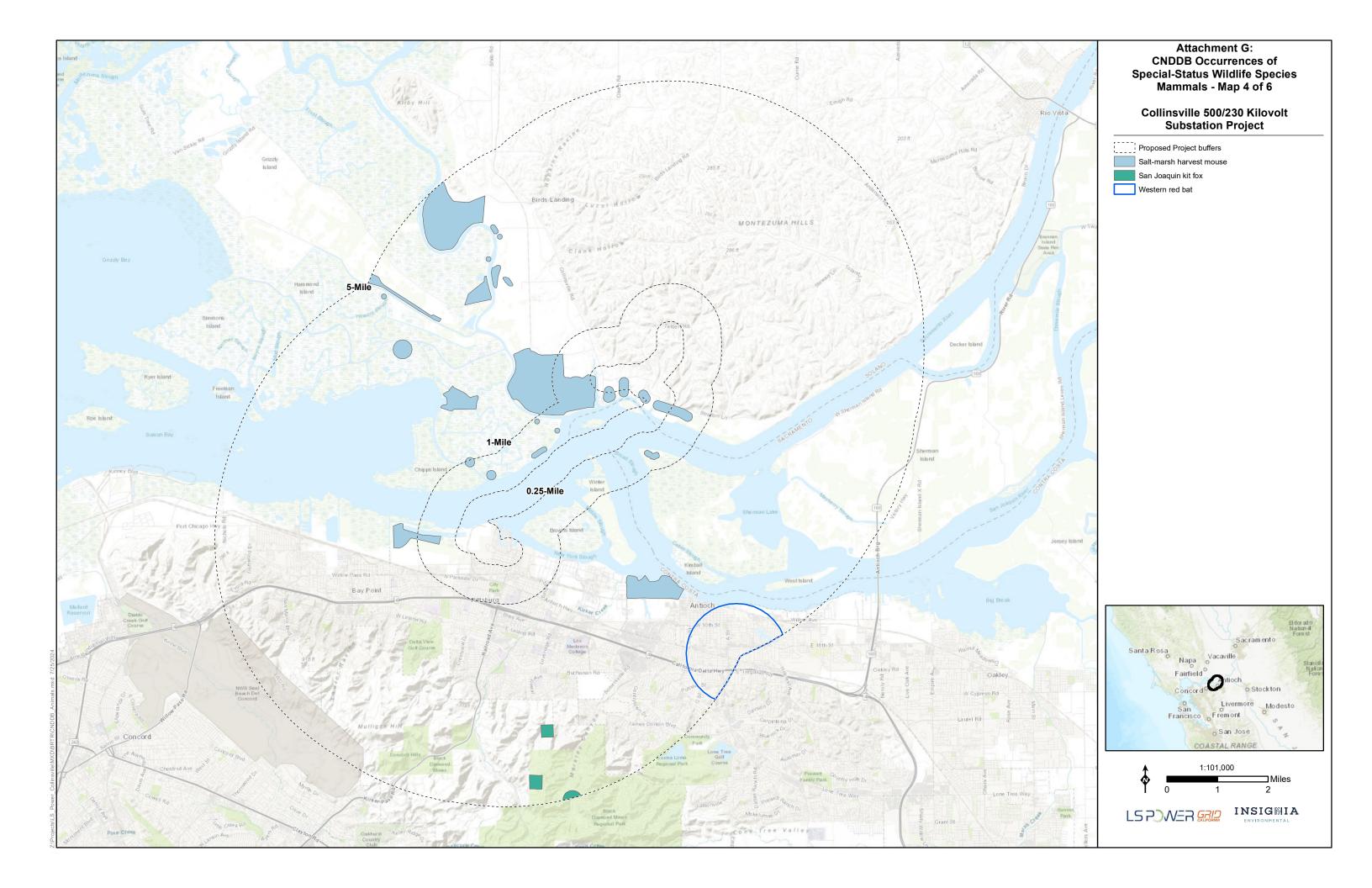


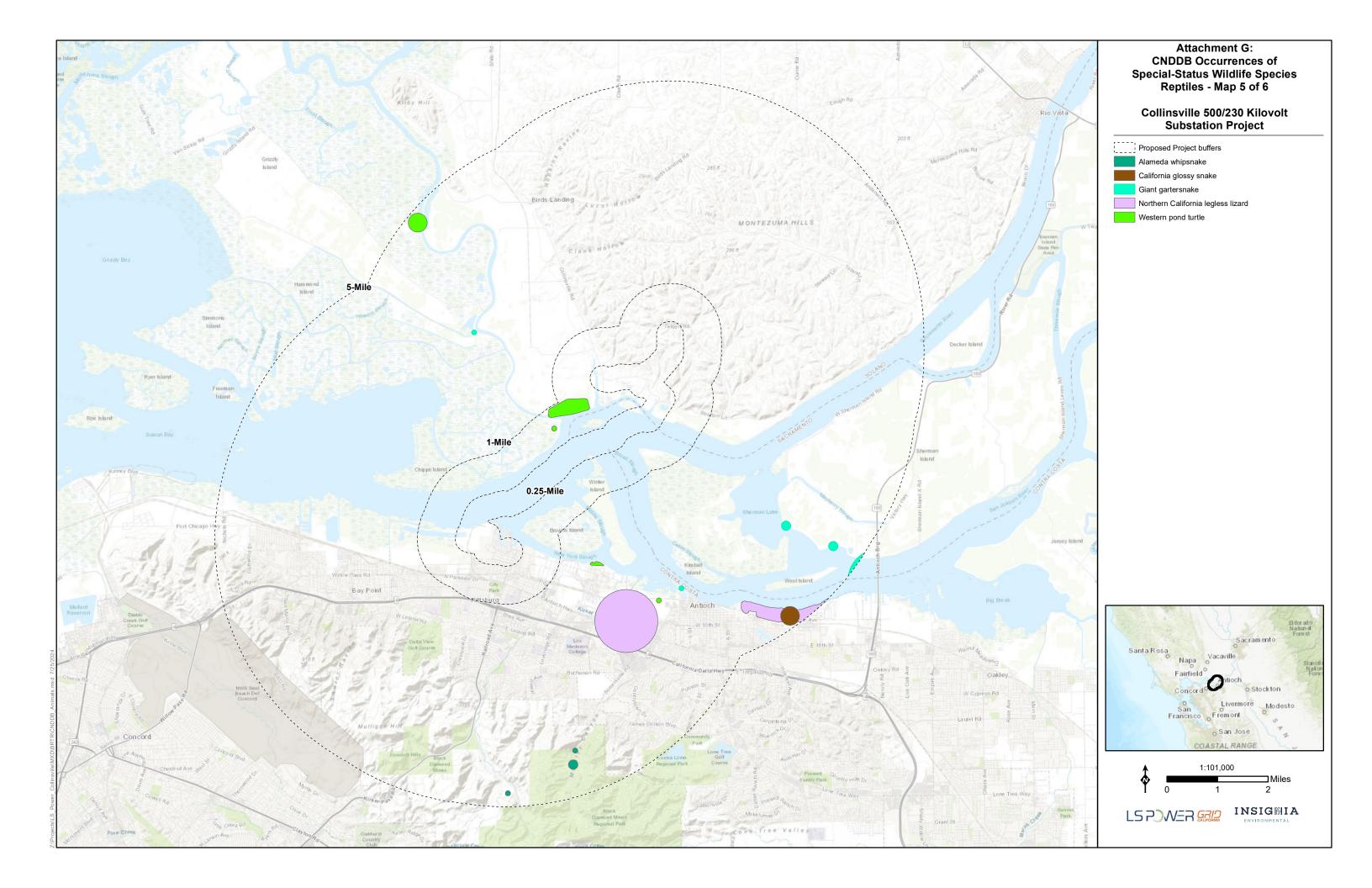
ATTACHMENT H: CNDDB OCCURRENCES OF SPECIAL-STATUS WILDLIFE SPECIES

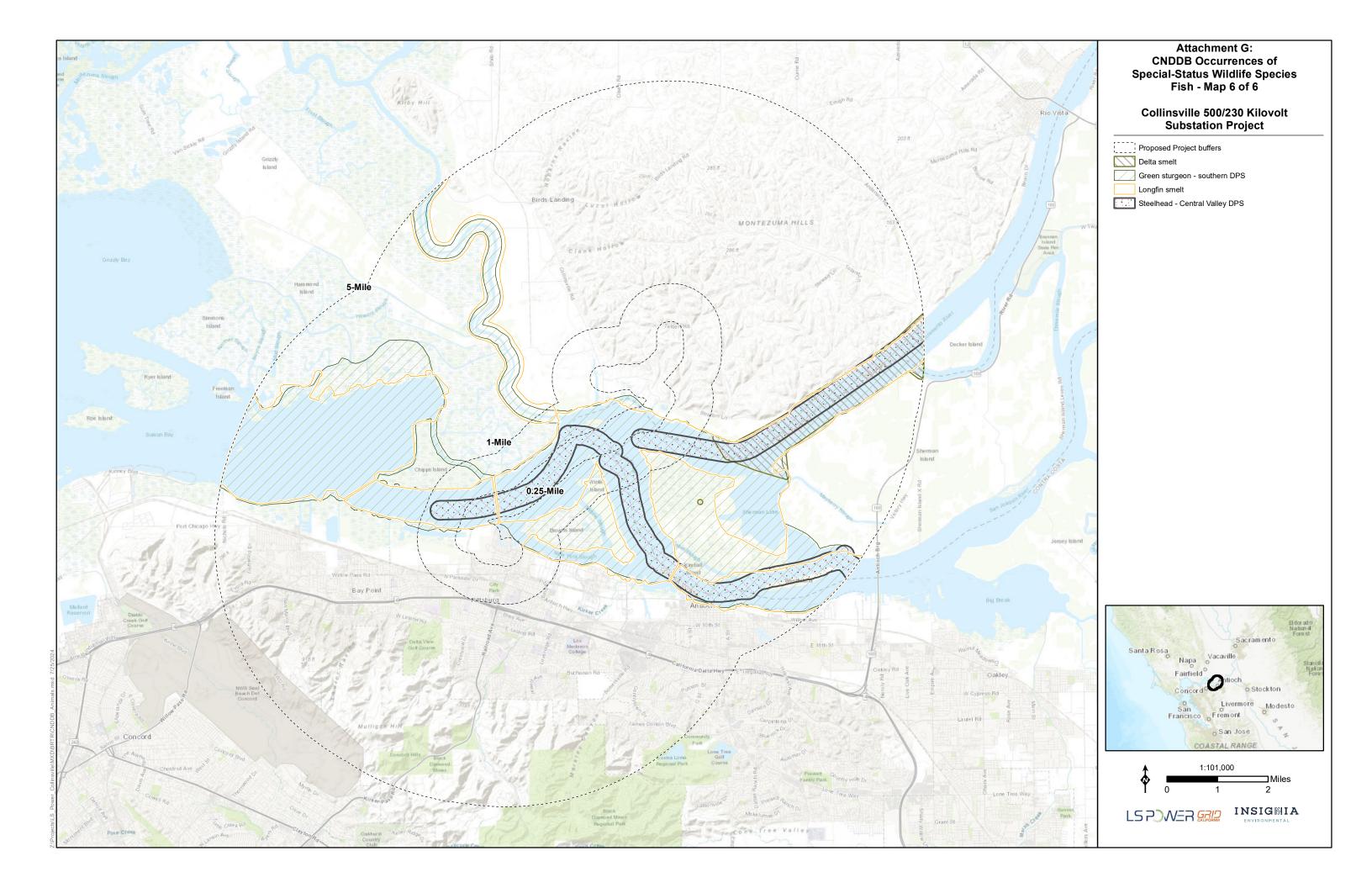












#### ATTACHMENT I: LINEAR WATER FEATURE PHOTOGRAPHS

## ATTACHMENT I: LINEAR WATER FEATURE PHOTOGRAPHS



Photograph 1: D-1, facing upstream and northwest.



Photograph 2: D-1, facing downstream and south.

### ATTACHMENT J: WETLAND FEATURE PHOTOGRAPHS

# ATTACHMENT J: WETLAND FEATURE PHOTOGRAPHS



Photograph 1: W-1, facing south.



Photograph 2: W-2, facing southeast.



Photograph 3: W-3, facing southwest.



Photograph 4: W-4, facing northeast.



Photograph 5: W-5, facing southwest.



Photograph 6: W-6, facing northeast.



Photograph 7: W-7, facing west.

ATTACHMENT K: POTENTIALLY JURISDICTIONAL WATER FEATURES TABLE

### ATTACHMENT K: POTENTIALLY JURISDICTIONAL WATER FEATURES TABLES

**Table K-1: Potentially Jurisdictional Wetland Features** 

Wetland Identification Number	Vegetation Type	Cowardin Classification	Page Number in Attachment A	Potential USACE- and RWQCB- Jurisdictional Area within Survey Area (acres)	Potential CDFW- Jurisdictional Area within Survey Area (acres)
W-1	Schoenoplectus (acutus, californicus) Herbaceous Alliance, Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance, Rosa californica Shrubland Alliance, and Schoenoplectus acutus/Rosa californica Association	E2EM1	1, 2	7.43	7.43
W-2	Schoenoplectus (acutus, californicus) Herbaceous Alliance, Distichlis spicata Herbaceous Alliance, and Frankenia salina Herbaceous Alliance	PEM1	1, 2	22.43	22.43
W-3	Distichlis spicata Herbaceous Alliance	PEM1	2	0.25	0
W-4	Frankenia salina Herbaceous Alliance and Schoenoplectus (acutus, californicus) Herbaceous Alliance	PEM1	2	1.22	0
W-5	Distichlis spicata Herbaceous Alliance and Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance	PEM1	3, 4	15.16	15.16
W-6	Distichlis spicata Herbaceous Alliance and Juncus arcticus (var. balticus, mexicanus) Herbaceous Alliance	PEM1	5, 6	10.02	11.85
W-7	Distichlis spicata Herbaceous Alliance	PEM1	4	1.55	0
Total				58.06	55.04

Notes: USACE = United States Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife

Table K-2: Potentially Jurisdictional Linear Water Features

ID	Feature		Average Measurements (feet)			Jurisdictional Areas (acres)			
Type	Length	OHWM Width	OHWM Depth	TOB Width	TOB Depth	USACE	RWQCB	CDFW	
D-1	Ephemeral	926.12	3.00	0.10	4.90	2.20	0.06	0.06	0.10

Notes: OHWM = ordinary high water mark; TOB = top of bank

ATTACHMENT L: NATIONAL WETLANDS INVENTORY MAP

