# Appendices

# Appendix A NOP and NOP Comments



# Notice of Preparation Draft EIR

# Russ Creek and Centerville Slough Restoration Project

Humboldt County Resource Conservation District April 27, 2022

# Notice of Preparation Draft Environmental Impact Report Russ Creek and Centerville Slough Restoration Project



Humboldt County Resource Conservation District, Lead Agency 5630 South Broadway
Eureka, CA 95503

Attention: Jill Demers, Executive Director (707) 442-6058 x 5

In collaboration with:

USDA – Natural Resources Conservation Service 430 G Street, Room 4164 Davis, CA 95616



Attention: Dean Kwasny, Easement Program Specialist (530) 792-5648



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## 1. Introduction

# 1.1 CEQA Requirements

This proposed Project is subject to the requirements of the California Environmental Quality Act (CEQA). The CEQA lead agency is the Humboldt County Resource Conservation District (HCRCD), the decision-making body being the HCRCD. The HCRCD is responsible for assuring the completion of the appropriate evaluation and processes required by CEQA. The HCRCD has the sole responsibility to make the appropriate findings and determinations with respect to the CEQA process and disposition of the Project. The purpose of this Notice of Preparation (NOP) is to solicit participation in determining the scope of the Environmental Impact Report (EIR) which would be prepared for the Russ Creek and Centerville Slough Restoration Project (Project) with regard to the Project description described below. The EIR being prepared is intended to satisfy the requirements of CEQA (Public Resources Code, Div 13, Sec 21000-21177), and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Sec 15000-15387).

#### 1.2 General Information

Protect Title: Russ Creek and Centerville Slough Restoration Project

**Lead Agency:** Humboldt County Resource Conservation District, Lead Agency

5630 South Broadway Eureka, CA 95503

Attention: Jill Demers, Executive Director

Availability of Project Documents/Files: Project documents/files are available for review at the Humboldt County Resource Conservation District, Lead Agency, located at 5630 South Broadway, Eureka, 95503 California. The NOP is available on the HCRCD's website: http://humboldtrcd.org/

**Written Comments:** Written comments on the scope of the EIR can be sent to Jill Demers, Executive Director, Humboldt County Resource Conservation District, Lead Agency, located at 5630 South Broadway, Eureka, California 95503. Comments may also be sent via email to jillhcrcd@gmail.com with "Russ Creek and Centerville Slough Restoration Project, Comments on NOP" in the title.

**Comment Period:** CEQA Guidelines Section 15082 (b) requires a 30-day response period for input about the scope and content of the EIR. The comment period for the NOP begins on April 27, 2022 and ends on May 26, 2022. The post mark deadline for submitting written or emailed comments is May 26, 2022, at 5:00 PM.

**Public and Agency Scoping Meeting:** A hybrid (in-person and virtual) public scoping meeting to accept comments on the environmental issues germane to the Project will be held on May 20, 2022, from 2:00 to 4:00 PM at the Humboldt County Agriculture Center, 5630 South Broadway, Eureka, 95503 California and via Zoom phone +1(669)900-6833 (Meeting ID: 838 9516 5708; Passcode: 2345) or Zoom weblink: https://us02web.zoom.us/j/83895165708?pwd=T0h3UGdXdFNsanBYdENZaTN1YmtuQT09

# 1.3 Previous CEQA Analysis and Public Review

A previous project (Eel River Estuary and Centerville Slough Enhancement Project, formerly referred to as the Eel River Estuary Preserve Ecosystem Enhancement Project, SCH#2014122040) was proposed for a

similar project area. The EIR was circulated in September 2016. The EIR was then amended and recirculated in December 2016. The recirculated EIR was certified by the CEQA Lead Agency (California Coastal Conservancy) in February 2017. The project was never constructed and has since been redesigned. The redesigned project is described herein this NOP.

# 2. Project Location and Setting

The Project Area is approximately 1,860-acres and is located approximately four miles west of the City of Ferndale, in Humboldt County, California (Figure 1). The Project Area primarily includes various parcels privately owned by the Russ family and parcels owned by The Wildlands Conservancy (TWC) known as the Eel River Estuary Preserve (EREP). The west side of the Project encompasses the near shore dunes of Centerville Beach and extends to the Pacific Ocean. East of the dunes, the Project supports a system of sloughs and pastures that comprise a portion of the Salt River watershed, itself a tributary to the Eel River estuary. The northern portion of the Project Area borders the Eel River. Much of the southern half of the Project east of the former Centerville Slough was reclaimed and has been converted to pasture for agricultural purposes. Some of this land represents diked former tidelands that are separated from the estuarine wetlands by a series of dikes and the Cutoff Slough tide gates. An upland area occupies the southeastern portion of the Project, where vehicular access is gained from Russ Lane via Centerville Road. Centerville Road is maintained by Humboldt County and is the southern extent of the Project. Few structures occur on site, but there is one residence at the southwestern edge of the Project, two barns within the upland area near Russ Lane (referred to as the Potato Barn and Quonset Hut), a third barn (North Barn) located between Cutoff Slough and the near shore dunes, approximately midway between the north and south property lines and a fourth barn (South Barn) located in the southwest corner of the Project Area. The North and South barns are connected by unimproved roads to the Potato Barn.

EREP includes agricultural (grazing) land, tidal salt marsh, brackish marsh, riparian scrub, sloughs/open water channels, freshwater ponds and ditches, and nearshore dune ridges and swales. The Russ family owns the parcels of land immediately south of the EREP; this area includes grazing land with managed ditches, open water channels and mixed freshwater and brackish marsh and dunes.

The climate is Mediterranean with precipitation most abundant in the winter months, and the average annual rainfall is approximately 48.5 inches. Approximately two thirds of the year, the site is influenced by coastal fog. Prominent water features include Russ Creek, remnant Centerville Slough, Cutoff Slough, and the Western Drainage Ditch (which in turn conveys the flow of Shaw Creek and Creamery Ditch), as well as smaller (seasonal) slough channels and drainage ditches. The northern end of the site borders the mouth of the Eel River.

Humboldt County General Plan land use for the Project Area is Natural Resources (NR/R) and Agriculture Exclusive (AE), which includes prime agricultural lands. Primary uses are limited to the production of food, fiber, plants, timber, timber agriculturally related uses, and agriculture related recreational uses. Very-low intensity residential uses may be allowed if they are incidental to the property and if they support agricultural activities or are necessary for the enhancement and protection of the natural resources of the area. Minimum parcel size is 60 acres, except divisions to 20 acres may be permitted where the parcel is subject to an agricultural preserve contract or agreement, such as the Williamson Act. Zoning for the Project Area is NR/R and AE-60/W,F,R,T, which is consistent with the land use designation. Combining zones include Coastal Wetland Areas (W), Flood Hazard Areas (F), Streams and Riparian Corridors Protection (R), and Transitional Agricultural Lands (T).

A large portion of the Project Area is enrolled in Williamson Act contracts.

The Natural Resources Conservation Service (NRCS) has worked cooperatively with the private landowners to acquire three Agricultural Conservation Easement Program - Wetland Reserve Easements (ACEP-WRE) on EREP totaling 1,077.75 acres of the Project Area, and two on Russ property totaling 162.21 acres of the Project Area, of which one is nearing finalization. These are perpetual conservation easements that seek to protect and restore wetland habitat while allowing limited livestock grazing in suitable habitat types. NRCS will be serving as the federal cooperating agency for this Project.

# 3. Project Description

# 3.1 Project Goals and Objectives

The goal of the Project is to improve geomorphic and ecosystem function that will enhance habitats for native fisheries and aquatic species, support water bird and wildlife species, and increase agricultural land viability and resiliency to changing geomorphological and climatic conditions. The Project would enhance existing tidal wetlands and restore marginal diked pasture land to a mosaic of natural habitats, including estuarine and tidal slough channels, freshwater streams, and agricultural pastures, all within the context of promoting the resilience of the Project Area and viability of adjacent agricultural lands outside of the Project Area.

Specific objectives of the Project include:

- Restore natural functions and processes of tidal cycles, riverine inundation and sedimentation, tidal channel connectivity, and wetlands maintenance by removing or modifying existing infrastructure and reestablishing historic tidal channels
- Increase resiliency of existing agricultural lands to sea level rise by reconfiguring dikes and enhancing dune function that promotes natural dune formation processes that reduce over wash during extreme high tides and storm events
- Improve access for agricultural land management, maintenance, outdoor recreation, and nature study compatible with existing land uses and the ACEP-WRE conservation easements
- Enhance native plant communities, and expansion of rare plant habitat, through active and passive habitat development, control and eradication of invasive non-native species, and establishment of native species
- Improve access to restored aquatic habitats for salmonids and other aquatic dependent species by increasing migratory access between estuarine and inland waters and by restoring overwintering and rearing habitat for juvenile salmonids
- Improve drainage efficiency and sediment transport while enhancing tidal processes by reestablishing connectivity of Russ Creek and Shaw Creek to a restored Centerville Slough
- Establish a long-term adaptive management and maintenance program for the Project

# 3.2 Overall Concept

The Project would restore a landscape of mostly diked pasture land to a mosaic of pasture and natural habitats, including estuarine and tidal slough channels, freshwater streams, freshwater ponds and agricultural pastures. Critical to achieving this is the restoration of tidal flow and an enhancement in tidal flushing to reactivate wetland functions. Reestablishing the connection of Centerville Slough to the Eel

River and removing and reconfiguring dikes would provide full tidal prism into a restore Centerville Slough, restoring historic tidal slough channels that have been filled and degraded due to reclamation efforts, sediment, and significant tectonic activity. Improvements to tidal channels and the tidal prism would restore aquatic organism passage from the Eel River to Centerville Slough, Shaw Creek and Russ Creek, while improving drainage and the transport of sediment. Additionally, adding new tide gates structures to Shaw Creek, Russ Creek, and other strategic locations would increase reliability of the drainage efficiency and reduce saltwater intrusion of surrounding pasture lands. Realignment and restoration of Centerville Slough, Russ Creek and Shaw Creek are expected to support overwintering juvenile salmonids, water bird habitat and drainage from the landscape, and maintain an existing drainage easement agreement. Improved drainage, sediment transport, and habitat conditions would be established along Russ Creek. Project components are illustrated in Figure 2.

As a strategy to increase agricultural land viability and reduce vulnerability from frequent dune over-wash events and projected sea level rise, proposed placement of set-back berms provide increased resiliency to ongoing and projected geomorphic and climactic changes. The longevity of this Project depends upon the successful restoration of natural ecological processes and the frequency and nature of maintenance activities but would be heavily influenced by uncontrollable natural events within this dynamic, highly altered and geologically unstable watershed. As a result, this Project would include an adaptive management and maintenance program to provide a feedback mechanism between monitoring, maintenance, and management actions.

# 3.3 Proposed Project Activities

#### Reestablish Full Tidal Cycle to Centerville Slough Marsh Network

Historically, Centerville Slough extended south from the Salt River, parallel to the dune network to the community of Centerville at the base of the Wildcat Mountains. Reclamation and the associated reduction in the tidal prism, coupled with actively directed Russ Creek avulsions, resulted in a significant reduction in hydraulic capacity. The Western Drainage Ditch is all that remains as a remnant drainage feature. Russ Creek and Shaw Creek, which once flowed into Centerville Slough, now terminate with avulsion and overland sheet flows over existing pastures and create large sediment loads that impact agricultural uses.

The Project proposes to realign and expand Centerville Slough along former tidal channels and reestablish the Centerville Slough connection to Eel and Salt Rivers in order to increase the tidal prism within the Project Area. The Centerville Slough channel would be sized to enhance flood storage, conveyance of flood flows and sediments, and restore brackish aquatic habitat. Some of the existing levees/dikes would be removed to increase tidal exchange within the site. The increased tidal prism would increase sediment transport throughout the system.

#### Create and Enhance Inter- and Sub-Tidal Habitats

Portions of the Project Area that were diked and drained for agricultural purposes are currently at elevations below current tidal marsh elevations due in part to ground subsidence from tectonic activity and oxidation. The lack of frequent tidal and river flooding has also minimized sediment accretion in these disconnected areas. Other portions of the Project Area that were diked and drained have elevated overtime due to deposition of sediment from Shaw and Russ Creeks. This in-balance of sediment exchange across the Project Area has resulted in infilling of the Centerville Slough and associated historic tidal channels. The Project proposes to restore and enhance the Centerville Slough marsh network, which would be comprised of four hydrologically connected and enhanced marsh areas, including the Outer Marsh, Inner Marsh, Russ

Creek Marsh, and Angels Camp Marsh, in order to restore ecosystem services throughout the Project Area to enhance habitat and agricultural productivity. Active improvements throughout the marsh areas would include the restoration and creation of new tidal channels, enhancement of existing tidal channels, construction of tidal ridges along tidal channels to improve sediment transport processes, restoration and enhancement of ecotone/estuarian habitat, and removal of existing access roads through proposed wetlands. Marsh areas would be graded to provide habitat variability and promote sediment accretion in subsided areas through a network of inter-tidal lagoons and hummocks. The lagoons would passively evolve into inter-tidal salt marshes with sediment accretion from the Eel River and Russ Creek over time, providing diverse habitats of mudflat, saltmarsh, and subtidal channels. Native planting and invasive species removal would occur as a part of the restoration work and ongoing site management.

#### **Protect and Enhance Drainage, Land Uses, and Habitats**

Threats to the richness of existing habitat and land uses include disturbances of dunes, saltwater intrusion, sedimentation of watercourses, subsidence and natural conversion of agricultural pasture, and invasive species. While some areas within the Project Area are targeted for wetland restoration and enhancement, other areas would be preserved for continued agricultural land uses. The Project design would preserve and enhance agricultural land uses on properties within and adjacent to the Project Area.

#### Enhance Existing Berm and Construct New Agricultural Protection and Access Berm

An agricultural protection and access berm would be constructed on the eastern side of the Centerville Slough Marsh Network to prevent inundation of adjacent agricultural lands from tidal, brackish water. An access road/walking path would be located on the berm to provide passive outdoor recreation, nature study opportunities, and access for site maintenance. Onsite sediment would be used to construct berms, elevate marsh plains, and create habitat ridges and hummocks.

#### Realign Russ Creek and connect to Centerville Slough

A new fish friendly tide gate would be installed in the access berm to reconnect Russ Creek to the Centerville Slough-Russ Creek Marsh area in order to improve site drainage, create in-channel flood storage, reestablish a long estuary-stream ecotone and provide a wetland prism that includes freshwater wetland and/or riparian habitat, as well as habitat connectivity for anadromous fish. The area around Russ Creek would be modified to improve drainage efficiency and maintain areas in agricultural production. Modifications could include raising ground levels around Russ Creek to contain flows, constructing a new planted berm, and/or realigning and new drainage ditches to convey runoff to new tide gates.

#### Improve Agricultural Drainage and Pasture Productivity

Improvement of agricultural lands would occur through active implementation projects and ongoing management.

- Tide gates
  - Tide gates would be installed in the access berm to re-connect Shaw Creek and Creamery Ditch to Centerville Sough that will improve sediment transport, and fish passage.
  - Additional tide gates would be installed at strategic locations to hydrologically connect inboard ditches for agricultural drainage to the Centerville Slough-Russ Creek Marsh area and to allow drainage connection of the Halley property behind the southern portion of the berm to the Centerville Slough-Angel Creek Marsh area.
- Livestock management

- New fencing would allow vegetation to recover in designated areas and prevent livestock from accessing wetland areas.
- Access routes, culverts, and bridges
  - Project implementation and future management would require durable yet limited access routes
    that minimize impacts to the Project Area. Some existing access routes, culverts and bridges
    would be improved and maintained, while others may be decommissioned. Routes would be
    designed to accommodate a range of vehicle types and weight classes and culverts replaced as
    needed to increase access reliability.

#### Convert Existing Uplands to Wetlands

A portion of uplands within the Project Area would be converted to wetlands in order to balance wetland fills associated with new berms.

#### **Enhance Back Dune Berms**

Significant disturbance from off-road vehicle use and dune over-wash has occurred to the dune field west of the Project Area. The Project would include passive and active techniques to prevent further dune loss and migration of existing dunes into Centerville Slough. This would occur through the construction of back dune berms to reduce wave over-wash, direct drainage, and capture sand to passively build up the foredune. Native dune species would be planted along with construction of sand fencing to capture sand and prevent migration inland. The Project would focus on back dune enhancements outside of designated Snowy Plover Critical Habitat.

#### Elevate Centerville Road

Depending on the alternative selected, a portion of Centerville Road (approximately 300 linear feet) may be elevated, generally within its current footprint, to prevent increase in flood frequency of the County Road.

#### Repair the Existing Cutoff Slough Tide Gate

Minor repairs to the existing Cutoff Slough tide gate may be made to increase resiliency of agricultural fields to sea level rise.

#### **Beneficial Re-use of Sediment**

Excavated sediment would be reused on site and would not be hauled off-site for disposal. On-site sediment reuse would include:

- Construction of back dune berms
- Application to agricultural areas subject to rising saline groundwater
- Construction of new berms and rehabilitation of the existing berms and permanent access roads
- Construction of tidal ridges and marsh plain fill

#### **Develop Adaptive Maintenance, Management, and Monitoring Plan**

The Project would include an adaptive management and maintenance program to provide a feedback mechanism between monitoring, maintenance, and management actions.

#### **Provide Public Education and Access**

Access to the Project Area is currently limited. Russ properties are managed for livestock grazing. TWC property is managed for livestock grazing and for outdoor recreation and education opportunities. The EREP has a waterfowl hunting lease, welcomes scheduled and docent led small group site visits, and uses the site to educate elementary school children about wetland and estuary systems and agriculture as practiced in the coastal zone. Public access is not anticipated to increase as a result of the proposed Project. No public education or access is proposed outside of the EREP portion of the Project.

#### Kayak Put In and Take Out

A kayak put in and take out would be installed near the restored Centerville Slough on EREP in order to facilitate post-Project monitoring and maintenance, aquatic educational programs and limited recreational use by visitors. The launch will consist of a 10 to 15-foot-wide graveled slope extending from the bank of the slough to the slough channel to facilitate launching of kayaks and small non-motorized watercraft.

#### Road and Access Improvements

In order to ensure the viability of continued agricultural operations and management within and around the Project Area, a variety of minor access improvements are proposed on EREP, such as new gates, parking area, vault toilet, lighting and fencing. These minor access improvements will be located outside of the ACEP-WRE conservation easement boundaries.

# 4. Probable Environmental Effects

The following discussion evaluates potential adverse effects by resource category based on preliminary review of the proposed Project. The environmental categories presented below are from Appendix G of the CEQA Guidelines. Mitigation measures would be developed in the EIR and presented along with additional and specific site information and analysis. There is the potential for significant impacts to occur as a result of the proposed Project, even with the use of mitigation measures; therefore, an EIR would be prepared to evaluate potential environmental effects as a result of the proposed Project and would also evaluate alternatives. The EIR would recommend mitigation measures, as feasible, to lessen the significance of any impacts identified as potentially significant. Per CEQA Guidelines Section 15082 (a)(1)(c), the probable environmental effects of the Project are summarized below.

### 4.1 Aesthetics

#### Would the project:

- a) Have a substantial adverse effect on a scenic vista?
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project Area is in a highly scenic area and includes tidal wetlands, freshwater marsh, sand dunes, grasslands, agricultural pastures, and beach frontage. Project activities are not anticipated to substantially degrade scenic resources in the Project Area. However, the EIR would analyze the potential impacts to

aesthetic resources, and if necessary and appropriate, include feasible mitigation measures to address any potentially significant impacts.

# 4.2 Agricultural & Forestry Resources

#### Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

The proposed Project would strike a balance between restoration of critical ecosystem functions and preservation of agricultural resources, including sustaining agricultural productivity. An Agricultural Conversion Analysis prepared for the Project would be utilized to determine the impacts/benefits to agricultural land resources on the Project Area and would be used as supporting information for the EIR. A portion of the Project Area's agricultural lands are under Williamson Act contract and are intended to remain under contract post Project. Potential impacts could be the loss of Important Farmland or the conversion of agricultural land to another use. The EIR would analyze the potential effects to agricultural resources from implementation of the Project and include feasible mitigation measures, if needed, to reduce any potentially significant impacts to a less than significant level. The Project Area does not include any forest land or land zoned timberland.

## 4.3 Air Quality

#### Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- d) Expose sensitive receptors to substantial pollutant concentrations?
- e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The Project Area is located within the North Coast Air Basin (NCAB), which is under the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). The NCAB is currently in attainment (or is unclassified) for all state and federal ambient air quality standards, with the exception of the state standard for particulate matter less than ten micrometers in diameter (PM<sub>10</sub>). The EIR would discuss the temporary impacts from construction and operational activities and identify potential mitigation measures if needed. The EIR would discuss the Project's conformity with applicable air quality plans and exposure of sensitive receptors to criteria air pollutants and odors, and mitigation measures would be included where applicable.

# 4.4 Biological Resources

#### Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

A wide variety of wildlife, including special-status species inhabit the Project Area, utilize the site and may be affected by implementation of the Project. The Project Area also includes wetlands, riparian areas, coastal dunes and uplands that support a diverse array of aquatic and terrestrial biological resources. The EIR would utilize a number of special studies in the preparation of this section such as habitat mapping, sensitive plant and animal studies, wetland delineations, vegetation mapping, biological evaluations, and other existing reports/studies. The EIR would analyze potential impacts to special status-species, wetlands, riparian habitat, coastal dunes and include feasible mitigation measures to address any potentially significant impacts. The EIR would also discuss the Project's conformity with local policies or plans protecting biological resources.

### 4.5 Cultural Resources

#### Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?

A Cultural Resources Investigation has been prepared for the Project by Roscoe and Associates to inventory cultural resources and assess potential impacts on these resources from Project activities. Potential impacts could include the impaction of unknown cultural resources. The EIR would include the results from this investigation and include mitigation measures for the inadvertent discovery of cultural resources and the inadvertent discovery of human remains.

# 4.6 Energy

#### Would the project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction of the Project would consume energy as a result of combustion of fossil fuels used in construction equipment and vehicles from workers commuting to and from the site. The Project would require the use of several pieces of heavy earthmoving equipment, and construction commute and utility

vehicles. The County has not yet adopted a Climate Action Plan; however, impact analysis will evaluate the Project's potential impact related to energy resources. This potential impact would be further discussed in the EIR and appropriate mitigation measures would be included if applicable.

# 4.7 Geology & Soils

#### Would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - ii. Strong seismic ground shaking?
  - iii. Seismic related ground failure, including liquefaction?
  - iv. Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Geologic and soils issues include potential erosion and sedimentation during and after construction due to proposed grading, excavation, channel reconfiguration, levee reconfiguration, and filling. The EIR would describe the Project Area's existing geologic conditions and soils based on existing information and technical reports prepared for the Project. Potential impacts could include soil erosion or the loss of topsoil. The EIR would include an analysis of the geology of the site as it relates to slope stability, earthquake hazards, landslides, and any other potential geologic hazards, and recommend appropriate best management practices and mitigation measures if applicable.

# 4.8 Greenhouse Gas Emissions

#### Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction of the Project would cause release of GHG emissions as a result of combustion of fossil fuels used in construction equipment and vehicles from workers commuting to and from the site. The Project would require the use of several pieces of heavy earthmoving equipment, and construction commute and utility vehicles. The NCUAQMD has not adopted a threshold for construction-related GHG emissions against which to evaluate significance and has not established construction-generated criteria air pollutant screening levels above which quantitative air quality emissions would be required; however, this potential impact would be further discussed in the EIR and appropriate mitigation measures would be included if applicable.

#### 4.9 Hazards & Hazardous Materials

#### Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Phase I and II Environmental Site Assessments were completed within the Project Area to support the previous EIR. The information from these assessments would be used in the analysis of this resource category and appropriate mitigation measures would be incorporated if applicable. Potential impacts could include the discovery of unknown hazardous materials during construction, or the release of hazardous materials associated with transport, use and disposal. The EIR would discuss the existing conditions with regard to potential hazards in the Project Area, identify appropriate spill prevention measures, identify potential impacts to Project workers and recreation users due to potential soil contamination and other potential hazards at the site, and describe necessary mitigation measures.

# 4.10 Hydrology & Water Quality

#### Would the project:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i. result in a substantial erosion or siltation on- or off-site;
  - ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
  - iv. impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project could affect water quality through release of contaminants and sediment from construction activities. The Project could alter hydrodynamic processes, which control local salinity levels. The Project could increase turbidity during and after construction, adversely affecting water quality. In addition, flows in Centerville Slough, Cutoff Slough, Russ Creek and Salt River are likely to change with the increased tidal prism following restoration; these increased flows could affect water quality, erosion along these waterways, and fisheries use of these waterways. The reconfiguration of the existing levee system could alter flood

patterns to adjacent properties including Centerville Road. The EIR will discuss these issues and potential effects to surface and groundwater and incorporate mitigation measure if applicable.

# 4.11 Land Use & Planning

#### Would the project:

- a) Physically divide an established community?
- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project would require a Conditional Use Permit from Humboldt County and a Coastal Development Permit from the Coastal Commission per the California Coastal Act. The EIR will describe existing land uses in the Project Area, assess Project impacts and identify any potential land use conflicts. The EIR will review the County's General Plan and the Eel River Area Plan and summarize applicable goals and policies and assess the Project's consistency with applicable General Plan and Eel River Area Plan goals and policies, land use designations, and the County Zoning Ordinance. The need for mitigation measures related to land use and planning is not anticipated.

#### 4.12 Mineral Resources

#### Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

There are no mining operations in the Project Area. The Project would not require the use of a substantial amount of any mineral resource and would not result in the loss of availability of known mineral resources of value to the state, region or locally. The EIR would analyze potential effects to mineral resources. The need for mitigation measures related to mineral resources is not anticipated.

### **4.13** Noise

#### Would the project:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Noise levels would increase temporarily during construction activities at the Project Area. The EIR would describe the existing noise levels in the Project Area and identify any noise sensitive receptors. The EIR would evaluate the potential for temporary noise impacts from construction. Project construction would be limited to daytime hours. Future operational noise levels would be compared to existing noise levels to determine if the Project would cause a significant increase in ambient noise levels and mitigation measures would be included if applicable.

# 4.14 Population & Housing

#### Would the project:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would not add either new homes or businesses and no new housing is proposed. The Project would not displace any housing or people, on or adjacent to the site. The need for mitigation measures relation to population and housing is not anticipated.

#### 4.15 Public Services

#### Would the project:

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - i. Fire protection?
  - ii. Police protection?
  - iii. Schools?
  - iv. Parks?
  - v. Other public facilities?

Except in the event of an emergency, the Project would place no material demand on fire and police services. The Project would not place additional demands on schools, parks, or other services. The Project does not include the construction of residential or commercial structures, and the Project is not anticipated to result in substantial population growth in the area; and therefore, would not substantially increase the need or use of public services and amenities.

#### 4.16 Recreation

#### Would the project:

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The Project is not anticipated to place additional demands on recreational facilities and the Project does not require recreational facility construction or expansion. The Project does include features, described above, that relate to recreation. These include: 1) maintenance roads and turn-outs that can serve as pedestrian pathways and overlooks with interpretative signage; 2) A kayak put in and take out to Centerville Slough, and; 3) Minor improvements to existing infrastructure intended to avoid interactions between recreational and agricultural operations and be compatible with the NRCS ACEP-WREs. The EIR would analyze potential impacts to recreational resources and identify feasible mitigation measures if significant impacts are identified.

# 4.17 Transportation & Traffic

#### Would the project:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
- c) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?
- d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e) Result in inadequate emergency access?

The Project would result in a temporary increase in traffic during construction and minimal traffic post construction, potentially affecting levels of service on local streets. The EIR would discuss existing traffic volumes and level of service in the Project Area and recommend mitigation measures (such as the implementation of a traffic control plan) that would ensure any potential significant environmental impacts on transportation would remain less than significant.

#### 4.18 Tribal Cultural Resources

#### Would the project:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources; or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. The Project may potentially encounter known or as-of-yet unknown archaeological materials during Project-related construction activities. If such resources were to represent "tribal cultural resources" as defined by CEQA, any substantial change to or destruction of such resources would be a significant impact. The Humboldt County Resource Conservation District will complete tribal consultation with local tribes through the AB 52 process. Any tribal cultural resources identified through tribal consultation would be evaluated in the EIR. The EIR will analyze tribal cultural resources per Public Resources Code Section 21080.3.1, and include mitigation measures, if applicable, per Public Resources Code Section 21080.3.2.

# 4.19 Utilities & Service Systems

#### Would the project:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project does not include the construction of facilities (residential, commercial, or industrial) that would place additional demands on public water systems, wastewater systems, or landfills. The EIR would include information obtained from the County of Humboldt and applicable utility providers regarding any potential constraints. The need for mitigation measures related to utilities and service systems is not anticipated.

#### 4.20 Wildfire

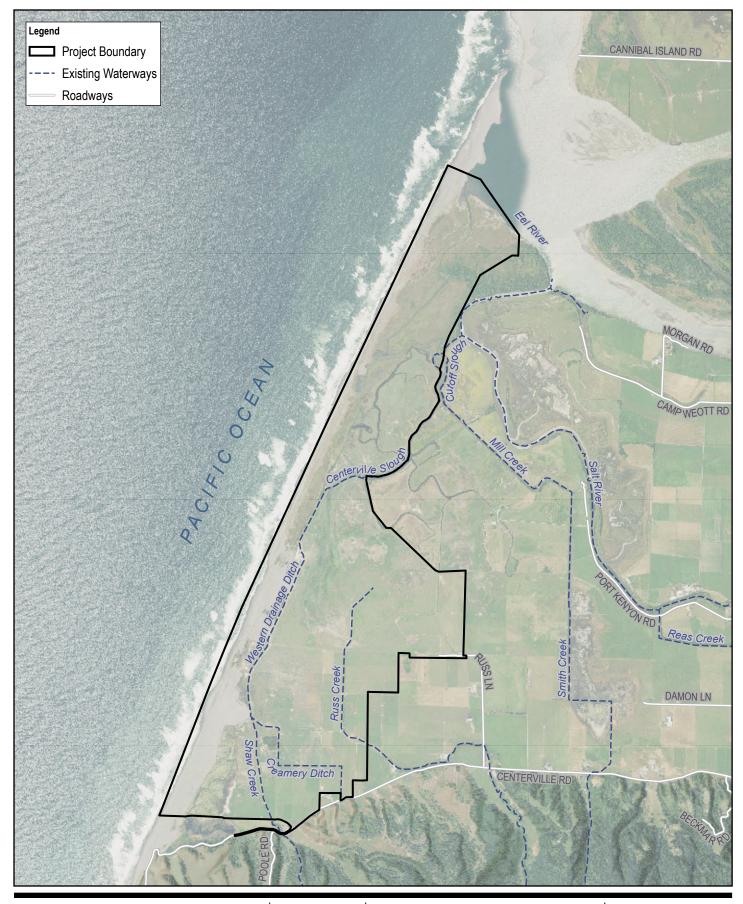
#### Would the project:

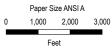
- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slop instability, or drainage changes?

The Project is not anticipated to impair emergency response or evacuation plans, exacerbate wildfire risks, or expose people or structures to significant risks as a result of wildfire. The EIR would include information obtained from the County of Humboldt and Local and State Responsibility Area emergency service providers regarding potential risks. The need for mitigation measures related to wildfire is not anticipated.

# Appendices

# Appendix A Figures





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



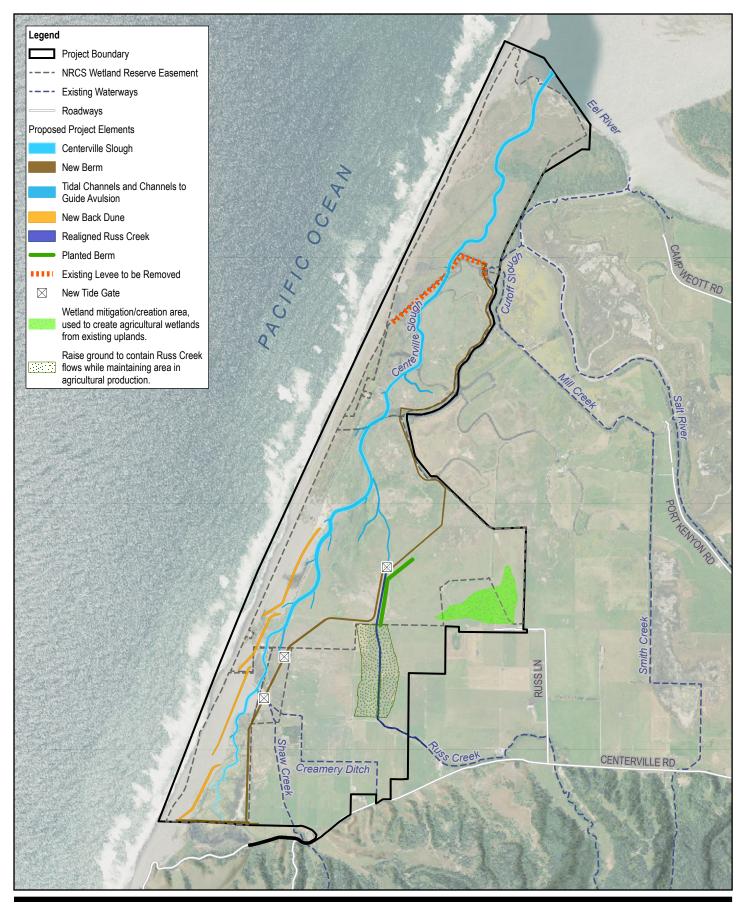
GHD

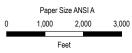
Humboldt County Resource Conservation District Russ Creek and Centerville Slough Restoration Project

Project No. 11187323 Revision No. D Date Apr 2022

EIR Notice of Preparation Approximate Project Boundary

FIGURE 1





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



Humboldt County Resource Conservation District Russ Creek and Centerville Slough Restoration Project

Project No. 11187323 Revision No. Date Apr 2022

**EIR Notice of Preparation Approximate Project Components** 

FIGURE 2

David Shabazian, Director 715 P Street, MS 1803 Sacramento, CA. 95814

Gavin Newsom, Governor

T: (916) 445-5986

05/20/2022

County: Humboldt - Humboldt County Resource Conservation District Jill Deemers jillhcrcd@gmail.com



Construction Site Well Review (CSWR) ID: 1012492

Assessor Parcel Number(s): 10013101, 10013102, 10014307, 10101116, 10014202, 10012105, 10013104, 10014201, 10013103, 10012104, 10012103, 10012101, 31008103, 10014209, 10014304, 10014303, 10014221, 10110204, 10101105, 10101114, 10014308, 10014208, 10014211, 10014302, 10014301

Property Owner(s): Wildlands Conservancy

Project Location Address: Russ Creek and Centerville Slough 40.596885, -124.329484, Eureka, California 95501

Project Title: Russ Creek and Centerville Slough Restoration Project

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 5/2/2022. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in Humboldt County, within the boundaries of the following fields:

N/A

Our records indicate there are no known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Northern district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (805) 937-7246 or via email at Miguel.Cabrera@conservation.ca.gov.

Sincerely,

Miguel Cabrera

Northern District Deputy

cc: Jill Deemers - Plan Checker

From: Andrea Hilton
To: Andrea Hilton

Subject: FW: Russ Creek and Centerville Slough Restoration Project, Comments on NOP

**Date:** Monday, May 23, 2022 8:06:25 AM

---- Forwarded Message -----

From: Yahoo Desk < nocopump@frontiernet.net >

To: Jill Demers < iillhcrcd@gmail.com >

**Sent:** Sunday, May 22, 2022, 01:48:13 PM PDT

Subject: Russ Creek and Centerville Slough Restoration Project, Comments on NOP

After reviewing the Draft EIR of the Russ Creek and Centerville Slough Restoration Project, I find one major concern. The southern boundary of the project is shown as a proposed berm. Centerville road is shown in white on the Figure 2 map just south of that proposed berm. I see no concern or accommodations for the Headwaters of Centerville Slough that exists south of Centerville Road in that location and drains north. My concern is that if there is no consideration for the Headwaters of Centerville Slough water flow in that location, where is that water drainage suppose to go? That drainage flows north and the proposed berm location on Figure 2 would cut off water flow in any direction, resulting in that Headwater source flooding Centerville Road.

I would appreciate this being taken into consideration before finalization of this plan.

Cheryl Laffranchi 8550 Centerville Road Ferndale, Ca. 95536



CHAIRPERSON Laura Miranda Luiseño

VICE CHAIRPERSON Reginald Pagaling Chumash

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#### NATIVE AMERICAN HERITAGE COMMISSION

May 9, 2022

Jill Demers Humboldt County Resource Conservation District 5630 South Broadway Eureka, CA 95503

Re: 2022040559, Russ Creek and Centerville Slough Restoration Project, Humboldt County

Dear Ms. Demers:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015. If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). Both SB 18 and AB 52 have tribal consultation requirements. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of <u>portions</u> of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080,3,1 (d)).
  - **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
- 3. <u>Mandatory Topics of Consultation If Requested by a Tribe</u>: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080,3.2 (a)).
- 4. <u>Discretionary Topics of Consultation</u>: The following topics are discretionary topics of consultation:
  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
- 6. <u>Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:</u> If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. <u>Conclusion of Consultation</u>: Consultation with a tribe shall be considered concluded when either of the following occurs:
  - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - **b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
  - a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - **b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. <u>Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource</u>: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
  - **a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - **b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

#### SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at:

https://www.opr.ca.gov/docs/09 14 05 Updated Guidelines 922.pdf.

Some of SB 18's provisions include:

- 1. <u>Tribal Consultation</u>: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe. (Gov. Code §65352.3 (a)(2)).
- 2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
- 3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
- 4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
  - **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <a href="http://nahc.ca.gov/resources/forms/">http://nahc.ca.gov/resources/forms/</a>.

#### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

- 1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (<a href="http://ohp.parks.ca.gov/?page\_id=1068">http://ohp.parks.ca.gov/?page\_id=1068</a>) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
- 2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

- 3. Contact the NAHC for:
  - **a.** A Sacred Lands File search. Remember that tribes do not alway Sacred Lands File, nor are they required to do so. A Sacred Lands Fi consultation with tribes that are traditionally and culturally affiliated project's APE.
  - **b.** A Native American Tribal Consultation List of appropriate tribes t project site and to assist in planning for avoidance, preservation in preservation in preservation.
- 4. Remember that the lack of surface evidence of archaeological resourc does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring the identification and evaluation of inadvertently discovered archa Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of certified archaeologist and a culturally affiliated Native American w should monitor all ground-disturbing activities.
  - **b.** Lead agencies should include in their mitigation and monitoring for the disposition of recovered cultural items that are not burial assurantiated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring for the treatment and disposition of inadvertently discovered Native and Safety Code §7050.5, Public Resources Code §5097.98, and Cc subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and followed in the event of an inadvertent discovery of any Native Am associated grave goods in a location other than a dedicated cem-

If you have any questions or need additional information, please contact me a Cameron. Vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela Cultural Resources Analyst

cc: State Clearinghouse

STATE OF CALIFORNIA GAVIN NEWSOM, Governor

#### CALIFORNIA STATE LANDS COMMISSION

100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202



May 26, 2022

JENNIFER LUCCHESI, Executive Officer (916) 574-1800 TTY CA Relay Service: 711 or Phone 800.735.2922 from Voice Phone 800.735.2929 or for Spanish 800.855.3000

Contact Phone: (916) 574-1890

File Ref: SCH # 2022040557

Jill Demers
Humboldt County Resource Conservation District
5630 South Broadway
Eureka, CA 95503

VIA REGULAR & ELECTRONIC MAIL: jillhcrcd@gmail.com

Subject: Notice of Preparation (NOP) for an Environmental Impact Report (EIR)

for the Russ Creek and Centerville Slough Restoration Project,

**Humboldt County** 

Dear Jill Demers:

The California State Lands Commission (Commission) staff has reviewed the subject NOP for an EIR for the Russ Creek and Centerville Slough Restoration Project (Project), which is being prepared by the Humboldt County Resource Conservation District (District). The District, as a California public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Commission is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect State sovereign land and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on State sovereign land, the Commission is also a responsible agency. Commission staff requests that the District consult with us on preparation of the Draft EIR (DEIR) as required by CEQA section 21153, subdivision (a), and the State CEQA Guidelines section 15086, subdivisions (a)(1) and (a)(2).

#### **Commission Jurisdiction and Public Trust Lands**

The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the ordinary high-water mark as generally indicated by the mean high tide line (MHTL), except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary highwater mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

At the Project area, the Eel River, portions of Centerville Slough, and the Pacific Ocean waterward of the MHTL are State sovereign land under the Commission's jurisdiction. A lease for the use of State sovereign land will be required from the Commission for any portion of the Project encroaching on State sovereign land. Please see the contact information below for more information on leasing requirements with the Commission.

#### **Project Description**

The Project would restore a landscape of mostly diked pasture land to a mosaic of pasture and natural habitats, including estuarine and tidal slough channels, freshwater streams, freshwater ponds, and agricultural pastures. The goal of the Project is to improve geomorphic and ecosystem function that will enhance habitats for native fisheries and aquatic species, support water bird and wildlife species, and increase agricultural land viability and resiliency to changing geomorphological and climatic conditions. As a strategy to increase agricultural land viability and reduce vulnerability from frequent dune over-wash events and projected sea level rise, proposed placement of set-back berms provides increased resiliency to ongoing and projected geomorphic and climactic changes. Reestablishing the connection of Centerville Slough to the Eel River and removing and reconfiguring dikes would provide full tidal prism into a restored Centerville Slough.

#### **Environmental Review**

Commission staff requests that the District consider the following comments when preparing the DEIR.

#### **General Comments**

 Project Description: A thorough and complete Project Description should be included in the DEIR in order to facilitate meaningful environmental review of potential impacts, mitigation measures, and alternatives. The Project Description should be as precise as possible in describing the details of all allowable activities (e.g., types of equipment or methods that may be used, maximum area of impact or volume of sediment removed or disturbed, seasonal work windows, locations for material disposal, construction schedule and staging areas, etc.), as well as the details of the timing and length of activities. Thorough descriptions will facilitate Commission staff's determination of the extent and locations of its leasing jurisdiction, make for a more robust analysis of the work that may be performed, and minimize the potential for subsequent environmental analysis to be required. Please be as specific as possible regarding all proposed work within the Commission's jurisdiction waterward of the MHTL, inclusive of the historic bed of the Eel River, Centerville Slough, and if applicable, below the MHTL of the Pacific Ocean. Please describe construction access, staging areas, and equipment for proposed dune restoration and all other work occurring within close proximity to the MHTL of the Pacific Ocean. Provide additional details regarding proposed passive and active techniques for invasive species management and improvement of dune function.

#### **Biological Resources**

- 2. The DEIR should disclose and analyze all potentially significant effects on sensitive species and habitats in and around the Project area, including special-status wildlife, fish, and plants, and if appropriate, identify feasible mitigation measures to reduce those impacts. The District should conduct queries of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database and U.S. Fish and Wildlife Service's (USFWS) Special Status Species Database to identify any special-status plant or wildlife species that may occur in the Project area. The DEIR should also include a discussion of consultation with the CDFW, USFWS, and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS), including any recommended mitigation measures and potentially required permits identified by these agencies.
- 3. Construction Noise: The DEIR should also evaluate noise and vibration impacts on fish and birds from construction, restoration, or flood control activities in the water, on the dikes, and for water conveyance and tide gate structures. Mitigation measures could include species-specific work windows as defined by CDFW, USFWS, and NMFS. Again, staff recommends early consultation with these agencies to minimize the impacts of the Project on sensitive species.

#### Cultural Resources

4. <u>Title to Resources</u>: The DEIR should also mention that the title to all archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the California State Lands Commission (Pub. Resources Code, § 6313). Commission staff requests that the District consult with Staff Attorney Jamie Garrett, should any cultural resources on state lands be discovered during construction of the proposed Project. In addition, staff requests that the following statement be included in the DEIR's Mitigation and Monitoring Plan: "The final disposition of archaeological, historical, and paleontological resources recovered on State sovereign land under the

jurisdiction of the California State Lands Commission must be approved by the Commission."

#### Hydrology and Sea Level Rise

5. In the Environmental Setting section of the DEIR, please provide detail regarding the Project area's surface hydrology features and characteristics, groundwater characteristics, history of flood events and any known land uses and structures subject to flood hazards, and any flood zone designations for the Project area. Please also provide a description of the former hydrology and floodplain of the Project vicinity prior to the construction of dikes, tide gates, and other drainage control structures that resulted in the conversion of wetlands and tidelands to other land uses, such as pasture lands for grazing.

In addition to impacts from proposed modifications of Project area hydrology, sedimentation processes, biological resources, and geomorphic channel modifications, the DEIR should also analyze potential for these impacts on the affected reaches of the Salt River, Eel River, and coastal processes and resources outside of the Project area, including sediment discharge in the Pacific Ocean.

Please also provide a detailed analysis of how the Project will attempt to plan for sea level rise through enhanced floodplain drainage, capacity, open space, preservation and enhancement of dune areas, and any potential future conflicts with surrounding land uses, such as agricultural and grazing land uses.

#### Recreation

6. Please provide a comprehensive description of existing recreational uses and public access to waterways and coastal resources within the Project area, particularly waterways within the Commission's jurisdiction. In addition to inland waterways, describe recreational uses of the dunes, beach, and surf zone of the Pacific Ocean, and identify public access locations to the Pacific Ocean within the Project vicinity, such as Centerville Beach. Describe any restrictions or limitations on public access to the Project area during construction and methods to provide notice to the public prior to construction.

#### Alternatives

7. In addition to describing mitigation measures that would avoid or reduce the potentially significant impacts of the Project, the District should identify and analyze a range of reasonable alternatives to the proposed Project that would attain most of the Project objectives while avoiding or reducing one or more of the potentially significant impacts (see State CEQA Guidelines § 15126.6).

#### **Environmental Justice**

8. Environmental justice is defined by California law as "the fair treatment and meaningful involvement of people of all races, cultures, and incomes with respect to

the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." (Gov. Code § 65040.12) This definition is consistent with the Public Trust Doctrine's principle that management of trust lands is for the benefit of all people.

The Commission adopted an updated <a href="Environmental Justice Policy and Implementation Blueprint">Environmental Justice Policy and Implementation Blueprint</a> in December 2018 to ensure that environmental justice is an essential consideration in the agency's processes, decisions, and programs. The twelve goals outlined in the Policy reflect an urgent need to address the inequities of the past, so they do not continue. Through its policy, the Commission reaffirms its commitment to an informed and open process in which all people are treated equitably and with dignity, and in which its decisions are tempered by environmental justice considerations.

Although not legally required in a CEQA document, Commission staff suggests that the District include a section describing the environmental justice community outreach and engagement undertaken in developing the DEIR and the results of such outreach. The California Office of Environmental Health Hazard Assessment developed the CalEnviroScreen mapping tool to assist agencies with locating census tracts near proposed projects and identifying the environmental burdens, should there be any, that disproportionately impact those communities. Environmental justice communities often lack access to the decision-making process and experience barriers to becoming involved in that process. It is crucial that these communities are consulted as early as possible in the project planning process. Commission staff strongly recommends using the CalEnviroScreen tool and then, as applicable, reaching out through local community organizations, such as the California Environmental Justice Alliance. Engaging in early outreach will facilitate more equitable access for all community members. In this manner, the CEQA public comment process can improve and provide an opportunity for more members of the public to provide input related to environmental justice. Commission staff also recommends incorporating or addressing opportunities for community engagement in mitigation measures. Commission staff will review the environmental justice outreach and associated results as part of any future Commission action.

Thank you for the opportunity to comment on the NOP for the Project. As a trustee and responsible agency, the Commission requests that you consult with us on this Project and keep us advised of changes to the Project Description and all other important developments. Please send additional information on the Project to the Commission staff listed below as the DEIR is being prepared. Please refer questions concerning environmental review to Jason Ramos, Senior Environmental Scientist, at (916) 574-1814 or via e-mail at <a href="mailto:Jason.Ramos@slc.ca.gov">Jason.Ramos@slc.ca.gov</a>. For questions concerning archaeological or historic resources under Commission jurisdiction, please contact Jamie Garrett, Staff Attorney, at Jamie.Garrett@slc.ca.gov or (916) 574-0398. For questions concerning Commission leasing jurisdiction, please contact Ninette Lee, Public Land Manager, at (916) 574-1869, or via e-mail at <a href="mailto:Ninette.Lee@slc.ca.gov">Ninette.Lee@slc.ca.gov</a>.

Sincerely,

Nicole Dobroski, Chief

Division of Environmental Planning and Management

CC: Office of Planning and Research

N. Lee

J. Ramos

J. Garrett

On Thu, May 12, 2022 at 1:41 PM Teicher, Margarete@Waterboards <a href="Margarete.Teicher@waterboards.ca.gov">Margarete.Teicher@waterboards.ca.gov</a> wrote:

To: Ms. Jill Demers, Executive Director

**Humboldt County Resource Conservation District** 

5630 South Broadway

Eureka, CA 95503

jillhcrcd@gmail.com

Regional Water Board staff has reviewed the April 27, 2022, Notice of Preparation, Draft EIR, Russ Creek and Centerville Slough Restoration Project, Humboldt County Resource Conservation District (NOP).

We offer the following comments on the NOP:

- The subject proposed project, as described in the NOP, has the potential to directly or indirectly impact waters of the State.
   Therefore, you will be required to apply for a Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects). Anyone proposing to conduct a project that requires a federal permit or involves dredge or fill activities that may result in a discharge to U.S. surface waters and/or waters of the state are required to obtain a Clean Water Act (CWA) Section 401 Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects) from the North Coast Regional Water Quality Control Board, verifying that the project activities will comply with state water quality standards. The type of 401 certification coverage depends on the type of project activity, location, and federal permit issued.
- We encourage you to meet with Regional Water Board 401 staff early in the design process, before submitting a CWA 401
  certification application, to discuss the potential project impacts, measures to avoid and minimize impacts to waters of the State, and
  mitigation for unavoidable impacts. Also, we encourage you to visit our website for more information on our water quality
  certification program at <u>Water Quality Compliance | California Northcoast Regional Water Quality Control Board</u> as well as our
  Restoration Program at <u>Restoration Program | California Northcoast Regional Water Quality Control Board</u>.

We look forward to meeting with you to discuss your project.

Thank you.

Margarete "Maggie" Teicher

North Coast Regional Water Quality Control Board

5550 Skylane Blvd., Suite A

Santa Rosa, CA 95403

Margarete.Teicher@waterboards.ca.gov

(707) 576-2501

Work Schedule 8:00-4:30

<sup>\*\*</sup>Due to COVID restrictions, I am mostly working from home. The best way to contact me is via email.\*\*

# Appendix B

CalEEMod Model Output and Emissions Computations

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Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## Russ Creek and Centerville Slough Restoration Project 2024 Humboldt County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	1,860.00	81,021,600.00	0

#### 1.2 Other Project Characteristics

 Urbanization
 Rural
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 103

 Climate Zone
 1
 Operational Year
 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N2O Intensity
 0.004

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a mix of natural terrain such as coastal dunes and sloughs, as well as agirucultural uses.

Construction Phase - Project Specific Construction Phasing and schedule

Off-road Equipment - Project specfic equipment and phasing

Grading - No import or export of materials

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	40510800	20255400
tblAreaCoating	Area_Nonresidential_Interior	121532400	60766200
tblConstructionPhase	NumDays	15,500.00	131.00
tblConstructionPhase	NumDays	15,500.00	131.00
tblConstructionPhase	NumDays	15,500.00	25.00
tblConstructionPhase	NumDays	6,000.00	131.00
tblConstructionPhase	NumDaysWeek	5.00	6.00

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblLandUse	LandUseSquareFeet	0.00	81,021,600.00
tblLandUse	LotAcreage	0.00	1,860.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
	·		

## 2.0 Emissions Summary

## 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT.	/yr		
2024	0.9882	8.3626	7.7012	0.0204	2.8744	0.3479	3.2223	1.3674	0.3208	1.6882	0.0000	1,789.1090	1,789.1090	0.5498	2.0600e- 003	1,803.4675
Maximum	0.9882	8.3626	7.7012	0.0204	2.8744	0.3479	3.2223	1.3674	0.3208	1.6882	0.0000	1,789.1090	1,789.1090	0.5498	2.0600e- 003	1,803.4675

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

#### 3.0 Construction Detail

#### **Construction Phase**

	Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
ľ	1	Vegetation Control	Site Preparation	5/15/2024	10/14/2024	6	131	
		Channel Excavation and Levee	Grading	5/15/2024	10/14/2024	6	131	
i	3	Berm Fill and Tide Gate Placement	Grading	5/15/2024	10/14/2024	6	131	
4	1	Berm Road Base Placement	Grading	9/15/2024	10/14/2024	6	25	

Acres of Grading (Site Preparation Phase): 0 Acres of Grading (Grading Phase): 425.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating -

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Vegetation Control	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Channel Excavation and Levee Lowering	Excavators	5	8.00	158	0.38
Channel Excavation and Levee Lowering	Generator Sets	1	8.00	84	0.74
Channel Excavation and Levee Lowering	Off-Highway Trucks	10	8.00	402	0.38
Channel Excavation and Levee Lowering	Rubber Tired Dozers	2	8.00	247	0.40
Channel Excavation and Levee Lowering	Scrapers	2	9.00	367	0.48
Channel Excavation and Levee Lowering	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Berm Fill and Tide Gate Placement	Excavators	2	10.00	158	0.38
Berm Fill and Tide Gate Placement	Graders	2	8.00	187	0.41
Berm Fill and Tide Gate Placement	Rollers	2	9.00	80	0.38
Berm Fill and Tide Gate Placement	Rubber Tired Dozers	4	8.00	247	0.40
Berm Fill and Tide Gate Placement	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Berm Road Base Placement	Dumpers/Tenders	8	8.00	16	0.38
Berm Road Base Placement	Rollers	2	8.00	80	0.38
Berm Road Base Placement	Tractors/Loaders/Backhoes	2	8.00	97	0.37

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Vegetation Control	1	3.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Channel Excavation	22	55.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Berm Fill and Tide Gate	12	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Berm Road Base	12	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## 3.2 Vegetation Control - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4300e- 003	0.0949	0.1464	2.0000e- 004		4.3500e- 003	4.3500e-003		4.0100e- 003	4.0100e-003	0.0000	17.9312	17.9312	5.8000e- 003	0.0000	18.0761
Total	9.4300e- 003	0.0949	0.1464	2.0000e- 004	0.0000	4.3500e- 003	4.3500e-003	0.0000	4.0100e- 003	4.0100e-003	0.0000	17.9312	17.9312	5.8000e- 003	0.0000	18.0761

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e- 003	8.8000e- 004	8.6200e- 003	2.0000e- 005	2.3600e- 003	1.0000e- 005	2.3700e-003	6.3000e- 004	1.0000e- 005	6.4000e-004	0.0000	1.8952	1.8952	6.0000e- 005	7.0000e- 005	1.9165
Total	1.3000e- 003	8.8000e- 004	8.6200e- 003	2.0000e- 005	2.3600e- 003	1.0000e- 005	2.3700e-003	6.3000e- 004	1.0000e- 005	6.4000e-004	0.0000	1.8952	1.8952	6.0000e- 005	7.0000e- 005	1.9165

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## 3.3 Channel Excavation and Levee Lowering - 2024

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					1.0147	0.0000	1.0147	0.4580	0.0000	0.4580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6252	5.0635	5.0206	0.0146		0.2040	0.2040		0.1882	0.1882	0.0000	1,276.9981	1,276.9981	0.4025	0.0000	1,287.0614
Total	0.6252	5.0635	5.0206	0.0146	1.0147	0.2040	1.2186	0.4580	0.1882	0.6463	0.0000	1,276.9981	1,276.9981	0.4025	0.0000	1,287.0614

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ns/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0162	0.1581	3.8000e- 004	0.0432	2.6000e- 004	0.0435	0.0115	2.4000e- 004	0.0118	0.0000	34.7458	34.7458	1.1700e- 003	1.2100e- 003	35.1349
Total	0.0238	0.0162	0.1581	3.8000e- 004	0.0432	2.6000e- 004	0.0435	0.0115	2.4000e- 004	0.0118	0.0000	34.7458	34.7458	1.1700e- 003	1.2100e- 003	35.1349

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

#### 3.4 Berm Fill and Tide Gate Placement - 2024

#### **Unmitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	/yr		
Fugitive Dust					1.7862	0.0000	1.7862	0.8898	0.0000	0.8898	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2984	3.0559	2.1375	4.7400e- 003		0.1337	0.1337		0.1230	0.1230	0.0000	416.8334	416.8334	0.1348	0.0000	420.2037
Total	0.2984	3.0559	2.1375	4.7400e- 003	1.7862	0.1337	1.9199	0.8898	0.1230	1.0128	0.0000	416.8334	416.8334	0.1348	0.0000	420.2037

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ns/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0130	8.8300e- 003	0.0862	2.1000e- 004	0.0236	1.4000e- 004	0.0237	6.2800e- 003	1.3000e- 004	6.4100e-003	0.0000	18.9522	18.9522	6.4000e- 004	6.6000e- 004	19.1645
Total	0.0130	8.8300e- 003	0.0862	2.1000e- 004	0.0236	1.4000e- 004	0.0237	6.2800e- 003	1.3000e- 004	6.4100e-003	0.0000	18.9522	18.9522	6.4000e- 004	6.6000e- 004	19.1645

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#### Russ Creek and Centerville Slough Restoration Project 2024 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

#### 3.5 Berm Road Base Placement - 2024

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7yr		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1208	0.1272	2.2000e- 004		5.4000e- 003	5.4000e-003		5.1100e- 003	5.1100e-003	0.0000	18.1363	18.1363	4.6700e- 003	0.0000	18.2531
Total	0.0146	0.1208	0.1272	2.2000e- 004	0.0000	5.4000e- 003	5.4000e-003	0.0000	5.1100e- 003	5.1100e-003	0.0000	18.1363	18.1363	4.6700e- 003	0.0000	18.2531

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4800e- 003	1.6900e- 003	0.0165	4.0000e- 005	4.5000e- 003	3.0000e- 005	4.5200e-003	1.2000e- 003	3.0000e- 005	1.2200e-003	0.0000	3.6168	3.6168	1.2000e- 004	1.3000e- 004	3.6573
Total	2.4800e- 003	1.6900e- 003	0.0165	4.0000e- 005	4.5000e- 003	3.0000e- 005	4.5200e-003	1.2000e- 003	3.0000e- 005	1.2200e-003	0.0000	3.6168	3.6168	1.2000e- 004	1.3000e- 004	3.6573

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Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

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#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## Russ Creek and Centerville Slough Restoration Project 2025 Humboldt County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	1,860.00	81,021,600.00	0

#### 1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	103
Climate Zone	1			Operational Year	2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N2O Intensity
 0.004

 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)
 (Ib/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use is a mix of natural terrain such as coastal dunes and sloughs, as well as agirucultural uses.

Construction Phase - Project Specific Construction Phasing and schedule

Off-road Equipment - Project specfic equipment and phasing

Grading - No import or export of materials

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	40510800	20255400
tblAreaCoating	Area_Nonresidential_Interior	121532400	60766200
tblConstructionPhase	NumDays	15,500.00	131.00
tblConstructionPhase	NumDays	15,500.00	131.00

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#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	15,500.00	25.00
tblConstructionPhase	NumDays	6,000.00	131.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblLandUse	LandUseSquareFeet	0.00	81,021,600.00
tblLandUse	LotAcreage	0.00	1,860.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	8.00	9.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

## 2.0 Emissions Summary

# 2.1 Overall Construction <a href="Unmitigated Construction">Unmitigated Construction</a>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2025	0.9226	7.4225	7.4836	0.0203	2.8744	0.3020	3.1765	1.3674	0.2785	1.6459	0.0000	1,786.7867	1,786.7867	0.5493	1.9000e- 003	1,801.0853
Maximum	0.9226	7.4225	7.4836	0.0203	2.8744	0.3020	3.1765	1.3674	0.2785	1.6459	0.0000	1,786.7867	1,786.7867	0.5493	1.9000e- 003	1,801.0853

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#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

#### 3.0 Construction Detail

#### **Construction Phase**

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
Number					Week		
1	Vegetation Control	Site Preparation	5/15/2025	10/14/2025	6	131	
2	Channel Excavation and Levee	Grading	5/15/2025	10/14/2025	6	131	
3	Berm Fill and Tide Gate Placement	Grading	5/15/2025	10/14/2025	6	131	
4	Berm Road Base Placement	Grading	9/15/2025	10/13/2025	6	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 425.75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating -

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Vegetation Control	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Channel Excavation and Levee Lowering	Excavators	5	8.00	158	0.38
Channel Excavation and Levee Lowering	Generator Sets	1	8.00	84	0.74
Channel Excavation and Levee Lowering	Off-Highway Trucks	10	8.00	402	0.38
Channel Excavation and Levee Lowering	Rubber Tired Dozers	2	8.00	247	0.40
Channel Excavation and Levee Lowering	Scrapers	2	9.00	367	0.48
Channel Excavation and Levee Lowering	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Berm Fill and Tide Gate Placement	Excavators	2	10.00	158	0.38
Berm Fill and Tide Gate Placement	Graders	2	8.00	187	0.41
Berm Fill and Tide Gate Placement	Rollers	2	9.00	80	0.38
Berm Fill and Tide Gate Placement	Rubber Tired Dozers	4	8.00	247	0.40
Berm Fill and Tide Gate Placement	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Berm Road Base Placement	Dumpers/Tenders	8	8.00	16	0.38
Berm Road Base Placement	Rollers	2	8.00	80	0.38

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#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Berm Road Base Placement	Tractors/Loaders/Backhoes	2	8.00	97	0.37

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Vegetation Control	1	3.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Channel Excavation	22	55.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Berm Fill and Tide Gate	12	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Berm Road Base	12	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

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003

5.8000e-

003

0.0000

18.0935

#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

### 3.2 Vegetation Control - 2025 Unmitigated Construction On-Site

ROG NOx CO SO2 PM10 Total PM2.5 Total Bio-CO2 NBio- CO2 Total CO2 CH4 N20 CO2e Fugitive Exhaust Fugitive Exhaust PM10 PM10 PM2.5 PM2.5 Category MT/yr tons/yr Fugitive Dust 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 8.6500e-0.0875 0.1460 3.2600e-003 0.0000 0.0000 18.0935 Off-Road 2.0000e-3.5400e-3.5400e-003 3.2600e-17.9483 17.9483 5.8000e-

0.0000

3.2600e-

003

3.2600e-003

0.0000

17.9483

17.9483

3.5400e-003

003

3.5400e-

003

#### **Unmitigated Construction Off-Site**

003

8.6500e-

003

0.0875

0.1460

2.0000e-

004

0.0000

Total

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ns/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2300e- 003	7.9000e- 004	7.9100e- 003	2.0000e- 005	2.3600e- 003	1.0000e- 005	2.3700e-003	6.3000e- 004	1.0000e- 005	6.4000e-004	0.0000	1.8355	1.8355	6.0000e- 005	6.0000e- 005	1.8550
Total	1.2300e- 003	7.9000e- 004	7.9100e- 003	2.0000e- 005	2.3600e- 003	1.0000e- 005	2.3700e-003	6.3000e- 004	1.0000e- 005	6.4000e-004	0.0000	1.8355	1.8355	6.0000e- 005	6.0000e- 005	1.8550

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#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## 3.3 Channel Excavation and Levee Lowering - 2025

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					1.0147	0.0000	1.0147	0.4580	0.0000	0.4580	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5862	4.4168	4.8714	0.0146		0.1750	0.1750		0.1615	0.1615	0.0000	1,276.5233	1,276.5233	0.4023	0.0000	1,286.5795
Total	0.5862	4.4168	4.8714	0.0146	1.0147	0.1750	1.1897	0.4580	0.1615	0.6195	0.0000	1,276.5233	1,276.5233	0.4023	0.0000	1,286.5795

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tor	ns/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0225	0.0144	0.1449	3.7000e- 004	0.0432	2.4000e- 004	0.0434	0.0115	2.3000e- 004	0.0117	0.0000	33.6505	33.6505	1.0500e- 003	1.1100e- 003	34.0085
Total	0.0225	0.0144	0.1449	3.7000e- 004	0.0432	2.4000e- 004	0.0434	0.0115	2.3000e- 004	0.0117	0.0000	33.6505	33.6505	1.0500e- 003	1.1100e- 003	34.0085

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#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

#### 3.4 Berm Fill and Tide Gate Placement - 2025

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	/yr		
Fugitive Dust					1.7862	0.0000	1.7862	0.8898	0.0000	0.8898	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2754	2.7778	2.0922	4.7400e- 003		0.1182	0.1182		0.1087	0.1087	0.0000	416.8305	416.8305	0.1348	0.0000	420.2008
Total	0.2754	2.7778	2.0922	4.7400e- 003	1.7862	0.1182	1.9044	0.8898	0.1087	0.9985	0.0000	416.8305	416.8305	0.1348	0.0000	420.2008

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ns/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0123	7.8700e- 003	0.0791	2.0000e- 004	0.0236	1.3000e- 004	0.0237	6.2800e- 003	1.2000e- 004	6.4000e-003	0.0000	18.3548	18.3548	5.8000e- 004	6.1000e- 004	18.5501
Total	0.0123	7.8700e- 003	0.0791	2.0000e- 004	0.0236	1.3000e- 004	0.0237	6.2800e- 003	1.2000e- 004	6.4000e-003	0.0000	18.3548	18.3548	5.8000e- 004	6.1000e- 004	18.5501

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#### Russ Creek and Centerville Slough Restoration Project 2025 - Humboldt County, Annual

#### EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

## 3.5 Berm Road Base Placement - 2025

#### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ıs/yr							МТ	/yr		
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.1159	0.1270	2.2000e- 004		4.8900e- 003	4.8900e-003		4.6400e- 003	4.6400e-003	0.0000	18.1410	18.1410	4.6700e- 003	0.0000	18.2578
Total	0.0141	0.1159	0.1270	2.2000e- 004	0.0000	4.8900e- 003	4.8900e-003	0.0000	4.6400e- 003	4.6400e-003	0.0000	18.1410	18.1410	4.6700e- 003	0.0000	18.2578

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	ns/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3400e- 003	1.5000e- 003	0.0151	4.0000e- 005	4.5000e- 003	3.0000e- 005	4.5200e-003	1.2000e- 003	2.0000e- 005	1.2200e-003	0.0000	3.5028	3.5028	1.1000e- 004	1.2000e- 004	3.5401
Total	2.3400e- 003	1.5000e- 003	0.0151	4.0000e- 005	4.5000e- 003	3.0000e- 005	4.5200e-003	1.2000e- 003	2.0000e- 005	1.2200e-003	0.0000	3.5028	3.5028	1.1000e- 004	1.2000e- 004	3.5401

# Appendix C

**Summary of Upland and Habitat Mapping** 



## **Technical Memorandum**

#### **August 8, 2022**

То	Jill Demers and Doreen Hansen, Humboldt County Resource Conservation District (HCRCD)  Dean Kwasny and Nathan Key, Natural Resources Conservation Services (NRCS)
From	Jane Cipra, GHD Botanist
Reviewed	Misha Schwarz, GHD Wetland Scientist Jeremy Svehla, GHD Project Manager
Ref. No.	11187323
Subject	Russ Creek & Centerville Slough Enhancement Project - Sensitive Natural Communities, Rare Plants and Upland Delineation

#### 1. Introduction

The Eel River Estuary north of Centerville Beach is a tidal river delta that was diked in the 19<sup>th</sup> century for agricultural use and is now a mosaic of wetlands and pastures actively managed for grazing. These pastures are seasonally flooded by the Eel River, and in the last 20 years have been subject to an increased frequency of overwash from ocean waves. Recent overwash events have eroded protective foredune vegetation and flooded the inland freshwater pastures, causing vegetation community conversion from freshwater wetlands to brackish marshes and brackish pasture. Based on aerial imagery (Google Earth 2019) foredune and nearshore vegetation have been eroded by overwash events over 1.7 linear miles north of Centerville Beach since 2004. A study of Eel River Shorelines Trends measured the net shoreline erosion in the Project Area from 1948 to 2016 to be 16.39 meters, or a loss of 0.24 meter per year (GHD 2018).

The wetlands in the Project Area have been delineated over multiple years by Mad River Biologists (MRB) in 2009 and 2011, Morrisette in 2012, and GHD Inc. (GHD) staff, along with rare plant surveys, and vegetation community mapping since 2013 (Table 1). GHD staff delineated uplands in the Eel River Estuary Preserve (EREP) in the fall of 2013, and surveyed the vegetation in the EREP in 2014. GHD staff delineated uplands and surveyed the vegetation of the Russ Ranch & Timber (RR&T) Properties south of the Preserve in 2015. In 2021, upland delineation and vegetation mapping were revisited and updated due to the changing conditions of the Project Area. GHD staff completed the upland delineations in the right-of-way along Centerville Road on April 27, 2022 and surveyed the road shoulders for rare species in April and June of 2022.

This memorandum is a compilation and summary of all past and current work; mapping of vegetation, rare plants, and uplands in the Project Area.

Table 1 Previous studies and reports in the Project Area.

Author, Year	Title	Study
MRB 2009	Delineation of Wetland and Waters of the US for Connick Ranch	Delineation of wetlands
MRB 2011	Eel River Estuary Preserve Biological Evaluation and Wetland Delineation for Proposed Bridge Construction and Road Improvement Project	Wetland delineation
Morrissette 2012	Eel River Estuary Preserve Biological Evaluation and Wetland Delineation for Russ Creek Bridge Replacement Project.	Wetland delineation
GHD 2013	Eel River Estuary Preserve	Habitat and vegetation mapping
GHD 2014	Eel River Estuary Preserve (EREP) Ecosystem Enhancement Project	Delineation of uplands
GHD 2014	Special-Status Species Evaluation and Special-Status Plant and Animal Surveys for Eel River Estuary Preserve (EREP), Ferndale, California	Special-status plant and animal survey
GHD 2015	Russ Ranch and Timber	Delineation of uplands
GHD 2015	Special-Status Plant Survey for Russ Ranch and Timber component of the Eel River Estuary Preserve Ecosystem Enhancement Project	Rare plant survey

#### 1.1 Location

The Project Area is located on the coast in Humboldt County, west of Ferndale, California. The Project Study Boundary (PSB) extends from Centerville Beach in the south, to the confluence of the Eel and Salt Rivers to the north (**Attachment A; Figure 1**). The Project Area is owned by two private landowners: the southern 601 acres are owned by RR&T, and the northern 1,239 acres comprise the EREP owned by The Wildlands Conservancy (TWC). The Project Area includes coastal dunes and swales, and a patchwork of agricultural lands, tidal salt marsh, brackish marsh, sloughs/open water channels, freshwater ponds and ditches up to 1.3 miles inland from the Pacific Ocean. Prominent water features include the Salt River, Russ Creek, Shaw Creek, and the southern portion of the Western Drainage as well as smaller (seasonal) slough channels and drainage ditches.

The climate is Mediterranean with precipitation most abundant in the winter months, and the average annual rainfall is approximately 48.5 inches. Approximately two thirds of the year, the site is influenced by coastal fog.

The site corresponds to portions of the USGS 7.5 Minute Ferndale and Cannibal Island quadrangles in the 02N and 03N Townships and 02N Range. The coordinates for the Centerville Road access route are 40.576407N, - 124.333866W.

## 1.2 Project Study Boundary (PSB)

Prior to conducting field work, the PSB was discussed and determined in conjunction with the project partners. The PSB was established to focus delineation efforts and vegetation mapping on areas of the site where project features such as site modifications, project alternatives, mitigation, staging, and access could be considered. The uplands delineation effort targeted areas that were topographically higher and thus might be confirmed/documented as uplands (i.e., historic levees, roads, and visually higher and sloped areas) to identify possible mitigation opportunities, spoils disposal options, and temporary staging and stockpile areas for proposed various restoration activities. The delineation did not focus on evaluation/mapping of upland dune complex along the western portion of the parcels.

The PSB consists of level to undulating areas influenced by surface and subsurface hydrology, salinity and past and current land use and modifications. Elevations on site range from -4.0 feet in the tidal channels to approximately 20 feet (NAVD88) in the foredunes. Historical land use for the site includes grazing for dairy through the use of diked levees on historic tidal lands. Many of these wetland pastures are still actively used for grazing.

## 1.3 Upland and Wetland Delineation

In October, 2013, GHD staff conducted a delineation of uplands on the EREP in preparation for a proposed Ecosystem Enhancement Project. GHD staff delineated the uplands of the RR&T Properties in June and September of 2015. GHD staff revised all delineations in 2021 and completed upland delineation in April 2022 in the right-of-way along Centerville Road.

The upland delineation procedure was completed pursuant to the U.S. Army Corps of Engineers (USACE) 1987 Manual; and the Regional Supplement to the USACE Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Regions (2010); and California Coastal Commission (Commission) guidance for wetland delineations (based on a one and three-parameter definitions). Current and historic land use practices in the vicinity of the Project Area consist of active agricultural management. Portions of the Project Area are noted to be potential "Problematic Areas" as the wetlands are considered seasonal (USACE 2010). The Project Area is further complicated due to the seasonal nature of surface and/or groundwater and the observed absence of hydrology within 12 inches of the soil surface in the fall months.

The delineation in this report includes a discussion of site conditions, sampling methodology, sampling results, and conclusions as well as a map delineating proposed upland and wetland boundaries within the PSB for both the EREP and the RR&T parcels (**Attachment A; Figure 2**). A jurisdictional determination (JD) from the USACE (and Commission if deemed appropriate) should be requested to seek concurrence with results reported herein in preparation for anticipated permitting requirements of the proposed project.

## 1.4 Vegetation Community Mapping

In April and June of 2014, GHD staff conducted special status plant surveys in the EREP PSB. GHD staff performed protocol-level rare plant surveys on the RR&T Properties in May and June, 2015. From April through August 2021, GHD staff resurveyed the entire PSB including both the EREP and the RR&T Properties. Vegetation communities and rare plants were remapped in 2021 (**Attachment A; Figures 3-4**) to document vegetation community shifts resulting from the storm surges of 2016 and 2021.

Areas of the site with the highest potential to be affected by proposed restoration activities were prioritized for vegetation characterization and mapping. Detailed surveys and mapping were not performed where the potential for ground disturbing work was determined to be low. Managed pastures were not formally surveyed and were mapped based on a limited reconnaissance site visit and photo-interpretation of aerial imagery. The western portion of the PSB and Russ Creek riparian area on the eastern edge were described and mapped in more detail because these areas were proposed for potential ground-disturbing work.

The results of these field efforts will provide a basis to avoid, minimize, and/or mitigate potential impacts associated with project-related activities and guide future management goals and decisions.

## 2. Regulatory Setting

## 2.1 Federally Protected Plant Species

Special status plant species under federal jurisdiction include those listed as endangered, threatened, or as candidate species by the Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (FESA).

## 2.2 State Protected Plant Species

Special status plant species under California Department of Fish and Wildlife (CDFW) jurisdiction include the following:

- Endangered, Threatened, or Candidate plant species listed under the California Endangered Species Act (CESA),
- Plants listed as Rare under California Native Plant Protection Act (Fish & G. Code, § 1900 et seq.) and,

 California Rare Plant Ranking (CRPR) rare plants on the California Native Plant Society's (CNPS) Lists 1 and 2.

Plant species on CNPS Lists 1 and 2 are considered eligible for state listing as Endangered or Threatened pursuant to the California Fish and Game Code, and CDFW has oversite of these special status plant species as a trustee agency. Such species are considered during the CEQA process because they meet the definition of Threatened or Endangered under Sections 2062 and 2067 of the California Fish and Game Code. Plants on CNPS Lists 3 and 4 do not have formal protection under CEQA but may merit consideration in certain circumstances. CDFW publishes and periodically updates lists of special status species which include all taxa of concern that are tracked by CDFW. Additionally, locally significant plants (CEQA Guidelines, § 15125, subd. (c)), or as designated in local or regional plans, policies, or ordinances) are considered special status plant species (CDFW 2018).

#### 2.3 Sensitive Natural Communities

Natural vegetation communities listed as Sensitive in the California Natural Diversity Database (CNDDB) and on the California Sensitive Natural Communities List are to be addressed within the CEQA review process (CDFW 2021a). Sensitive Natural Communities (SNCs) are primarily classified at the Alliance level according to A Manual of California Vegetation (Sawyer et al. 2009). Legacy SNCs are listed in CNDDB according to the Holland classification system (1986), and Holland types may be used when a current Alliance-level classification does not exist (CDFW 2021a). CDFW considers alliances with a NatureServe State Rank of S1 to S3 to be Sensitive Natural Communities, and therefore these alliances are considered during the CEQA process (CDFW 2021a).

#### 2.4 Environmental Sensitive Habitat Areas

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

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

The Coastal Commission's designation of ESHA generally includes vegetation alliances listed in CDFW's California Sensitive Natural Communities List with an S1- S3 ranking. The Coastal Commission's ESHA category is broadly defined, and it also includes habitat for special-status species, wetlands, riparian areas, and other areas that provide important ecosystem functions (CCC 2013). While there is not a specific list of habitats considered to be ESHA for the State or County, the Coastal Commission through the Coastal Act and counties or municipalities through the Local Coastal Program (LCP) are the jurisdictional agencies that exert authority in identifying and protecting ESHAs in the course of project activities and permitting.

#### 2.5 Eel River Area Local Coastal Plan

The Project Area is within the Appeal and Local Jurisdiction of the Coastal Zone, which is regulated by Humboldt County under the Eel River Area Local Coastal Plan (Eel River Area Plan [ERAP]) under the Coastal Act. The Appeal Jurisdiction is appealable to the California Coastal Commission.

The Eel River Area Plan (certified in 1982) uses the Coastal Act definition of wetlands (Ch.3, p.30), and states "No land use or development shall be permitted in areas adjacent to coastal wetlands, called Wetland Buffer Areas, which degrade the wetland or detract from the natural resource value" (Ch.3, p.31, Humboldt County 2014). The Local Coastal Plan provides specific examples of ESHA within the Eel River Area coastal zone (Ch.3, p.28):

- a. Environmentally sensitive habitats within the Eel River Planning Area include:
  - (1) Rivers, creeks, and associated riparian habitats;
  - (2) Estuaries, sloughs, and wetlands;

- (3) Rookeries for herons and egrets;
- (4) Harbor seal pupping areas;
- (5) Critical habitats for rare or endangered species listed on State or Federal lists.

## 3. Approach

## 3.1 Pre-Survey Investigations

Prior to initiating field work, the *California Natural Diversity Database* (CNDDB) [CDFW 2021b], and the CNPS *Inventory of Rare and Endangered Vascular Plants* (CNPS 2013-2021) were queried to identify the special-status plants known to occur in the project vicinity or with the potential to occur in the PSB. Relevant literature was also reviewed, including recovery plans, status reports, published articles, species lists maintained by TWC staff, and previous regulatory review documents, when available. Topographic maps and aerial photography were also consulted prior to and during the survey to determine potential habitats for target sensitive species occurrence.

The CDFW and the CNPS recommend project assessments include species with potential to occur on nine USGS quads with the project site located in the central quad. The scoping list included species with potential to occur on the USGS 7.5 Minute quadrangles in which the project is located (Ferndale), as well as six adjacent quads (Capetown, Cape Mendocino, Fields Landing, Fortuna, Taylor Peak, and Cannibal Island). For this scoping list, only seven quads were used due to the coastal location of the Project Area and lack of offshore quads to the west. The queries yielded 30 special-status plant species previously documented in the project vicinity. Of these taxa, 14 have a high to moderate probability of occurring within the PSB or are confirmed as present (Table 2).

Table 2 Rare plant potential to occur table

Scientific Name	Common Name	Listing status, CRPR rank	Habitat Description	Bloom Period	Potential to Occur in PSB
Abronia umbellata var. breviflora	pink sand-verbena	1B.1	Coastal dunes	Jun-Oct	High
Angelica lucida	sea-watch	4.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt)	Apr-Sep	Present
Anomobryum julaceum	slender silver moss	2B.2	Broadleafed upland forest, Lower montane & North Coast coniferous forest, outcrops, usually on roadcuts	NA	None
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk- vetch	1B.2	Coastal dunes (mesic), Coastal scrub, Marshes and swamps (coastal salt, streamsides)	Apr-Oct	High
Carex leptalea	bristle-stalked sedge	2B.2	Bogs and fens, Meadows, seeps, marshes and swamps	Mar-Jul	Moderate
Carex lyngbyei	Lyngbye's sedge	2B.2	Marshes and swamps (brackish or freshwater)	Apr-Aug	Present
Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's- clover	1B.2	Marshes and swamps (coastal salt)	Apr-Aug	Present
Castilleja litoralis	Oregon coast paintbrush	2B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub/sandy	Jun	Low
Chloropyron maritimum ssp. palustre	Point Reyes bird's- beak	1B.2	Marshes and swamps (coastal salt)	Jun-Oct	High
Clarkia amoena ssp. whitneyi	Whitney's farewell-to- spring	1B.1	Coastal bluff scrub, Coastal scrub	Jun-Aug	Low
Erysimum menziesii	Menzies' wallflower	FE, SE, 1B.1	Coastal dunes	Mar-Sep	High
Erythronium oregonum	giant fawn lily	2B.2	Cismontane woodland, Meadows and seeps	Mar- Jun(Jul)	None
Erythronium revolutum	coast fawn lily	2B.2	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest/Mesic, streambanks	Mar- Jul(Aug)	Low
Gilia capitata ssp. pacifica	Pacific gilia	1B.2	Coastal bluff scrub, Chaparral (openings), Coastal prairie	Apr-Aug	Low
Gilia millefoliata	dark-eyed gilia	1B.2	Coastal strand, dunes	June- Aug	Present
Hesperevax sparsiflora var. brevifolia	short-leaved evax	1B.2	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie	Mar-Jun	Low
Hesperolinon adenophyllum	glandular western flax	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland/usually serpentinite	May-Aug	None

Scientific Name	Common Name	Listing status, CRPR rank	Habitat Description	Bloom Period	Potential to Occur in PSB
Lathyrus palustris	marsh pea	2B.2	Bogs, fens, Coastal prairie, Coastal scrub, Lower montane & North Coast coniferous forest, marsh, wetland	Mar-Aug	Moderate
Layia carnosa	beach layia	FT, SE, 1B.1	Coastal dunes, Coastal scrub (sandy soils)	Mar-Jul	Present
Lilium occidentale	western lily	FE, SE, 1B.1	Bogs, fens, marshes, swamps (freshwater), Coastal prairie/scrub/bluff scrub, North Coast coniferous forest	Jun-Jul	Moderate
Montia howellii	Howell's montia	2B.2	Meadows and seeps, North Coast coniferous forest, Vernal pools/vernally mesic, sometimes roadsides	Mar-May	Low
Oenothera wolfii	Wolf's evening- primrose	1B.1	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane coniferous forest/sandy, usually mesic	May-Oct	Low
Packera bolanderi var. bolanderi	seacoast ragwort	2B.2	Coastal scrub, North Coast coniferous forest/Sometimes roadsides	May-Jul (Aug)	No
Polemonium carneum	Oregon polemonium	2B.2	Coastal prairie, Coastal scrub, Lower montane coniferous forest	Apr-Sep	Low
Puccinellia pumila	dwarf alkali grass	2B.2	Marshes and swamps (coastal salt)	Jul	High
Romanzoffia tracyi	Tracy's romanzoffia	2B.3	Coastal bluff scrub, Coastal scrub/rocky	Mar-May	None
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	1B.2	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest/often roadcuts	May-Aug	None
Sidalcea oregana ssp. eximia	coast checkerbloom	1B.2	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Jun-Aug	Low
Sisyrinchium hitchcockii	Hitchcock's blue-eyed grass	1B.1	Cismontane woodland (openings), Valley and foothill grassland	Jun	None
Spergularia canadensis var. occidentalis	western sand-spurrey	2B.1	Marshes and swamps (coastal salt)	Jun-Aug	High

#### Status abbreviations:

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

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

California Rare Plant Ranks (CRPR), CNPS rankings for rare plants (CNPS 2022): 1A = Plants presumed extinct in California; 1B = Plants rare, threatened or endangered in California and elsewhere; 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; 3 = Plants about which more information is needed (a review list); 4 = Plants of limited distribution (a watch list); n/a = not applicable;

Threat Code extensions and their meanings: ".1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 – Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat); .3 – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)" (CDFW 2021b).

## 3.2 Mapping Methods

For the 2013-2014 delineation and surveys of the EREP, a Trimble GPS with sub meter accuracy was used. The locations of individual rare plants were not recorded, rather a polygon was drawn to encompass the area of species presence and an estimate of individuals (to the nearest 100) present and approximate percent cover (using standard cover classes of 1-5%, 5-25%, 25-50%, 50-75%, and greater than 75%) at the time of survey was recorded.

For the 2015 RR&T delineation and surveys, staff used a Tablet PC with a Pro 6H receiver which has GPS accuracy of one to three feet depending on environmental and site conditions. A total of three field days were spent mapping vegetation communities within the PSB.

Uplands were mapped in 2021 and 2022 using an Eos Arrow 100 Submeter Global Navigation Satellite System (GNSS) Receiver and an iPad running ArcGIS Collector software in the WGS84 datum.

The 2021 surveys focused on resurveying the areas that had changed due to the storm surge overwash events of 2016 and 2021. Vegetation communities were mapped using points collected in the field with an Eos Arrow 100 Submeter Global Navigation Satellite System (GNSS) Receiver and an iPad running ArcGIS Collector software in the WGS84 datum. Vegetation community boundaries were then digitized with GIS from aerial imagery based on field observations and visible vegetation signatures.

## 3.3 Botanical Survey Procedures

### 3.3.1 Vegetation Community Classification

Vegetation types for the project site were classified following California vegetation classification standards per A Manual of California Vegetation (MCV) (Sawyer et al. 2009), with updated regional information as available. Many of the alliances described herein were previously classified and described by Pickart (2006) for diked wetlands of Humboldt Bay National Wildlife Refuge where Pickart collected elevation, salinity, and soil moisture data to characterize the vegetation alliances. The results of that study are used here as a basis for groupings relating to salinity, with dominant species indicating various salinity regimes.

As described in the MCV, the basic unit of classification is called an alliance. Alliances are based on the dominant or diagnostic species of the stand, usually of the uppermost and/or dominant height stratum. A dominant species covers the greatest area. A diagnostic species is consistently found in some vegetation types but not others. Alliances reflect regional to sub-regional climates, substrates, hydrology, and disturbance regimes. Sub-units called associations are used to further refine alliances, capturing variety in species composition and structure. Vegetation types dominated by non-native plant species are referred to as seminatural stands rather than alliances and have stand types rather than associations (Sawyer et al. 2009).

## 3.3.2 Rare Plant Surveys

Surveys to determine the presence of special-status plant species (listed as rare, threatened, endangered, or candidate for rare, threatened, or endangered species listing under the State or Federal Endangered Species Acts, CNPS, or species of local importance) were conducted at the appropriate blooming or active period for each species. Cara Scott (GHD Botanist) and Annie Eicher (H.T. Harvey Plant Ecologist) surveyed the EREP in 2014 for a total of 30.5 field person hours. Cara Scott also surveyed the RR&T Properties in 2015. Kelsey McDonald (GHD Botanist) and Rose Dana (GHD Botanist) revisited accessible portions of the PSB for rare plants in 2021 and documented recent changes in vegetation communities. Jane Cipra (GHD Botanist) surveyed the right-of-way along Centerville Road for rare plants in April and June of 2022.

U.S. Fish & Wildlife Service (USFWS) and/or other resources agencies and local experts were contacted to verify that botanical surveys were being conducted at an appropriate time of year to allow for climatic microvariations and bloom periods for specific species on a year-to-year basis. Additionally, reference site(s) were viewed if possible, where target plant species are known to occur in the Project Area to verify the species was visible and blooming at the time of surveys. It was determined that a minimum of two seasonally-appropriate

focused botanical surveys should be conducted, one in the spring (April or May) as well as one visit in summer (June to mid-July).

The 2014 and 2015 surveys were floristic in nature following Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities by the California Natural Resource Agency (CDFW 2009) and General Rare Plant Survey Guidelines by the Endangered Species Recovery Program (USFWS 2002). An intuitively controlled survey was conducted that sampled and identified potential habitat(s). Plants were identified to the lowest taxonomic level (genus or species) necessary for rare plant identification. Nomenclature follows The Jepson Manual (Baldwin et al. 2012). Rare plant surveys were conducted by walking the site for target species and recording extent, approximate number, and percent cover of special-status plant species observed. Effort was focused in the EREP south of the existing earthen dike where project-related impacts were possible under alternatives being considered; minimal time was spent north of the earthen dike because no project activities are anticipated there.

## 3.4 Upland and Wetland Delineation

All delineations of uplands and wetlands were conducted by a GHD field team consisting of two qualified technical staff for each field visit including one wetland or soil scientist and one botanist. Table 3 lists the names and titles of all staff that participated in wetland delineation in the PSB.

Table 3 GHD qualified technical staff that performed wetland delineations in the PSB.

Date	Area	Staff	Title		
October 2013	EREP	Lia Webb	Soil Scientist		
		Stephanie Klein	Wetland Ecologist		
		Cara Scott	Botanist		
		Anna Gower	Environmental Scientist		
June, September 2015	RR&T Properties	Lia Webb	Soil Scientist		
		Misha Schwarz			
		Cara Scott	Botanist		
		Jordan Mayor	Botanist		
October 2021	Entire PSB	Misha Schwarz	Wetland/Soil Scientist		
		Kelsey McDonald	Botanist		
		Rose Dana	Botanist		
April 2022	Right-of-way along	Matt Tolley	Wetland/Soil Scientist		
	Centerville Road	Jane Cipra	Botanist		

All GHD field efforts focused on delineation of upland extent, the predominant matrix of seasonal agricultural wetlands and transitional areas present in the Project Area due to low gradient topography and proximity to Russ Creek and the Salt River. The delineation efforts also incorporated results of previous delineation efforts at portions of the site (Mad River Biologists 2011, Morrissette 2012). With this approach of relying on previous results and focusing on apparent upland areas within a matrix of wetland and transitional areas, many (yet not all) of the areas not mapped as uplands, by default likely fall under jurisdiction of the U.S. Army Corp of Engineers (USACE) based on the three-parameter wetland definition and/or Waters of the U.S., as well as under the jurisdiction of the California Coastal Commission (Commission). The delineation efforts required a streamlined approach that targeted larger upland areas that could be considered for use as project mitigation, staging, and/or access. Upland areas were challenging to discern at the time field work was conducted due to the lack of winter wetland hydrology coupled with very low gradient topography. Smaller upland areas may be

present within the larger wetland and transitional complex that dominates the site. The substantial upland dune complex on the western edge of the site was not evaluated (not mapped for either uplands or wetlands).

GHD field staff delineated upland boundaries that meet the three-parameter upland definition as well as other areas that meet the USACE definition of upland (not under USACE jurisdiction) yet may be under the Commission jurisdiction based on presence of one or two-parameter wetland indicators. The typical wetland delineation approach would be to determine one single wetland/upland boundary line that meets multi-jurisdictional requirements of both the Commission and USACE. However, due to a gradual ecotone and a low topographical gradient at this site, the field evaluation determined several areas that meet USACE upland definition, but could be considered jurisdictional by the Commission based on presence of one or two-parameters. Therefore, multiple jurisdictional lines were deemed appropriate to delineate these areas to meet separate USACE and Commission jurisdictional definitions.

The delineation followed the USACE criteria three-parameter approach from the most current USACE wetland delineation manual for the area, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Regions (Version 2.0) (USACE 2010), and per California Coastal Commission wetland definition which relies on a one-parameter approach. Wetland determination data sheets from the most current version of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast were used to document existing conditions for the field effort (USACE 2010) and are provided in **Attachment B**.

Vegetation, soil, and hydrology data were collected at sampling plots to typify areas with similar conditions of topography and vegetation communities in order to delineate the wetland/upland boundary. The defined upland boundaries are presented in figures provided in **Attachment A**; Figure 2. Upland confirmation points are provided as U#tp# naming convention where the test pits/plots are not paired in relation to a transect across wetland/upland boundary, yet were installed for confirmation of site conditions. Additional intermediate/confirmation pits/plots were installed in multiple presumed upland areas for verification of wetland/upland boundary and to confirm extrapolation of delineation boundaries based on previous test pits/plots, but are not recorded on data sheets in order to keep delineation efforts efficient (indicated with "-int" naming convention on maps).

Test pit/plots were evaluated at representative positions to allow onsite identification of upland areas. The surfaces of the fields were transected on foot to ensure no undetected changes in wetland/upland conditions existed. Typically, areas appearing to meet the criteria for wetlands were evaluated and determined individually for wetland characteristics. When possible upland areas were identified, a boundary was designated from the known wetland plot to the presumed edge of the upland. Typically, shifts in topography, soil, and/or vegetation were used to locate the wetland/upland boundary. In some places a complex mosaic of wetlands and uplands were encountered and topographic elevation was utilized in conjunction with plot observations in order to extrapolate the upland/wetland boundary from test pit locations around topographic features.

Along the levee berm west of the existing tidegate, elevation data was used to extrapolate results from vegetation transects conducted on adjacent agricultural lands in preparation for the nearby Salt River Restoration Project to determine the extent of brackish vegetation and wetland/upland boundary along the levee, which is along the 9-foot contour on the outboard/exterior. The adjacent vegetation transects on which this determination is based, included topographic survey and plots documenting extent of brackish hydrophytic vegetation in relation to elevation in the project vicinity. This project proposes to leverage this extensive past data collection as a basis for delineation of brackish wetlands along the outboard levee system. On the interior side of the levee, delineation results were extrapolated from south of the existing tidegate along the west side of existing levee, based on elevation. The area south of tidegate (Upland 1) determined wetland/upland boundary along the levee is along the 7-foot contour.

## 3.4.1 Soils Methodology

The definition of a hydric soil is "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." The USACE 1987 Manual procedures were combined with the Natural Resources Conservation Service's (NRCS) definition of

hydric soils presented in Changes in Hydric Soils of the United States and Field Indicators of Hydric Soils in the United States (USDA 2006), as well as the most recent wetland guidance document Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (USACE 2010). The regional supplement provides detailed descriptions of primary and secondary factors that help determine if wetland hydrology is present at a site. Soil data was recorded on data sheets from the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (USACE 2010; provided in **Attachment B** of this memorandum).

To evaluate the soil matrix and qualitatively describe the presence or absence of redoximorphic features, reductions and concentrations, soil pits were dug to an approximate depth of 14-18 inches. Data on soil color, texture and redoximorphic features were collected. Care was taken to observe mottling (iron concentrations), distinguish between chromas of 1 and 2, and determine the percentage of redoximorphic features in the soil. Redoximorphic features at 2% and 5% are important thresholds for identification of hydric soils for both USACE and CCC delineation purposes.

Colors were described for the entire depth of the test pit. Colors were determined on moist ped surfaces which had not been crushed. To determine the soil matrix colors, redoximorphic features colors and redoximorphic abundance, the Munsell Color Chart (Gretag Macbeth 2000) was used. Soils with low chromas were verified as being hydric or upland using indicators for Depleted Matrix (F3) and Redox Dark Surface (F6) for fine grained soils (USACE 2010).

## 3.4.2 Hydrology Methodology

One primary indicator or two secondary indicators are required to identify the presence of wetland hydrology. Ground water was present in the 2021 and 2022 soil pits to delineate the upland boundary, but direct evidence of ground water (soil saturation, standing water, etc.) was not present in wetland soil pits in 2013 and 2014 due to low rainfall conditions. Therefore, secondary indicators primarily used to delineate the wetland boundary in the absence of primary indicators include: Geomorphic Position (D2), FAC-Neutral Test (D5), and Drainage Pattern (B10).

## 3.4.3 Wetland Vegetation Survey

GHD staff identified the dominant species at each plot and species observed within a radius of five feet were listed in either the tree, shrub or herb stratum. The percent of absolute cover for each species was recorded along with their wetland indicator status as listed in the *Western Mountains, Valleys and Coasts Region-National Wetland Plant List Final Draft Ratings* (Lichvar 2013, USACE 2020). This document classifies plants based on the probability of occurring within a wetland using the categories shown in Table 4.

Table 4 Wetland vegetation indicator categories and probabili	Vetland vegetation indicator categories and probabilities	s
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Code	Wetland Indicator Category	Estimated Probability of Occurrence in Wetlands
OBL	Obligate Wetland	>99% of the time
FACW	Facultative Wetland	67% to 99% of the time
FAC	Facultative	34% to 66% of the time
FACU	Facultative Upland	1% to 33% of the time
UPL	Obligate Upland	Less than 1% of the time
NI	Non-Indicators	Not assigned a rating of wetland condition and are also included in the UPL category

(Tiner 1999, Lichvar et al. 2012)

If greater than 50% of the dominant plant species at each plot are classified Obligate (OBL), Facultative/Wet (FACW), or Facultative (FAC), the vegetation is determined to be hydrophytic (wetland plants) so long as the plants are growing as hydrophytes.

#### 3.4.4 Wetland Determination

#### **Corps of Engineers Jurisdictional Wetland Determinations**

The USACE wetland determination utilized the three parameters (soils, hydrology, and vegetation) but was limited mostly to soils and hydrology (secondary parameters) as the vegetation was relatively uniform throughout the site (except where described in Section 4.1 – Upland Mapping). An area was determined to be USACE and Commission uplands when all three wetland parameters were absent (hydric soils, wetland hydrology, and hydrophytes). If one of the three wetland parameters was not present, then the area was mapped as a USACE upland, yet identified as two-parameter upland (likely considered by Coastal Commission to be a wetland). This property is considered a "Problematic Area" as the wetlands are considered seasonal (USACE 1987 Manual, page 91).

In addition, the USACE noted in the wetland delineation manual that "on a sub-regional basis, questions of indicator status of FAC species may use the following opinion: When FAC species occur as dominants along with other dominants that are not FAC (either wetter or drier than FAC), the FAC species can be considered neutral, and the vegetation decision can be based on the number of dominant species wetter than FAC as compared to the number of species drier than FAC. When a tie occurs or all the dominant species are FAC, the non-dominant species should be considered. The area has hydrophytic vegetation when more than 50 percent of all considered species are wetter than FAC. When either all species are FAC or the number of species wetter than FAC equals the number of species drier than FAC, the wetland determination will be based on the soil and hydrology parameters" (USACE 1987 Manual, page 18).

#### **Commission Jurisdictional Wetland Determination**

Section 30121 of the California Coastal Act (1976) has a broad definition for a wetland:

"Wetland means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater, marshes, open or closed brackish water marshes, swamps, mudflats, or fens."

However, the Commission Administrative Regulations (Title 14 CCR Section 13577 (b)) provides a more explicit definition:

"Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitat."

#### 1994 California Coastal Commission Procedural Guidance

The 1994 California Coastal Commission Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone provides the following information regarding wetland classification system:

Although the U.S. Fish and Wildlife Service (USFWS) classification system is complex, it does provide an objective method for identifying virtually most wetland landscapes. Relative to the USACE, the USFWS definition is generally regarded as being more inclusive in the classification and subsequent delineation of a wetland. This is because the USFWS classification system defines a wetland by the presence "of the proper hydrology and either the presence of hydric soils or hydrophytic vegetation, except in non-soil areas, such as rocky intertidal areas, where only the presence of proper hydrology is required."

#### Cowardin Wetland Definition

According to Cowardin 1979 the definition of a wetland is as follows:

"In general terms, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single feature that most wetlands share is soil or substrate that is at least periodically saturated with or covered by water. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil.

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of the classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season each year."

Based on the above definitions as well as the 1994 guidance, the Commission relies on a one-parameter approach for the determination of a wetland and utilizes the 1979 Cowardin wetland definition/classification and the Classification of Wetlands and Deepwater Habitats of the United States (FGDC 2013). If an area is determined to have one of the three wetland parameters (hydric soils, wetland hydrology, or the predominance of hydrophytes) it is confirmed to be a Commission wetland. However, at this project site, vegetation is not a strong indicator of the wetland/upland boundary as the vegetation present on most of the site has been managed by continued farming and disking for agricultural purposes, and is heavily influenced by the maritime climate. The site includes soils with high available water (silts) which can have a perching effect during rain/stormwater events, and has soils with near iso-mesic temperature regimes. Agricultural management of the vegetation present on this land is the dominating factor influencing the dominant vegetation type at this site (not strongly correlated with the natural community and/or environmental selection) and more recently wave overwash.

Some listed FAC species, such as perennial ryegrass (*Festuca perennis*), have been seeded on the property; and therefore, are not growing as hydrophytes in all cases. Vegetation classified as OBL, FACW, FAC, FACU, or UP can lose strong predictive power at managed or disturbed sites. It is likely that the continued intensive management at this site promotes FAC plant species to be dominant, yet not necessarily growing in hydric conditions (not functioning as hydrophytes), in which case these species are existing as phreatophytes. A hydrophyte is defined as "a plant that grows partly or totally submerged in water" and a phreatophyte is defined as "a deep-rooted plant that obtains its water from the water table or the layer of soil directly above it" (Miriam-Webster Online Dictionary).

From a statistical perspective, when facultative wetland plants dominate an area, they are just as likely to occur in uplands or wetlands (34-66% chance) and therefore lose their predictive value. Field inspection to determine the presence of hydric soil conditions and/or wetland hydrology can alleviate potential technical misinterpretation as to actual hydric/wetland conditions. If the FAC plant species are not growing as hydrophytes (and no other parameters are present, i.e. hydric soil and/or hydrology), then the area should therefore not be considered a wetland based on various descriptive verbage/definitions of wetlands, including language originating from the Commission and USACE.

## 4. Results

## 4.1 Upland Mapping

Table 5 quantifies a summary of upland areas mapped at the project site to date by various consultants (GHD and Mad River Biologists). The "Change" column reflects the loss of uplands due to overwash events since 2015.

Table 5 Summary of Upland Results and change over time

Category	2015 Acres	2021 Acres	2022 Acres	Change
USACE Two-Parameter Uplands				
Upland 5	0.2	0		-0.2
Upland 6	0.1	0		-0.1
Upland 13	1.28	0		-1.28
Mad River Biologists (MRB) One-parameter wetland / Two-parameter Upland	9.83	9.80		-0.03
Centerville Rd One-parameter wetland / Two-parameter Upland			0.02	
SUBTOTAL 2-Par Uplands	11.41	9.80		-1.61
USACE/CCC Uplands				
Upland 1	3.34	3.31		-0.03
Upland 2	0.40	0.40		0
Upland 3	2.47	0		-2.47
Upland 4	0.64	0		-0.64
Upland 7	0.48	0		-0.48
Upland 8	0	0		0
Upland 9	0.62	0		-0.62
Upland 10	0.13	0		-0.13
Upland 14	0.04	0.04		0
Upland 15	3.75	3.75		0
RR&T Upland 1	3.27	0		-3.27
RR&T Upland 2	0.70	0.01		-0.69
RR&T Upland 3	0.46	0		-0.46
RR&T Upland 4	0.23	0		-0.23
RR&T Upland 5	0.34	0		-0.34
Centerville Road right-of-way (2022)			0.66	
SUBTOTAL USACE/CCC Uplands	16.87	7.51		-9.36
MRB Uplands [2009]	39.29	37.42		-1.88
TOTAL MAPPED UPLANDS 2015-21	67.57	54.73		-12.85
TOTAL MAPPED UPLANDS 2015-22			55.39	
Unmapped Area (upland wetland mix) <sup>1</sup>	1,031.59	1,044.43	1,044.59	
PSB Delineation Area TOTAL	1,099.16	1,099.16	1,099.98	

Current and historic land use practices in the vicinity of the site have consisted of active agricultural management primarily for grazing of dairy cows, hay production, and some areas have been disked and planted with agricultural pasture species. Many portions of the Project Area are noted to be potential Problematic Areas (USACE 1987, page 91) due to the altered nature of the site. Cattle currently being grazed on the site may complicate identification of some plant species, can alter the vegetation composition, and often

results in surface soil compaction that can in turn create ephemeral surface ponding (from episaturation) that is not related to groundwater conditions (endosaturation). The wetland/upland determination is further complicated due to the seasonal nature of surface and/or groundwater and absence of hydrology within 12 inches of the soil surface in the fall months. Historically, in average winter rainfall, portions of the site have been reported as being temporarily flooded after storm events, particularly in lower lying portions of the site, yet hydrology parameters were not observed in many locations during the fall delineation efforts due to flashy nature of hydrology and active use of the site.

Wetlands observed at the site are palustrine emergent seasonal wetlands (NWI code PEM1Cd, National Wetlands Inventory 1987; Cowardin 1979; FGDC 2013) and two-parameter USACE upland areas that are potentially considered jurisdictional (degraded/seasonal) according to Commission definitions. The upland areas are predominantly perennial grassland series within the open agricultural bottoms. The upland areas observed at the site consist predominantly of ruderal non-native vegetation (*Agrostis stolonifera-Festuca arundinacea* Semi-Natural Herbaceous Stands). The upland/wetland delineation field results are presented in **Attachment A; Figure 2**. General descriptions of vegetation, soils, and hydrology site conditions observed are presented below, followed by more specific description of the upland areas mapped at the site.

Within the PSB, dominant species within wetlands along the upland/wetlands edges consist of creeping bentgrass (*Agrostis stolonifera*, FAC), perennial ryegrass (*Festuca perennis*, FAC), birds-foot trefoil (*Lotus corniculatus*, FAC), clover species (*Trifolium* sp., FAC), velvet grass (*Holcus lanatus*, FAC), and silverweed (*Argentia anserina*, OBL) and these species are also present in upland plots yet in conjunction with other plant species in most cases. In some low-lying portions of the site including broad pasture areas as well as along roadsides and some levees, current or historic brackish inputs allow for dominant species assemblage to include non-native cordgrass (*Spartina densiflora*, NL) and fat hen (*Atriplex prostrata*, FAC) as well as native brackish species such as pickleweed (*Sarcocornia pacifica*, OBL), salt grass (*Distichlis spicata*, FACW), and occasionally tufted hairgrass (*Deschampsia caespitosa*, FACW).

Upland areas included many of the FAC species listed above as dominant in the wetland and transitional areas, as well as presence of some dominant upland species which were used in the field to key in on the wetland/upland boundary, including sweet vernal grass (*Anthoxanthum odoratum*, FACU), yarrow (*Achillea millefolium*, FACU), and English plantain (*Plantago lanceolata*, FACU). As previously mentioned, in addition, upland sample plots included some dominant herbaceous species that are FAC or wetter such as velvet grass (*Holcus lanatus*, FAC), bentgrass (*Agrostis stolonifera*, FAC), and bird's-foot trefoil (*Lotus corniculatus*, FAC).

The absence of wetland soil and hydrology indicators in upland areas corroborates the assumption that plants within some portions of the property that are listed as FAC are not actually growing as hydrophytes. This assumption is based on the definition that plants identified as FAC are just as likely to be found in both wetland and upland areas. The upland areas that did not have hydric soil or hydrology; yet with vegetation that fell on the cusp are an example of this condition (U1T2). From a statistical perspective, when facultative wetland plants dominate an area, they are just as likely to occur in uplands or wetlands (34-66% chance) and therefore lose their predictive value. Field inspection to determine the presence of hydric soil conditions and wetland hydrology can alleviate potential technical misinterpretation as to actual hydric/wetland conditions. If the FAC plant species are not growing as hydrophytes (as no other wetland parameters are present, i.e. hydric soil nor wetland hydrology), then the area would therefore not be considered a wetland based on various descriptive verbage/definitions of wetlands, including language originating from the Commission and USACE.

The Prevalence Index (PI) was calculated for areas where both soil and hydrology parameters (including topographic position) pointed toward an area being defined as upland, yet the vegetation was dominated by facultative (FAC) species. Where the additional evaluation using the PI determined a value greater than 3.0, the areas were mapped as three-parameter upland. If upon consideration of PI the vegetation still was determined to have a predominance of hydrophytic vegetation, this area was mapped as a two-parameter upland per Coastal Commission except in the following situations:

1) The PI values were very close to 3.0 and rounding up would have brought the PI to 3.0. Although this value is not greater than 3.0, it still does not officially pass the PI for upland vegetation.

- 2) Dominant species within an area were all FAC consisting of one to three FAC pasture species. While the PI is less than 3.0, the area does not include any dominant (> 20% absolute cover) wetter than FAC.
- 3) An area is topographically high and has absence of hydric soils and hydrology, therefore even if vegetation did not pass PI in these cases, the determination was made that these plants were not growing as hydrophytes due to topographic position, in conjunction with absence of wetland hydrology or hydric soils.

#### 4.1.1 Soil

In general, upland soils associated with transects did not meet hydric soil indicators due to either high matrix chroma and/or absence of redoximorphic features. The high chroma soils often had mixed color soil due to source material from levee construction, mixing and historic drainage and slough modifications at the site. Where redoximorphic features were observed, in some cases the contrast was faint and therefore did not meet wetland indicators, and/or the layer was not thick enough or close enough to the surface to meet hydric soil indicators. In some cases, redoximorphic features consisted of a thin band originating at the surface and therefore can be attributed to surface compaction from cattle. Where lower chromas were present, soils did not exhibit redoximorphic features, or the redoximorphic layer did not meet depth and/or thickness requirements to qualify for wetland indicator(s).

### 4.1.2 Hydrology

The field work was conducted in the fall 2013 and summer 2015, both during an unusually dry period prior to onset of wet season conditions. Field work in 2021 was conducted in May and July, and field work in 2022 was conducted in April. In 2013 and 2015, primary indicators that might be utilized as indicators of seasonal wetland hydrology during a normal year were absent. Two secondary wetland hydrology indicators, FAC neutral test (D5) and Geomorphic Position (D2), were observed and were the basis of most wetland hydrology indicator determination.

The absence of wetland hydrology indicators and hydric soil indicators confirmed the assumption that plants within some portions of the property that are listed as FAC are not actually growing as hydrophytes if the area lacks wetland hydrology and hydric soils. This assumption is based on the fact that plants identified as FAC are just as likely to be found in both wetland and upland areas.

## 4.2 Vegetation Communities and Rare Plants.

#### 4.2.1 Overview

From the 2014 botanical survey on the EREP, 137 vascular taxa were identified within the Project Area: 133 herbs, one shrub, two trees, zero ferns, and one fern ally (**Attachment C**). From the 2015 botanical survey on the RR&T Properties, 57 vascular taxa were identified within the Project Area: 55 herbs, one tree, and one fern (**Attachment C**). From the 2022 survey of Centerville Road, 84 vascular taxa were identified in the Project Area: 71 herbs, five shrubs, three trees, and four ferns, and one fern ally (**Attachment C**).

A little under half (49%) of all taxa observed (196 species) in all surveys are introduced species which is double that of the state average (Baldwin et al. 2012) and likely due to past and present agricultural practices. These 97 non-native taxa range from rare to extremely abundant and widespread such as bent grass (*Agrostis stolonifera*) and velvet grass (*Holcus lanatus*). This has resulted in the establishment of several vegetation alliances that are semi-natural stands with introduced species as the dominants such as *Agrostis stolonifera* Semi-Natural Herbaceous Alliance and *Lolium perenne* (now *Festuca perennis*) Semi-Natural Herbaceous Stand (Sawyer 2009).

During the 2014 botanical survey of the EREP, areas within the main slough channel were noted to have scattered bunches of eelgrass (*Zostera marina*) in patches of 0-5%, and 5-15% coverage, located behind the existing onsite tidegate, and as shown in **Attachment A; Figure 3**. The National Marine Fisheries Service has designated eelgrass as Essential Fish Habitat (EFH) and a Habitat of Particular Concern under the Magnuson-Stevens Fishery Conservation and Management Act in 1996. These areas were generally mapped to show the

range of coverages and extent, and trend of eel grass abundance decreasing further south from the tidegate. This area was not extensively surveyed since project activities were uncertain within the slough. Follow up species-specific surveys would be conducted if deemed appropriate in preparation for the proposed project.

## 4.2.2 Special-status Plants

In the 2014 survey of the EREP, seven special status plant species were observed and mapped during the protocol level survey, one of which is a federally and state listed species (Table 6). These rare plants were remapped in 2021(Attachment A; Figure 4). No special-status plant species were observed on the RR&T Properties or along Centerville Road.

Table 6 Special-status plants observed in the EREP in 2014

Scientific Name	Common Name	Listing Status	Approximate Number of Individuals	Approximate Absolute Coverage Range (%)
Angelica lucida	sea-watch	CRPR 4.2	4	5-10%
Carex lyngbyei	Lyngbye's sedge	CRPR 2B.2	> 5,000	50-75%
Castilleja ambigua ssp. humboldtiensis	Humboldt Bay's owl- clover	CRPR 1B.2	3,000	15-20%
Gillia millefoliata	dark eyed gilia	CRPR 1B.2	50	5-10%
Layia carnosa	beach layia	FT, SE, CRPR 1B.1	480	5-10%
Spergularia canadensis var. occidentalis	western sand spurrey	CRPR 2B.1	10	1-5%
Zostera maritima	Eelgrass	NMFS	unknown	unknown

FT = Federally Threatened, SE = California State Endangered

Note: California Rare Plant Ranking (CRPR) lists 1A, 1B and 2 and are considered eligible for state listing as Endangered or Threatened pursuant to the California Fish and Game Code.

NMFS = National Marine Fisheries Service: It is NMFS' policy to recommend no net loss of eelgrass habitat function in California.

## 4.2.3 Vegetation Communities

The distribution of vegetation types in the PSB is influenced by hydrology, salinity, and past and current land use and modifications. The northern portion of the EREP receives tidal input via side channels of the Salt River and also some input directly from the Eel River via a small channel. The area supports a complex of tidal salt and brackish marshes consisting largely of the *Spartina densiflora* Herbaceous Alliance and a "*Sarcocornia* complex" in which the *Sarcocornia pacifica* (Pickleweed) Herbaceous Alliance is the dominant alliance type and other vegetation types are not clearly discernible. Further investigation is needed to fully describe and map the vegetation types in this complex.

The RR&T Properties are former tidelands which have been diked for agricultural use and remain actively managed for grazing. The southern portion of the EREP and the RR&T Properties have experienced significant overwash events in 2016 and 2021 that have introduced large amounts of salt water into the freshwater pastures, converting the vegetation to a brackish pasture community. As these pastures become subjected to more tidal influence, it is expected the vegetation communities will shift to resemble those wetlands north of the dike with increasing *Sarcocornia pacifica* (pickleweed) and *Distichlis spicata* (salt grass).

The 2014 and 2015 botanical surveys identified and mapped 20 alliances within the PSB (Table 7); however, after the increased tidal influence from the tidal overwash events, many of these alliances in the pastures and marshes shifted in species composition to more brackish communities.

#### 2014-2015 Alliances

Abronia latifolia – Ambrosia chamissonis Herbaceous Alliance (dune mat [upland])

Abronia latifolia-Ambrosia chamissonis Herbaceous Alliance (dune mat alliance), Juncus breweri association (Brewer's rush swales)

Agrostis stolonifera Semi-Natural Herbaceous Stands (creeping bent grass flats) with Distichlis spicata Association

Alnus rubra Forest Alliance (red alder forests) with Salix hookeriana (coastal willow dune thickets)

Ammophila arenaria Semi-Natural Herbaceous Stands (European beach grass swards)

Argentina egedii (a.k.a. Potentilla anserina ssp. pacifica) Herbaceous Alliance (Pacific silverweed marshes)

Atriplex prostrata-Cotula coronopifolia Semi-Natural Herbaceous Stands (fields of fat hen and brass buttons)

Baccharis pilularis Shrubland Alliance (coyote brush scrub)

Bolboschoenus maritimus Herbaceous Alliance (salt marsh bulrush marshes)

Carex lyngbyei Provisional Herbaceous Alliance

Deschampsia caespitosa Herbaceous Alliance (tufted hairgrass grass meadows)

Distichlis spicata Herbaceous Alliance (salt grass flats)

Eleocharis macrostachya Herbaceous Alliance (pale spike rush marshes)

Holcus lanatus-Anthoxanthum odoratum Semi-Natural Herbaceous Stands (common velvet grass-sweet vernal grass meadows)

Juncus effusus Herbaceous Alliance (soft rush marshes)

Juncus lescurii Herbaceous Alliance (salt rush swales)

Lolium perenne (currently named Festuca perennis) Semi-Natural Herbaceous Stands (perennial rye grass fields)

Salix hookeriana Shrubland Alliance (coastal dune willow thickets)

Sarcocornia pacifica Herbaceous Alliance (pickleweed mats)

Spartina densiflora Semi-Natural Herbaceous Stands (denseflower cordgrass marshes)

The vegetation mapping effort in 2021 did not identify or map alliance level communities, but instead classified large areas as 13 different general habitat types (Table 8). Previously classified associations are not discussed further below with the exception of the dune mat and dune swales which are Sensitive Natural Communities.

Table 8 Habitat types and indicator vegetation mapped in 2021. Native species are in bold.

2021 Habitat	Acres	Characteristic species
Brackish Marsh	106.5	Argentina egedii (a.k.a. Potentilla anserina ssp. pacifica), Bolboschoenus maritimus, Distichlis spicata, Schoenoplectus pungens, Atriplex prostrata, Polypogon sp., Parapholis incurva
Dunes	123.5	Ammophila arenaria, Abronia latifolia, Ambrosia chamissonis
Dune Swales	45.6	Abronia latifolia, Ambrosia chamissonis, Juncus breweri
Open Sand	169.4	NA
Open Water	87.3	NA
Pasture – Brackish	298.0	<b>Distichlis spicata</b> , Cotula coronopifolia, Agrostis stolonifera, Festuca perennis, Festuca arundinacea, Trifolium fragiferum
Pasture - Freshwater	433.5	Agrostis stolonifera, Festuca perennis, Festuca arundinacea, Trifolium fragiferum
Pasture - Upland	37.4	Holcus lanatus, Anthoxanthum odoratum

2021 Habitat	Acres	Characteristic species
Riparian Forest	1.1	Alnus rubra, Salix hookeriana
Riparian Scrub	26.0	Baccharis pilularis, Salix hookeriana
Ruderal / Developed	13.9	NA
Tidal wetlands – full tidal influence	164.3	Sarcocornia pacifica, Distichlis spicata, Bolboschoenus maritimus, Spergularia marina, Carex lyngbyei, Deschampsia caespitosa, Spartina densiflora, Atriplex prostrata,
Muted Tidal wetlands	294.8	Argentina egedii (a.k.a. Potentilla anserina ssp. pacifica), Eleocharis macrostachya, Juncus effusus, Scirpus microcarpus

#### **Brackish Marsh**

Brackish marsh occurs in the center of the PSB, west of ruderal upland levees and adjacent to pickleweed marshes, and in wet depressions having residual soil salinity. Characteristic species of this habitat type include *Argentina egedii* (a.k.a. Potentilla anserina ssp. pacifica), Bolboschoenus maritimus, Distichlis spicata, Schoenoplectus pungens, Atriplex prostrata, Polypogon sp., and Parapholis incurva.

Argentina egedii (Pacific silverweed) occurs as a dominant species within perennial seeps of brackish wetlands.

Bolboschoenus maritimus (saltmarsh bulrush), a perennial herb commonly found in tidal brackish to saline coastal marshes, grows on slough channel margins and in areas of standing water along the southern edge of the EREP. Areas with salt marsh bulrush include perennial, wet areas adjacent to pickleweed mats.

*Distichlis spicata* (saltgrass) is a halophytic perennial plant of salt marshes, coastal dunes, and moist alkaline areas (Sawyer et al. 2009). Salt grass flats occur in small patches along the channel banks and saline wet depressions. Salt grass flats in the PSB have been severely invaded by *Agrostis stolonifera*, which has altered this native plant community. *Distichlis spicata* is dominant in areas with higher salinity and flooding.

#### **Dunes - Nearshore Ridges**

The PSB includes a dune system on the sand spit south of the mouth of the Eel River and extending south for roughly two thirds of the length of the Project Area toward Centerville Beach. Toward the north end of the PSB the dunes are low and broad, and they generally become higher and narrower to the south. Since 2016, large areas of these dunes have been washed away along the coast in the southernmost 1.7 miles of the PSB and are shown as Open Sand on **Attachment A**; **Figure 3**.

The foredune ridge and low-lying beach wash area of Angel's Camp in the western portion of the RR&T, and the majority of the foredune ridges in the EREP are dominated by the invasive *Ammophila arenaria* (European beach grass), a Cal-IPC ranked clumping perennial grass of high priority. Native species such as *Abronia latifolia*, *Calystegia soldanella*, *Tanacetum bipinnatum* and *Erigeron glaucus* are present albeit in low percentages.

An area at the north end of the EREP contains a stand of *Ammophila arenaria* with scattered coastal shrubs, including the native shrub *Baccharis pilularis* (coyote brush) and a shrubby lupine which appears to be a hybrid between the native *Lupinus rivularis* and the invasive *L. arboreus*.

#### Abronia latifolia – Ambrosia chamissonis Alliance (dune mat)

Dune mat is a community of low-growing herbaceous native plant species found on the protected inner dunes immediately east of the leading edge of the beach. Dune mat plants are low-growing and adapted to shifting sands and a harsh, windy environment and form an alliance recognized by A Manual of California Vegetation (Sawyer et al. 2009). This vegetation alliance is threatened by non-native grasses, iceplant, and lupines that shade and stabilize the sand. This alliance is also particularly threatened by storm surge overwash which has removed entire sand dunes from the PSB.

The dune mat alliance has 10 classified associations in A Manual of California Vegetation (Sawyer et al. 2009) but has been classified in Humboldt County into 14 different proposed associations (Pickart and Solomescsh unpublished data). One of these proposed associations is the *Juncus breweri* association which is discussed under dune swales below. The majority of dune mat associations are upland and would be considered an SNC and likely an ESHA within the Coastal Zone; however, none of the upland dune mat was specifically mapped in 2021 and may be difficult to map due to intermixing of *Ammophila arenaria* and open sand.

Within the area mapped as Dunes, there is a 4.7 acre area that has been mapped as both *Ammophila arenaria* and rare plant habitat for *Layia carnosa* (**Attachment A**; **Figure 4-4**). In this area, *Ammophila* distribution is patchy and *Layia* is intermixed. This area may also be assumed to be dune mat alliance, but additional surveying and mapping would be required to determine the acreages and boundaries of native vegetation.

#### **Dune Swales**

Behind foredune ridges are lower, protected herbaceous dune swales dominated by *Juncus breweri*. These "dry swales" have been described for the South Spit of Humboldt Bay (Pickart 2005) and for the North Spit of Humboldt Bay (Pickart 2006), and proposed as the *J. breweri* association of the *Abronia latifolia-Ambrosia chamissonis* Alliance (a.k.a. dune mat) in a recent floristic classification of Humboldt County dunes (Pickart and Solomescsh unpublished data). In the PSB a few associated species typically characteristic of dune mat were present in *Juncus breweri* swales and include: *Abronia latifolia, Ambrosia chamissonis, Calystegia soldanella,* and *Cardionema ramosissimum*.

Lower, wetter swales were vegetated primarily by *Schoenoplectus pungens*, with *Potentilla anserina* ssp. *pacifica*, and *Agrostis stolonifera*. This species composition differs from wet dune swales described for the North Spit of Humboldt Bay, which are characterized by *Carex obnupta* (Pickart and Solomescsh unpublished data). Although this association has been described as a "dry swale," this community was mapped as a 1-parameter wetland and was not classified as an SNC within the PSB.

#### **Pasture**

Historic tidelands in the PSB have been diked for agricultural use and remain actively managed for grazing. The grazed fields flood seasonally and in general have poorly drained soils. A small area of upland pasture occurs in the southeast portion of the EREP, but the majority of pasture is either freshwater or brackish wetland and in some locations support marsh plant species. Areas with residually high soil salinity and/or muted tidal seepage are brackish. The vegetation communities and salinities of these pastures are changing as tidal influence increases from winter overwash events.

#### Pasture - Brackish

Extensive stands of Agrostis stolonifera are prominent in the grazed areas of the EREP (both freshwater and brackish) and in the western portion of the RR&T Properties. In brackish pasture, *Agrostis stolonifera* is commonly found with *Distichlis spicata* and *Cotula coronopifolia*.

Agrostis stolonifera, a perennial herb not native to California, has invaded native vegetation types throughout the state, especially mesic ones (Sawyer et al. 2009). It has a Cal-IPC Inventory rank of Limited, meaning the ecological impact of this species is considered minor on a state-wide level (Cal-IPC 2013). The Humboldt Weed Management Area (HWMA) rates this species as High Priority, based on its widespread invasion of diked wetlands and ability to alter native plant communities. This aggressive competitor has a wide environmental tolerance, a long growing season, and the ability to spread vegetatively. Once established, Agrostis stolonifera causes changes to soil and water characteristics, such as forming a thick thatch layer that buffers it from high salinities in underlying soils, and alters native plant communities (Pickart 2006). In the EREP, this non-native community type is very aggressive and is frequently out competing the salt grass flats and pickleweed mats, both native halophyte communities.

#### Pasture - Freshwater

Freshwater pasture is found in areas intermediary between upland and brackish wetland in the south of the EREP and the east of the RR&T properties. Characteristic species of freshwater pastures include *Agrostis stolonifera*, *Festuca perennis*, *Trifolium fragiferum*, and *Festuca arundinacea*.

#### Pasture - Upland

Characteristic species of upland pastures are *Holcus lanatus* and *Anthoxanthum odoratum*. This introduced perennial grassland is found in moist pastures and wetlands at the driest moisture levels and lowest salinities. Upland pasture was mapped in the southeast corner of the EREP (**Attachment A**; **Figure 3**).

#### Riparian Forest

#### Alnus rubra Forest Alliance (red alder forest) with Salix hookeriana (coastal dune willow)

Alnus rubra, a common native tree shrub of coastal and inland areas of California, was observed in an upland Russ Creek riparian area intergrading with coastal dune willow, *Salix hookeriana*. The understory of this vegetation type was sparse; yet contains native plant species such as *Polystichum munitum* and non-natives like *Trifoilum repens*, *Malva nicaeensis*, and ruderal grasses.

#### Riparian Scrub

Willow swamps and riparian scrub occur on channel banks near the Salt River at the north end of the EREP, where the elevation is higher and there is a greater freshwater influence than in the adjacent marshlands.

#### Baccharis pilularis Shrubland Alliance (coyote brush scrub)

A small stand of *Baccharis pilularis* ssp. *consanguinea*, a common native shrub of coastal and inland areas of California, occurs at the north end of the EREP intergrading with various non-natives. Coyote brush scrub occurs in association with willow swamps bordering the Salt River, at the upper margin of tidal marsh, bordering slough channels, and sporadically on levees.

#### Salix hookeriana Shrubland Alliance

A small stand of *Salix hookeriana*, a coastal willow often found in floodplains, creeks, rivers and dune hollows, occurs at the north end of the EREP. Associated wetland herbaceous species include *Argentina egedii* and *Juncus effusus*.

Within the EREP, willow swamps also occur on channel banks near the Salt River, where the elevation is higher and there is a greater freshwater influence than in the adjacent marshlands. The willows are evident in the aerial imagery but were not visited in the field. *Salix hookeriana* is the only willow that has been reported occurring on the EREP (TWC unpublished data). Willows have also been planted along freshwater ditch margins in the southeast part of the preserve.

#### Ruderal / Developed

The PSB is interspersed with old levee and berm systems constructed to control seasonal flooding. The vegetation associated with these levees and berms is ruderal with a species composition of several non-native and invasive species including *Cirsium vulgare, Cirsium arvense, Holcus Ianatus, Festuca perennis, Ranunculus repens, Agrostis stolonifera, Trifolium repens,* and *Trifolium fragerium.* Additionally, a few native species occurr on the levees, including *Symphyotrichum chilense, Achillea millefolium, Grindelia stricta var. stricta* and *Baccharis pilularis* ssp. *consanguinea.* A small stand of *Grindelia stricta* was observed at the upper margin of tidal marsh along the north-western levee at the northern end of the EREP.

#### **Tidal Wetlands**

Tidal wetlands in the PSB are bisected by an existing earthen dike that runs from a tidegate on the Cutoff Slough southwest to the dunes (**Attachment A; Figure 3**). Tidal wetlands north of this dike are under full tidal influence from the Eel River Estuary while wetlands south of the dike have a muted tidal influence.

The northern portion of the EREP still receives tidal input via side channels of the Salt River and also some input directly from the Eel River via a small channel. The area supports a complex of tidal salt and brackish marshes. The EREP was described and mapped based on limited reconnaissance of readily accessible areas on the west side, aerial photo-interpretation, and available regional mapping of the invasive cordgrass *Spartina densiflora* (Grazul and Rowland 2011). Dense stands of *Spartina densiflora*, easily discernible in aerial imagery, were mapped as the *Spartina densiflora* Herbaceous Alliance. The remaining areas of tidal marsh were mapped as a "*Sarcocornia* complex" in which the *Sarcocornia pacifica* (Pickleweed) Herbaceous Alliance is the dominant alliance type and other vegetation types are not clearly discernible. Further investigation is needed to fully describe and map the vegetation types in this complex.

#### Tidal Wetlands – Full tidal influence

Sarcocornia pacifica (synonym: Salicornia depressa<sup>1</sup>, pickleweed mat) under full tidal influence in the EREP (north of the earthen dike) is dominant or co-dominant with a variety of associated species, including Spartina densiflora, Distichlis spicata, Jaumea carnosa, Plantago maritima, Carex lyngbyei, Triglochin maritima, Triglochin striata, and Isolepis cernua. The tidal wetlands include areas of potential rare plant habitat.

Deschampsia caespitosa and Carex lyngbyei are two marsh species typically considered indicative of brackish conditions. Both species are common and locally abundant in tidal marshes at the EREP. Deschampsia caespitosa often occurs as a co-dominant or sub-dominant with Sarcocornia pacifica. A Deschampsia caespitosa Herbaceous Alliance is recognized in MCV and discussed below.

Carex lyngbyei is locally abundant as a dominant species in full tidal wetlands, generally bordering slough channels, and also occurs in association with Sarcocornia pacifica and other species away from channels (Attachment A; Figures 4, 4-1 – 4-5). Where dense, there are few other species, or it is intermixed with the invasive Spartina densiflora. In other locations, C. lyngbyei grows in association with Jaumea carnosa, Distichlis spicata, Plantago maritima, Sarcocornia pacifica, Triglochin maritima, and Deschampsia caespitosa.

The occurrence of *Carex lyngbyei* stands at the upper edge of salt marsh and near the mouths of tidal creeks has been noted in general descriptions for regional tidal coastal marshes (Schlosser and Eicher 2012). The species is typically associated with brackish conditions, and stands are more prominent in the Eel River estuary than in Humboldt Bay marshes.

Carex lyngbyei has as CNPS Rank of 2.2, fairly endangered in California, but more common elsewhere (CNPS 2022). Carex lyngbyei is locally abundant in intertidal coastal marshes along the coasts of Alaska, Washington, and Oregon. In California, the species extends as far south as Bolinas Lagoon. In California, Carex lyngbyei is possibly threatened by grazing, non-native plants, and habitat disturbance (CNPS 2022) At EREP, the main threat to existing stands is encroachment by the invasive cordgrass Spartina. Control measures for Spartina in the EREP will need to follow mitigation measures to protect Carex lyngbyei per the PEIR for the regional Spartina eradication plan (H. T. Harvey & Associates 2013).

Spartina densiflora stands are located in the northern tidal wetlands of the EREP and are characterized by over 50% cover of Spartina densiflora. In these stands, Spartina densiflora forms monocultures with few associated species. It should be noted that Spartina densiflora also occurs at lower density throughout much of the remaining Full Tidal Wetlands (Attachment A; Figure 3).

Spartina densiflora is an invasive plant identified by the California Invasive Plant Council (Cal-IPC) with a high alert rating. Spartina densiflora has invaded an estimated 90% of salt marshes throughout Humboldt Bay and the Eel River estuary since its inadvertent introduction to the region in the 1870s. Spartina densiflora invasion

<sup>&</sup>lt;sup>1</sup>Ball, P.W., 2013. Salicornia, in Jepson Flora Project (eds.) Jepson eFlora, http://ucjeps.berkeley.edu/cgi-bin/get\_IJM.pl?tid=42666, accessed on Jul 29 2015

reduces biodiversity by displacing native plant species and altering habitat for fish and wildlife species, and it alters ecological processes such as biogeochemical cycling and sediment dynamics. A regional eradication program is underway to control *Spartina densiflora* in Humboldt County, as part of a larger effort along the West Coast of North America (H. T. Harvey & Associates 2013)

On the EREP, dense stands of *Spartina densiflora* are found bordering slough channels and open water areas where salinity is high. The largest concentration of dense *Spartina* is located at the furthest southern extent of the Full Tidal Wetlands, west of the earthen dike (**Attachment A**; **Figure 3**). Dense *Spartina* stands also occur in the northern part of the site, near the main channel of the Eel River. A few small, narrow stands border Cutoff Slough behind the large tidegate and additional plants occur as scattered individuals. Restrictions to tidal input limit the degree of *Spartina densiflora* invasion.

Tufted hair grass, *Deschampsia caespitosa*, is a perennial grass often found in sand dunes, coastal terraces and seasonally flooded areas with moderate salinity (Sawyer et al. 2009). In the tidal marshes of the EREP, *Deschampsia caespitosa* dominates some areas, but more often occurs as a co-dominant with *Sarcocornia pacifica*, *Grindelia stricta* var. *stricta*, and *Distichlis spicata*.

#### Tidal wetlands - Muted tidal influence

Tidal wetlands in the PSB are bisected by an existing earthen dike that runs from a tidegate on the Cutoff Slough southwest to the dunes (**Attachment A**; **Figure 3**). Tidal wetlands north of this dike are under full tidal influence from the Eel River Estuary while wetlands south of the dike have a muted tidal influence. The tidal wetlands south of the dike include a wide variety of vegetation types that intergrade into freshwater and brackish pasture, freshwater and brackish marsh, and full tidal wetlands. These vegetation communities are rapidly shifting due to the changes in tidal regimes from wave overwash events.

In muted tidal wetlands *Sarcocornia pacifica* occurs in wet areas with residually high soil salinity, such as along slough channel banks and in wet saline depressions. Bordering Cutoff Slough, the pickleweed mat occurs along the channel banks adjacent to *Bolboschoenus maritimus* growing on the water's edge. Small patchy areas were found at the toe of levees on the western and eastern edges of Western Drainage and around the Russ Creek washout area.

The *Sarcocornia pacifica* stands on the RR&T Properties are young and mostly monotypic in comparison to other salt marsh stands in the vicinity due to the new wave incursions over the dunes within the last 20 years. On higher ground with less frequent tidal inundation in the EREP, *Grindelia stricta* var. stricta often is a codominant with *Sarcocornia*.

Species that are characteristic of the muted tidal wetlands include: Sarcocornia pacifica, Agrostis stolonifera, Distichlis spicata, Potentilla anserina ssp. pacifica, Eleocharis macrostachya, Scirpus microcarpus, and Juncus effusus.

These vegetation communities are already undergoing changes due to the increased salinity from wave overwash are expected to shift further with increased cover in *Sarcocornia pacifica, Distichlis spicata, Bolboshoenus maritimus* as tidal influence increases.

#### 4.2.4 Sensitive Natural Communities

In the 2016 surveys vegetation communities were documented using the rapid assessment method to classify them at the alliance level and evaluate as potential Sensitive Natural Communities (SNCs). The Project Area contains eight vegetation communities with a NatureServe State Rank of S1 to S3 which are considered SNCs by the CDFW (Table 8). Of these eight communities, seven are dominated by wetland indicator species and were mapped as Coastal Commission 1-parameter wetlands and USACE 3-parameter wetlands (in blue below). The only upland SNC in the PSB is dune mat (*Abronia latifolia – Ambrosia chamissonis* alliance). All other vegetation communities listed in Table 7 above did not meet the criteria for SNCs.

Table 9 Vegetation alliances classified as Sensitive Natural Communities with California state ranks S1-3. Rows in blue are also three-parameter wetlands.

Common Name	Scientific Name	Classification	Global Rank	State Rank	Wetland
Lyngbye's sedge swathes	Carex lyngbyei	Provisional alliance	GNR	S1	1-Par.
Pacific silverweed marshes	Argentina egedii	Alliance	G4	S1	1-Par.
Salt marsh bulrush marshes	Bolboschoenus maritimus	Alliance	G4	S3	1-Par.
Dune mat	Abronia latifolia – Ambrosia chamissonis	Alliance	G3	S3	Upland
Salt rush swales	Juncus lescurii	Alliance	G3	S2?	1-Par.
Pickleweed mats	Sarcocornia pacifica (Salicornia depressa)	Alliance	G4	S3	1-Par.
Coastal tufted hair grass – Meadow barley – California oatgrass meadow	Deschampsia cespitosa – Hordeum brachyantherum – Danthonia californica	Alliance	GNR	<b>S3</b>	1-Par.
Coastal dune willow thickets	Salix hookeriana	Alliance	G4	S3	1-Par.

#### Dune mat (Abronia latifolia – Ambrosia chamissonis alliance)

Dune mat is an SNC with a state ranking of S3 (Sawyer at al. 2009, CDFW 2021a). The dune mat alliance has not been specifically mapped in the PSB, but may be included in the Dunes and Dune Swales habitats. This community intergrades with *Ammophila arenaria*, open sand, and dune swales and the boundaries may be shifting and ambiguous. This vegetation community is threatened by non-native invasives such as European beach grass which is dominant in the majority of the foredunes in the PSB. Dune mat is also threatened in the PSB by overwash storm surge events which have removed the entire foredune substrate.

Dune mat and other dune habitats including open sand and European beach grass swards may also be considered Environmentally Sensitive Habitat Areas (ESHA) by the Coastal Commission under Section 30240 (CCC 2013).

## 5. Conclusions

## 5.1 Upland and Wetland Evaluation

Based on all upland/ wetland evaluations conducted in the PSB from 2015 to 2022, 8.17 acres of three-parameter uplands were mapped that meet USACE and Coastal Commission definitions and are non-jurisdictional. Additionally, 9.82 acres of two-parameter uplands were mapped by GHD that meet the USACE definition of upland, but may be considered jurisdictional wetlands by the Coastal Commission due to presence of one wetland parameter (hydrophytic vegetation). To date an additional 37.42 acres of uplands have been mapped by other investigators on the project site (Mad River Biologists 2011; Morrisette 2012).

Over the course the study period from 2009 (MRB) to 2021 (GHD), 10.96 acres of upland were lost, largely due to tidal inundation from the winter storm overwash events in 2016 and 2021. An additional 1.88 acres of uplands originally delineated by MRB in 2009 were lost near the north barn (soil pit shown on Appendix A; Figure 2-1), either due to changing hydrology or re-evaluation.

The uplands mapped at the site by GHD, MRB, and Morrisette, consist of levees, roads, developed areas, stockpiled material uplands, as well as natural topographically higher areas. The identified upland areas are within a matrix of predominantly palustrine agricultural wetlands, transitional areas, brackish marsh, and slough channels. Additional upland areas exist on the site that were not mapped as part of the current effort, including the large upland dune complex to the west and likely some additional upland micro-topographic areas within the predominant wetland and transitional matrix.

## 5.2 Special-status Plants

The 2014 survey EREP identified seven special-status plants present in the Project Area, one of which is a federally and state-listed plant species: beach layia (*Layia carnosa*) FT, SE, CRPR 1B.1 (**Attachment A**; **Figure 4**). These species were all relocated and confirmed in the 2021 survey. No special-status plants were observed on the RR&T Properties or along Centerville Road.

## 5.3 Special Terms and Conditions

### 5.3.1 Purpose of this Report

To achieve the delineation objectives stated in this report, conclusions are based on the information available during the periods of the investigation in 2013, 2015, 2021 and 2022. This report does not authorize individuals to develop, fill or alter the wetlands delineated. Verification of the delineation by jurisdictional agencies, including the USACE and the California Coastal Commission may be necessary prior to the use of this report for site development purposes. Permits to affect wetlands must be obtained from the involved government agencies. If permits are obtained to develop the delineated wetlands after agency review, and with written verification, the delineation may or may not be given an expiration period (depending on which form or jurisdictional approve is obtain). If filling is used under permitted authority, care should be given to maintain a sufficient quantity of fill to prevent a reestablishment of wetlands. Land use practices and regulations can change thereby affecting current conditions and delineation results.

This report was prepared for the exclusive use of the HCRCD. GHD is not liable for any action arising out of the reliance of any third party on the information contained within this report.

## 5.3.2 Scope and Limitations

This report: has been prepared by GHD for the HCRCD and may only be used and relied on by the HCRCD for the purpose agreed between GHD and the HCRCD. GHD otherwise disclaims responsibility to any person other than the HCRCD arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

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

The opinions, conclusions and any recommendations in this report are based on conditions encountered, information reviewed at the date of preparation of the report, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points. Site conditions may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change.

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

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

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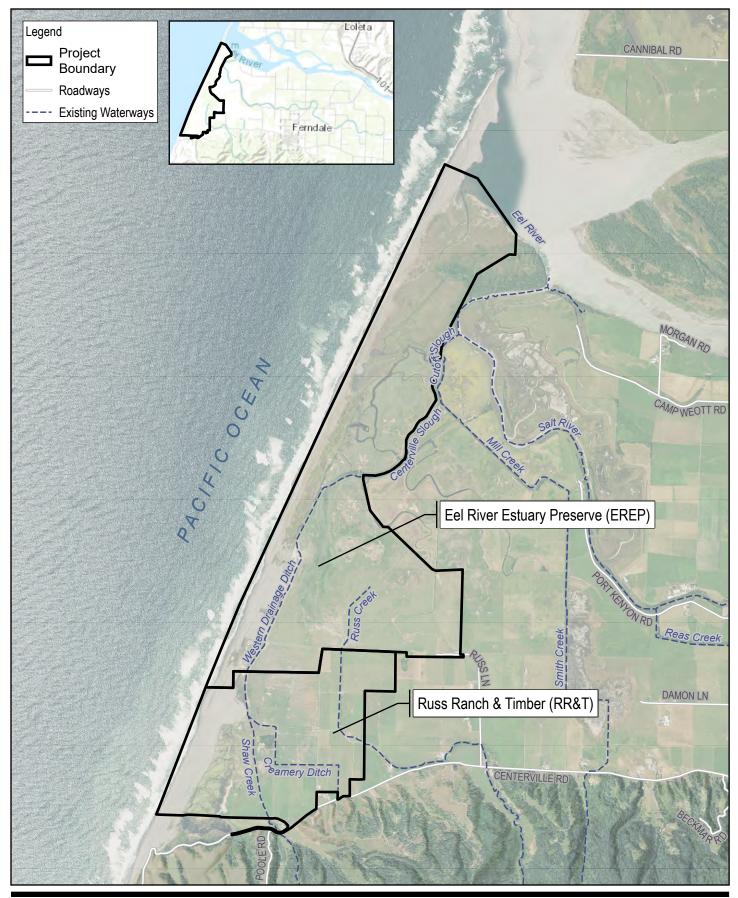
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## **Attachments**

## Attachment A

**Figures** 







GHD

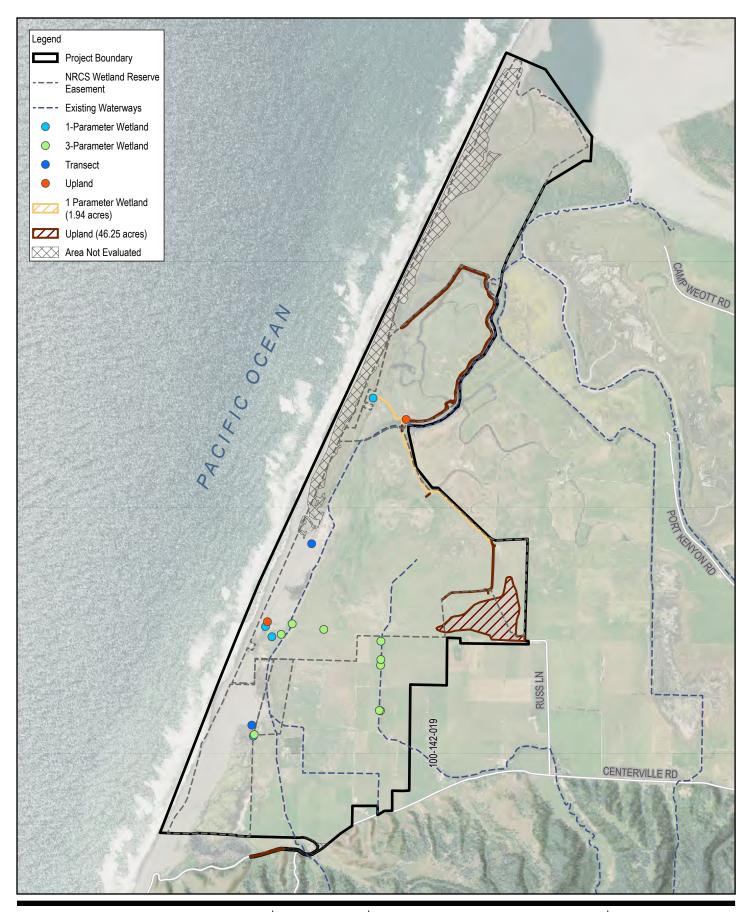
Humboldt County Resource Conservation District Russ Creek and Centerville Slough Restoration Project

Project No. 11187323 Revision No. -

Date Apr 2022

**Project Study Boundary and Vicinity** 

FIGURE 1







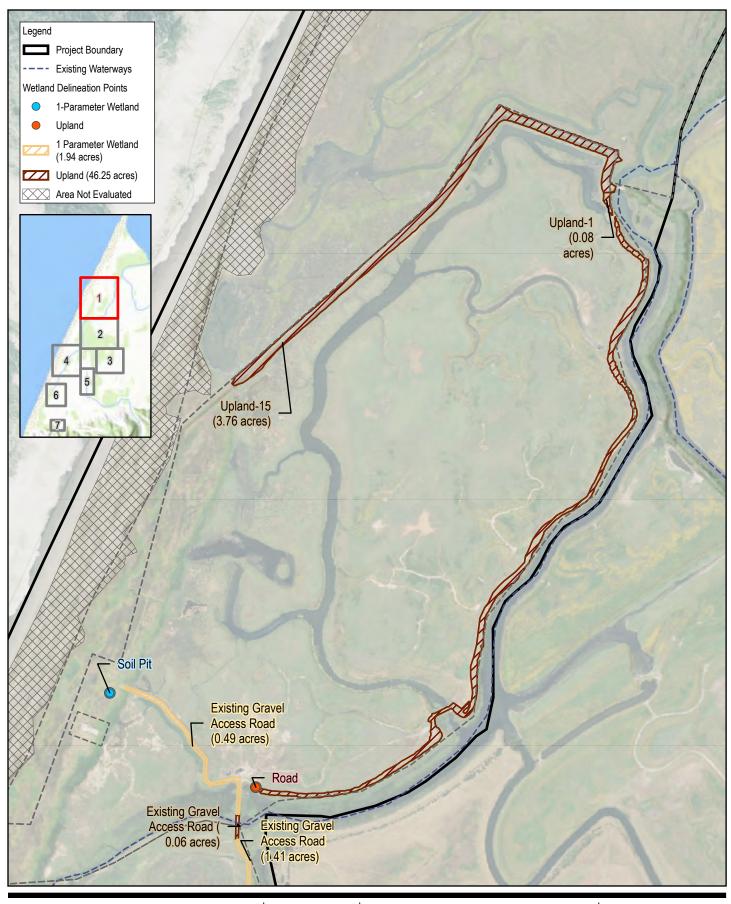


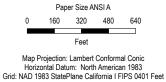
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Project No. 11187323 Revision No. Date June 2022

**Upland Delineation** Overview

FIGURE 2





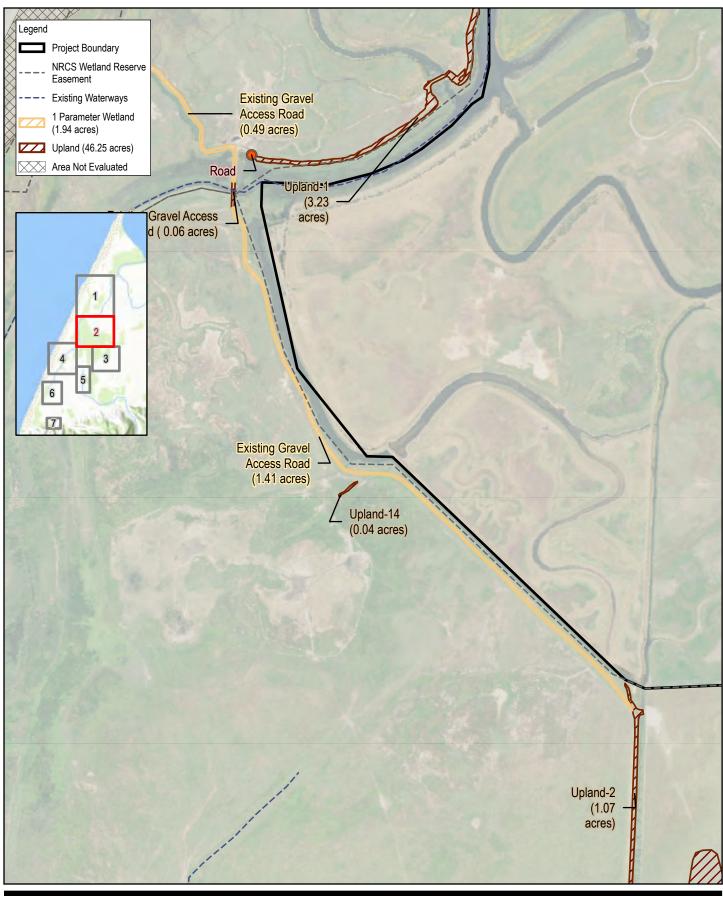


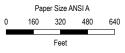
NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Project No. 11187323 Revision No. -

Date June 2022

**Upland Delineation** 



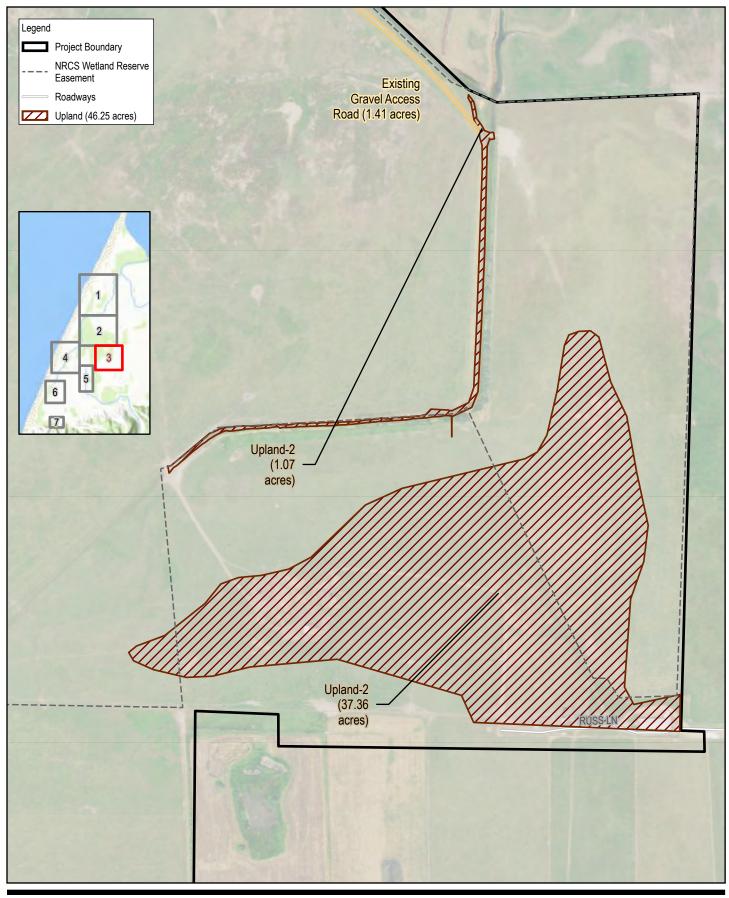


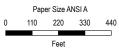


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**Upland Delineation** 





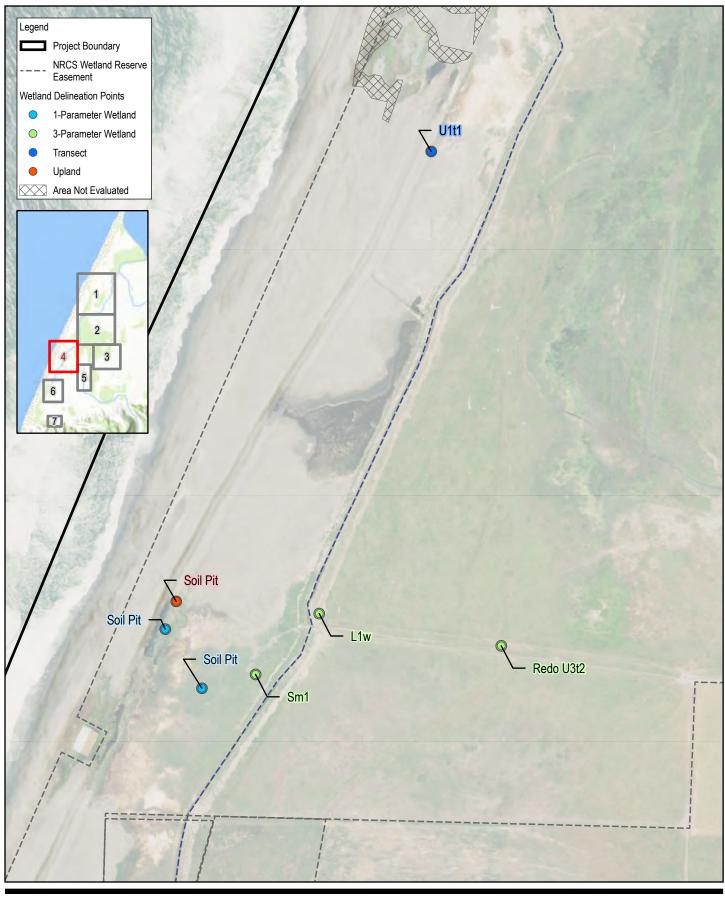


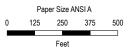


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**Upland Delineation** 





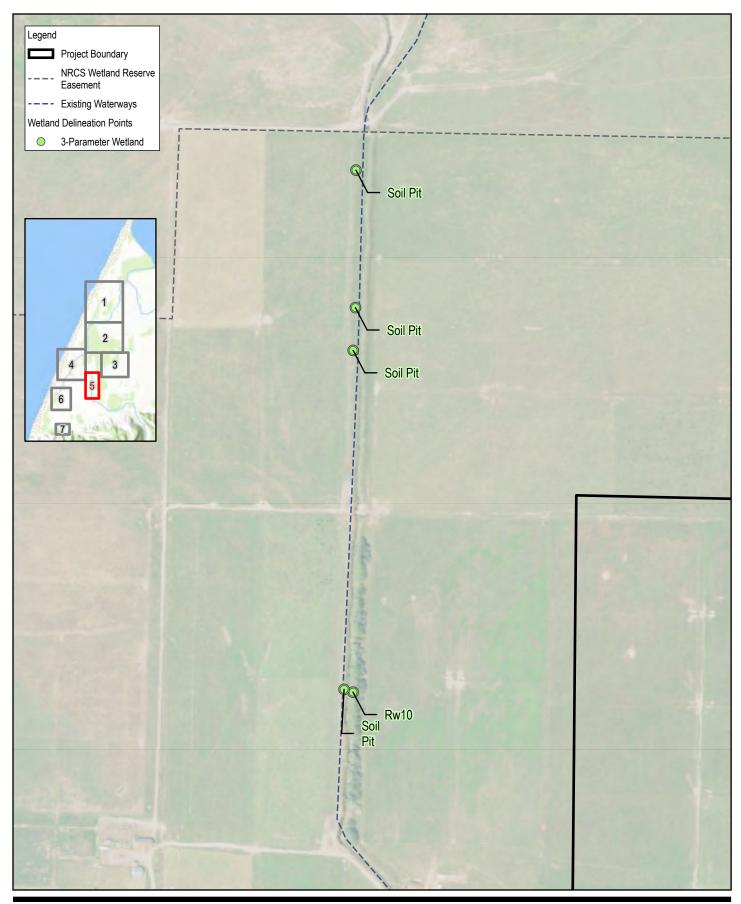


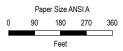
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Date June 2022

**Upland Delineation** 





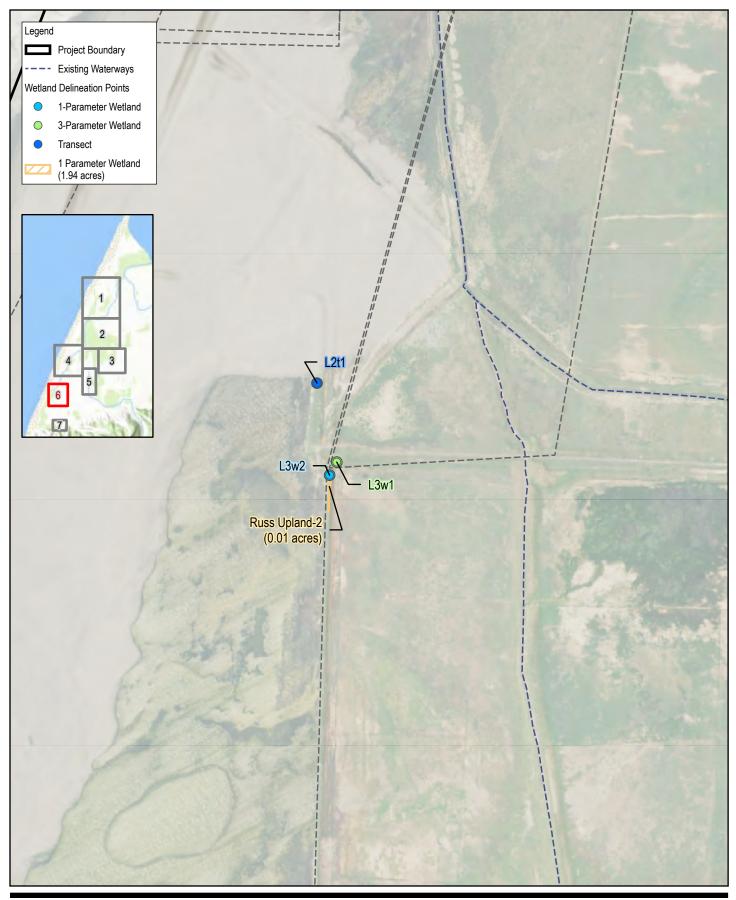




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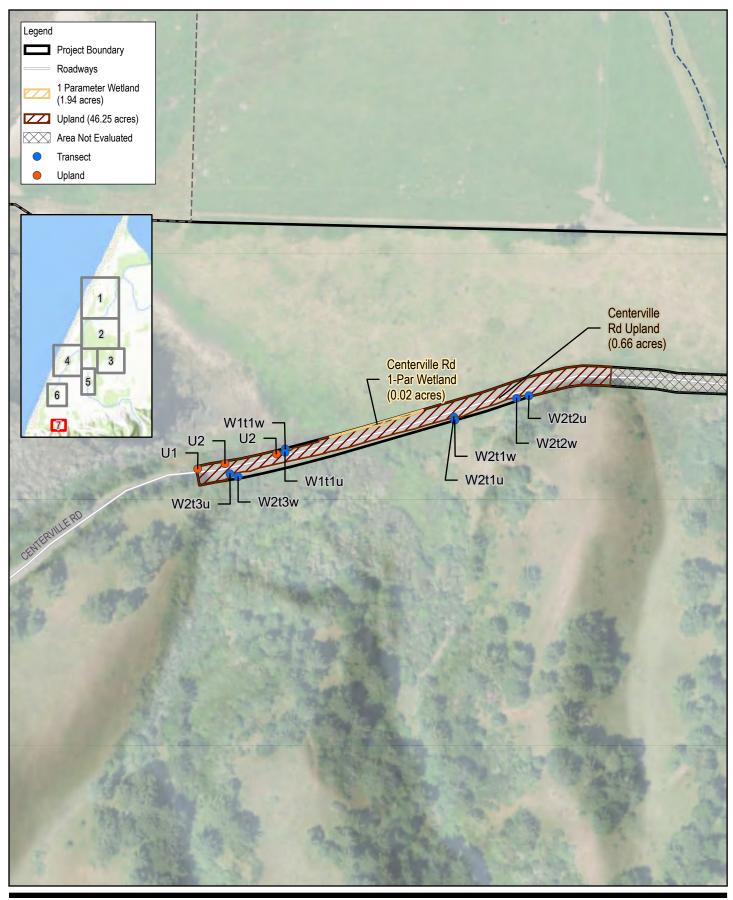


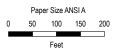
GHD

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Date June 2022

**Upland Delineation** 





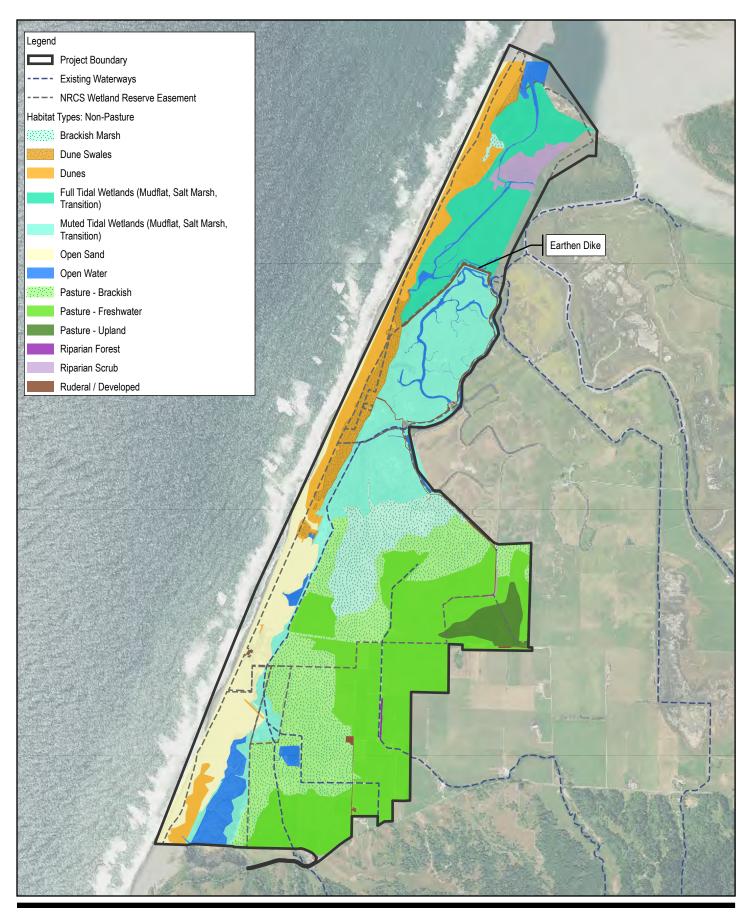


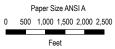


NRCS-HCRCD Russ Creek and Centerville Slough Restoration Project No. 11187323 Revision No. -

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**Upland Delineation** 





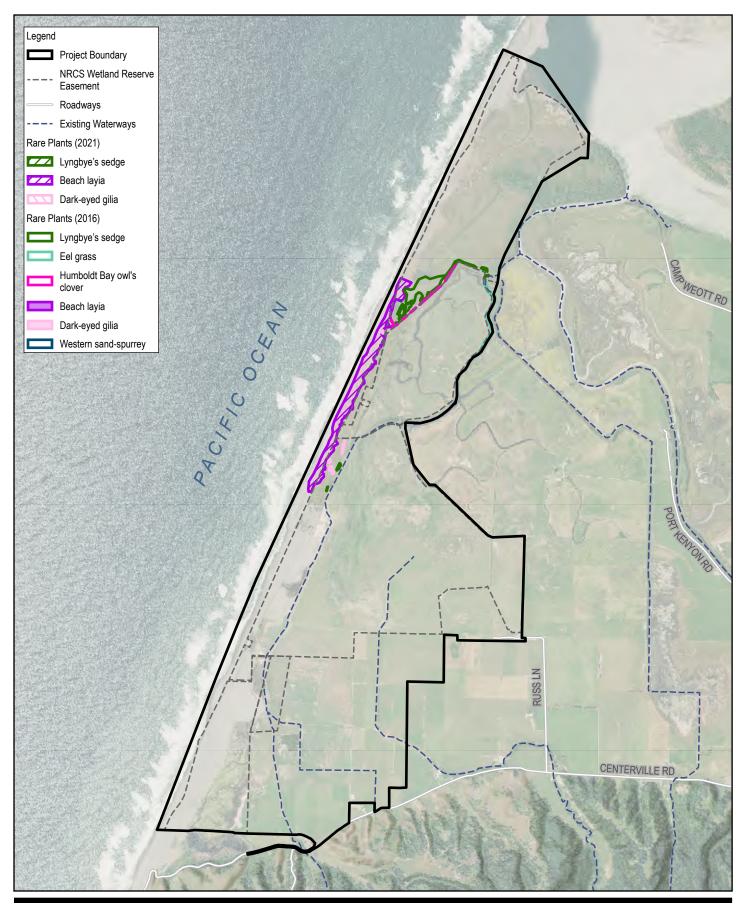


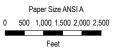
Humboldt County Resource Conservation District Russ Creek and Centerville Slough Restoration Project

Habitat Classification Overview Project No. 11187323
Revision No. Date May 2022

...., \_\_\_\_

FIGURE 3





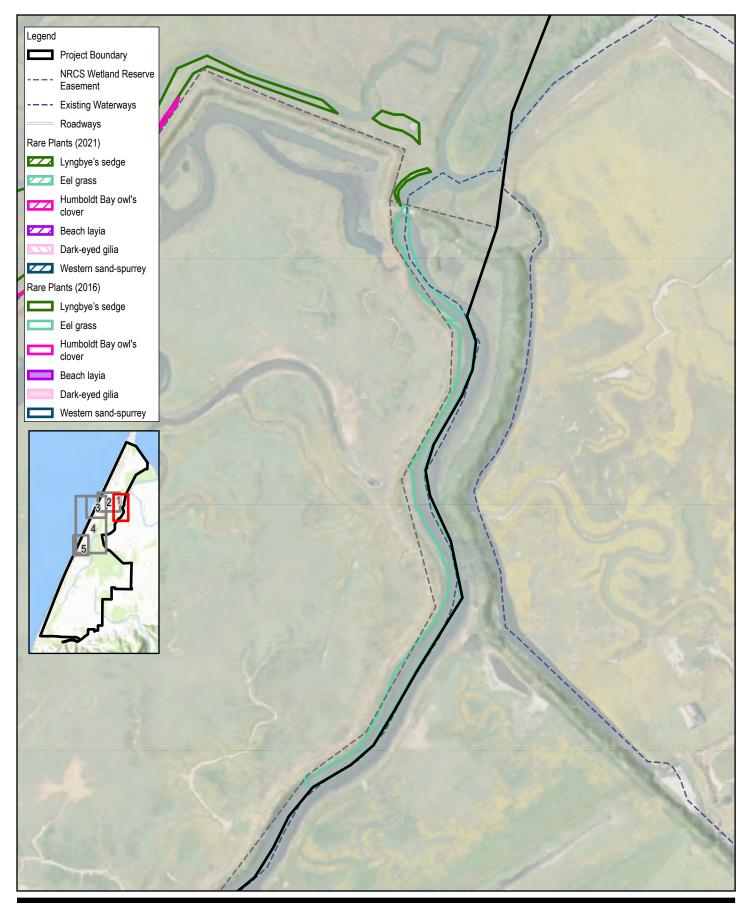


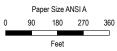


NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Rare Plants Reconnaissance Overview (Combined 2015-16 and 2021 Data) Project No. 11187323
Revision No. Date April 2022

FIGURE 4







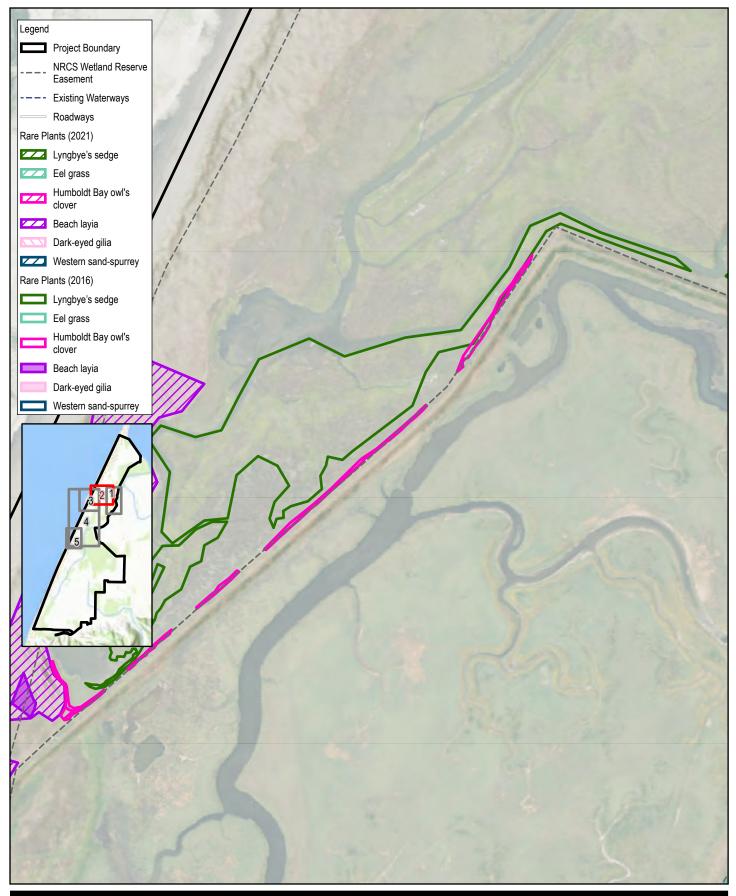


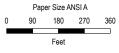
NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Project No. 11187323
Revision No. -

Date April 2022

Rare Plants Reconnaissance (Combined 2015-16 and 2021 Data)





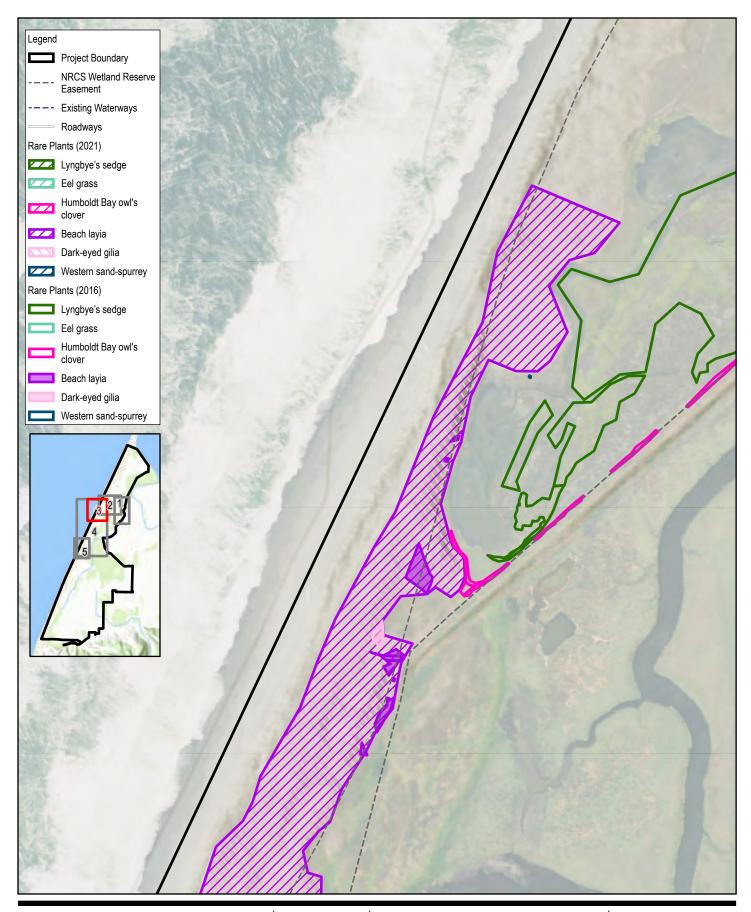


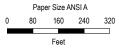
NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Rare Plants Reconnaissance (Combined 2015-16 and 2021 Data)

Project No. 11187323 Revision No. -

Date April 2022





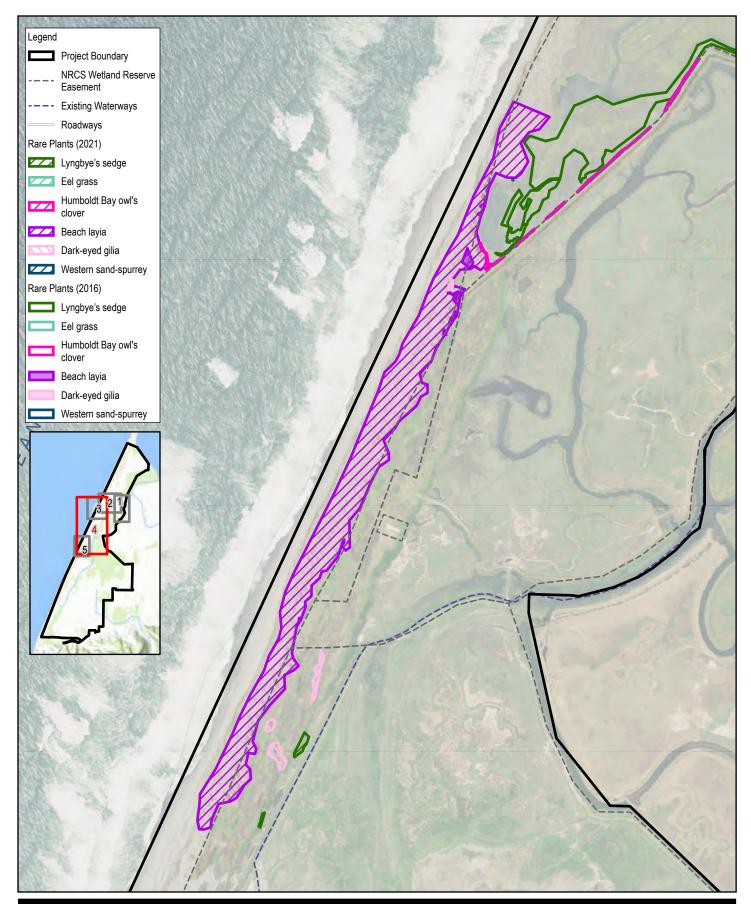


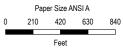


NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Project No. 11187323
Revision No. Date April 2022

Rare Plants Reconnaissance (Combined 2015-16 and 2021 Data)





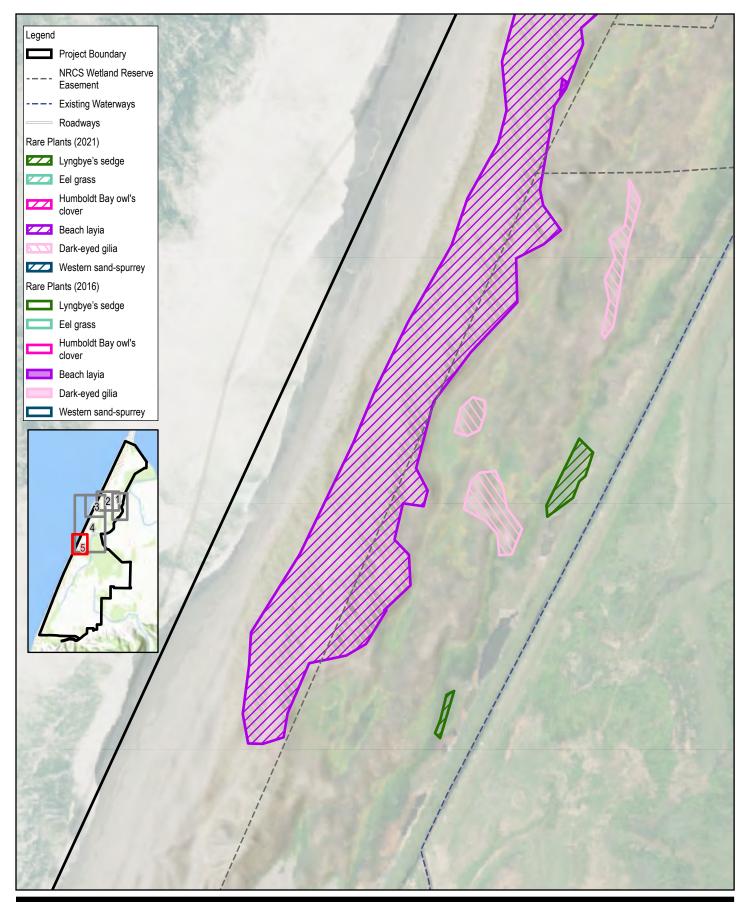


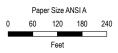


NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Project No. 11187323
Revision No. Date April 2022

Rare Plants Reconnaissance (Combined 2015-16 and 2021 Data)









NRCS-HCRCD Russ Creek and Centerville Slough Restoration

Rare Plants Reconnaissance (Combined 2015-16 and 2021 Data)

Project No. 11187323 Revision No. -

Date April 2022

# Attachment B

## **Wetland Delineation Datasheets**

pplicant/Owner: TW nvestigator(s): CS/AG		1	Section, Township, Ra	ange:
				, convex, none): In our / In the Slope (%): 1 (
bregion (LRR):		Lat:		Long: Datum:
il Map Unil Name:				NWI classification:
		The second secon		(If no, explain in Remarks.)
				"Normal Circumstances" present? Yes No
e Vegetation, Soil, o	r Hydrology	naturally pro	blematic? ${\cal N}$ (If n	needed, explain any answers in Remarks.)
JMMARY OF FINDINGS - A	Attach site n	nap showing	sampling point	locations, transects, important features, et
lydrophytic Vegetation Present? lydric Soil Present? Velland Hydrology Present?	Yes Yes		Is the Sample	
Remarks:			B 1 7	
EGETATION – Use scientifi	c names of			
ree Stratum (Plot size:			Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:
				Total Number of Dominant Species Across All Strata: (B)
				Percent of Dominant Species
	Š	P	= Total Cover	That Are OBL, FACW, or FAC: (A/B
apling/Shrub Stratum (Plot size:				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
				OBL species $\frac{20}{30}$ x1= $\frac{20}{30}$
1				FACW species 30 x2 = 60 FAC species 50 x3 = 150
				FACU species
erb Stratum (Plot size: M		9	= Total Cover	UPL species
Anyo St. St.		35	1 FAC	Column Totals: 100 (A) 230 (B)
Districtis Sp.		30	V. FACW	Prevalence Index = B/A = 2.3
		10	N FAC	Hydrophytic Vegetation Indicators:
Latus co.		22	2	
		_ H	OBL.	1 - Rapid Test for Hydrophytic Vegetation
Salicornia Sp. Aster Ch.		5	N FAC	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
Salicornia Sp. Aster Ch.		5		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹
Salicornia Sp Aster Ch.			N FAC	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin
Salicornia Sp. Aster Ch.			N FAC	<ul> <li>∠ 2 - Dominance Test is &gt;50%</li> <li>∠ 3 - Prevalence Index is ≤3.0¹</li> <li>_ 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)</li> </ul>
Salicornia Sp. Aster Ch.			N FAC	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹
Salicornia Sp. Aster Ch.			N FAC	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain)
Salicornia Sp. Aster Ch.			N FAC	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹
Salicornia Sp. Aster Ch.  O.  O.  Joody Vine Stratum (Plot size:	)		N FAC	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Salicornia Sp. Aster Ch.	)		N FAC	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must

- In	VICENALA			1111	5064 Sampling Date: 015/13
Project/Site: Connick					A A / 1   - FT   20 .
Applicant/Owner: TWC  nvestigator(s): (())					State: Sampling Point: 0//2 - 1
nvestigator(s): ( (.M.) // // // // // // // // // // // // //	leal calle	1/Charles	Section,	, Townsnip, Ra	convex, none): Charact Slope (%): 52
					Long: Datum:
Soil Map Unit Name: Are climatic / hydrologic conditions on		a Line Seco	1200.4	V	NWI classification:
					,
					"Normal Circumstances" present? Yes No
					eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – A	Attach site ma	ap showing	samp	ling point l	ocations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X Yes X	No No No	100	s the Sampled vithin a Wetlar	17
Remarks:	163	NO			
/EGETATION – Use scientific	c names of p	lants.			
T Olaskan (Dlake)		Absolute		ant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:			Specie	es? Status	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
1 2			1-		
3					Total Number of Dominant Species Across All Strala: (B)
4					New York Control of the Control of t
	- 64	_Ø	= Total	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
Sapling/Shrub Stratum (Plot size:					Prevalence Index worksheet:
1 2					Total % Cover of: Multiply by:
3.			-		OBL species
4					FACW species $30$ x 2 = $60$
5.					FAC species 20 x3 = 100 FACU species 20 x4 = 20
		_ 9	= Total	Cover	FACU species
Herb Stratum (Plot size: 1 2	_)	37	./	FACW	Column Totals: (OO (A) 130 (B)
1. Distichlis Sp. 2. Salicania pa.	46	1023	1/	OBL	
3. Agnishist.		20	V	FAC	Prevalence Index = B/A =
4.	our.	ATTEN BULL			1 - Rapid Test for Hydrophytic Vegetation
5.					2 - Dominance Test is >50%
6	. S	51		24.2	X 3 - Prevalence Index is ≤3.0¹
7			-		4 - Morphological Adaptations (Provide supporting
8					data in Remarks or on a separate sheet)
9	) ¥ ),				5 - Wetland Non-Vascular Plants <sup>1</sup>
10	10. 1	السنياب			Problematic Hydrophytic Vegetalion <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must
11	<del>-65</del> -	600%	Tatal		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:	N	60%	= 10tal C	Jover	
1,					Hydrophytic
2					Vegetation
OV Date Creation in Horb Stratum	1n		= Total C	Cover	Present? Yes No
% Bare Ground in Herb Stratum	14				
Remarks:					

Profile Description: (Describe to	o the depth ne	eded to docu	ment the i	ndicator	or confirm	the abser	ice of indic	ators.)	
Depth Matrix			ox Features					257-27-57	
(inches) Color (moist)	%C	olor (moist)	%	Type <sup>1</sup>	Loc2	Texture	-	Rei	marks /
0-18 10412312	80 2	.54414	15	C	M	SIN	aam	+	irm
5 (0									Compaga
						-			College
		-			-				
					-				
<del></del>									
		70000				-			-
Type: C=Concentration, D=Deple	etion, RM=Red	uced Matrix, C	S=Covered	or Coate	ed Sand Gra				ning, M=Matrix.
Hydric Soil Indicators: (Applica				∍d.)		Indic	ators for Pi	roblemati	c Hydric Soils³
Histosol (A1)		Sandy Redox (					cm Muck (	the second of the second	
Histic Epipedon (A2)		Stripped Matrix		A was as as			Red Parent N		
Black Histic (A3) Hydrogen Sulfide (A4)		Loamy Mucky I			t MLRA 1)				face (TF12)
Depleted Below Dark Surface		Loamy Gleyed Depleted Matri:		)		_ ,	Other (Expla	in in Rema	arks)
Thick Dark Surface (A12)		Redox Dark Su				3Indic	alors of hyd	Ironhytic y	egetation and
Sandy Mucky Mineral (S1)		Depleted Dark		7)					be present,
Sandy Gleyed Matrix (S4)		Redox Depress					less disturb	100	
Restrictive Layer (if present):									
Type:									1
турс									\ /
Depth (inches):						Hydric S	oil Present	? Yes_	<u>X</u> No_
Depth (inches):Remarks:						Hydric S	oil Present	? Yes_	X No_
Depth (inches):Remarks:						Hydric S	oil Present	? Yes_	X No_
Depth (inches):						Hydric S	oil Present	? Yes	X No_
Depth (inches):  Remarks:  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of on	e required; che	ck all that appl	y)						No_
Depth (inches):	e required; che	Water-Sta	ined Leave				condary Ind	icators (2	
Depth (inches):  Remarks:  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of on Surface Water (A1)  High Water Table (A2)	e required; che	Water-Sta	1 1 2 2 2 2 2 3				condary Ind Water-Stai	icators (2	or more require
Depth (inches):  Property    Perimary Indicators (minimum of on Surface Water (A1)   High Water Table (A2)   Saturation (A3)	e required; che	Water-Sta	ined Leave 1, 2, 4A, a				condary Ind Water-Stai	icators (2 ined Leave d 4B)	or more require es (B9) ( <b>MLRA</b>
Depth (inches):  YDROLOGY  Vetland Hydrology Indicators: Primary Indicators (minimum of on Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	e required; che	Water-Sta MLRA Salt Crust Aquatic In	ined Leave 1, 2, 4A, a (B11) vertebrates	nd 4B) s (B13)			condary Ind Water-Stai 4A, and	icators (2 ined Leave d 4B) Patterns (B	or more required es (B9) (MLRA 310)
Depth (inches):	e required; che	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave  1, 2, 4A, a  (B11)  vertebrates  Sulfide Od	nd 4B) s (B13) lor (C1)		Se	condary Ind Water-Sta <b>4A, and</b> Drainage F Dry-Seaso	icators (2 ined Leave d <b>4B)</b> Patterns (E on Water T	or more required es (B9) (MLRA 310)
Depth (inches):  Primary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	e required; che	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leave  1, 2, 4A, a  (B11)  vertebrates  Sulfide Od  Rhizospher	nd 4B) s (B13) lor (C1) res along	Living Root	Se	condary Ind Water-Stai <b>4A</b> , and Drainage F Dry-Seaso Saturation Geomorph	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or lic Position	or more required es (B9) (MLRA 310) Table (C2) In Aerial Imagery In (D2)
Depth (inches):  Primarks:  Primary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	e required; che	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced	nd 4B) s (B13) lor (C1) es along d Iron (C4	Living Root	s (C3) X	condary Ind Water-Stai <b>4A</b> , and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad	icators (2 ined Leave d 4B) Patterns (E on Water T Visible or lic Position quitard (D3	or more required es (B9) (MLRA B10) Table (C2) In Aerial Imagery In (D2)
Depth (inches):  Primary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	e required; che	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root 4) d Soils (C6)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or dic Position quitard (D: ral Test (D	or more required es (B9) (MLRA B10) Table (C2) To Aerial Imagery (D2) To (D2) To (D2) To (D2)
Depth (inches):		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction Stressed	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr Raised An	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or dic Position quitard (D3 ral Test (D t Mounds	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)
Depth (inches):	nagery (B7)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root 4) d Soils (C6)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or dic Position quitard (D3 ral Test (D t Mounds	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)
Depth (inches):	nagery (B7)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction Stressed	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root 4) d Soils (C6)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr Raised An	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or dic Position quitard (D3 ral Test (D t Mounds	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)
Depth (inches):  Primary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Im Sparsely Vegetated Concave (Sield Observations:	nagery (B7) Surface (B8)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduceton Reduction Stressed I plain in Rer	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root 4) d Soils (C6)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr Raised An	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or dic Position quitard (D3 ral Test (D t Mounds	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)
Popth (inches):  Primary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Im Sparsely Vegetated Concave (Sield Observations: Surface Water Present?	nagery (B7) Surface (B8)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction Stressed I blain in Rer	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root 4) d Soils (C6)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr Raised An	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or dic Position quitard (D3 ral Test (D t Mounds	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)
Primary Indicators (minimum of one Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Im Sparsely Vegetated Concave (Silland Concave (Silland Concave) Field Observations: Surface Water Present? Ves	nagery (B7) Surface (B8) s No s No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction Stressed I blain in Rer ches).	s (B13) lor (C1) res along d Iron (C4 on in Tilled Plants (D marks)	Living Root t) d Soils (C6) 1) (LRR A)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr Raised An Frost-Heav	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or nic Position quitard (D: ral Test (D t Mounds ve Hummo	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)
Popth (inches):  Proposition (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Im  Sparsely Vegetated Concave (B4)  Field Observations:  Surface Water Present?	nagery (B7) Surface (B8) s No s No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduced on Reduction Stressed I blain in Rer ches).	nd 4B) s (B13) lor (C1) res along d Iron (C4 on in Tilled	Living Root t) d Soils (C6) 1) (LRR A)	s (C3) X	condary Ind Water-Star 4A, and Drainage F Dry-Seaso Saturation Geomorph Shallow Ad FAC-Neutr Raised An	icators (2 ined Leave d 4B) Patterns (B on Water T Visible or nic Position quitard (D: ral Test (D t Mounds ve Hummo	or more required es (B9) (MLRA B10) Table (C2) Ta Aerial Imagery (D2) Table (D2) Table (D2) Table (D3) Table (D6) (LRR A)

Project/Site: CONNICK RANCH		City/County FOXN M	TE HUMBOLDT Sampling Date: 10/15/1
Applicant/Owner: TWC			State: CA Sampling Point: VIT3-
Investigator(s): C Scott / A. Gowal		Section, Township, Ra	
Landform (hillslope, terrace, etc.):			
	/		1 INCOM
Subregion (LRR):			
Soil Map Unit Name:		V	NWI classification:
Are climatic / hydrologic conditions on the site typical for			The state of the s
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology	naturally pro	blematic? / (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	ap showing	sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No _	to the Country	The state of the s
Hydric Soil Present? Yes	Carlotte and the second	Is the Sampled within a Wetlan	
Wetland Hydrology Present? Yes	No X	William & Frontier	165
of vege not growing	95 M	ydrophyt	-62
VEGETATION – Use scientific names of pl	lants.		
<u>Tree Stratum</u> (Plot size:) 1		Dominant Indicator Species? Status	Dominance Test worksheet:  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:)	-	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2			
3			75
4			FACW species
5			FACU species 10 0 x 4 = 40
Herb Stratum (Plot size:)		= Total Cover	UPL species 5 x5= 25 25
1. Po Nagnum On.	5	N UPL	Column Totals: 100 (A) 300; (B)
2. Salkania Ba.	20	¥ 684	Prevalence Index = B/A = 3.00
3. Achillean mi.	10	N. FAGN	Hydrophytic Vegetation Indicators:
4. Laws comi	20	Y FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Hypshis Shol.	35	X FAC	X 2 - Dominance Test is >50%
6. Distichlis sp. i	25	Y FAGW	X 3 - Prevalence Index is ≤3.01
7			4 - Morphological Adaptations (Provide supporting
8.	<u></u>		data in Remarks or on a separate sheet)
9		<del></del>	5 - Wetland Non-Vascular Plants <sup>1</sup>
10		<del></del>	Problematic Hydrophytic Vegetation¹ (Explain)
11		5100W177	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		= Total Cover	
1			Hydrophytic
2			Vegetation Present? Yes No
% Bare Ground in Herb Stratum	-	= Total Cover	
Remarks: TP - 3' from wet b	ounday	(4 . Da	ted on level road and
odes not meet 30% of	rhat	rology no	Liators

Profile Description: (Describe to the de	epth needed to docume	ent the indicator	or confirm	the absence of	f indicators.)	
Depth Matrix		Features		A-malanta	2.34	
(inches) Color (moist) %	Color (moist)		_Loc <sup>2</sup> _	Texture	Remarks	
0-11 (041- 12 100		0 -		511+100	um	
	·					
	0					
- <del></del>			· <del>(</del>			
T. 00				3.		C Destroy I
Type: C=Concentration, D=Depletion, RI Hydric Soil Indicators: (Applicable to a			d Sand Gra		ion: PL=Pore Lining, No. for Problematic Hydronian	
Histosol (A1)	Sandy Redox (S5)				Muck (A10)	ic dolla .
Histic Epipedon (A2)	Stripped Matrix (S				arent Material (TF2)	
Black Histic (A3)	Loamy Mucky Min		MLRA 1)		Shallow Dark Surface (1	F12)
Hydrogen Sulfide (A4)	Loamy Gleyed Ma				(Explain in Remarks)	/
Depleted Below Dark Surface (A11)	Depleted Matrix (F			_	(	
Thick Dark Surface (A12)	Redox Dark Surfa	100		3Indicators	of hydrophytic vegetati	on and
Sandy Mucky Mineral (S1)	Depleted Dark Sui	rface (F7)			hydrology must be pre	
Sandy Gleyed Matrix (S4)	Redox Depression	ns (F8)			disturbed or problemation	
Restrictive Layer (if present):						
Restrictive Layer (if present): Type:						V
Type:	matrix co	lor in	cl	774	resent? Yes	No X
Type:	matrix co	levée	clibuil	774	resent? Yes  due to , wood cl	No X
Type:	matrix co	lor in	clibuil	774	resent? Yes due to , wood cl	No X
Depth (inches):		level	clibuil	umps	due to, wood cl	rips
Type:	ed; check all that apply)			um p s ding	wood ch	e required)
Type:	ed; check all that apply) Water-Staine	ed Leaves (B9) (ex		Seconda Wat	ary Indicators (2 or more	e required)
Type: Depth (inches): Remarks:  YDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one required to the surface water (A1) High Water Table (A2)	ed; check all that apply)  Water-Staine MLRA 1, 2	ed Leaves (B9) (ex 2, 4A, and 4B)		Seconda  Wat	ary Indicators (2 or more er-Stained Leaves (B9)	e required)
Type: Depth (inches): Remarks:  YDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one requir Surface Water (A1) High Water Table (A2) Saturation (A3)	ed; check all that apply)  Water-Staine  MLRA 1, 2  Salt Crust (B	ed Leaves (B9) (ex <b>2, 4A, and 4B)</b> 11)		Seconda  Wat  Drai	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10)	e required) (MLRA 1, 2
Type:	ed; check all that apply) Water-Staine MLRA 1, 2 Salt Crust (B: Aquatic Inver	ed Leaves (B9) (e: <b>2, 4A, and 4B)</b> 11) debrates (B13)		Seconda  Wat  Drai  Dry-	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (C	e required) (MLRA 1, 2
Type:	ed; check all that apply)  Water-Staine  MLRA 1, :  Salt Crust (Bound in the common series)  Aquatic Inver Hydrogen Su	ed Leaves (B9) (e: <b>2, 4A, and 4B)</b> 11) 1ebrales (B13) alfide Odor (C1)	xcept	Seconda  Wat  Drai  Dry- Satu	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial	e required) (MLRA 1, 2
Type:	ed; check all that apply)  — Water-Staine  MLRA 1, 2  — Salt Crust (Back)  — Aquatic Inver  — Hydrogen Su — Oxidized Rhiz	ed Leaves (B9) (e: 2, 4A, and 4B) 11) 1ebrates (B13) alfide Odor (C1) zospheres along	xcept Living Roots	Seconda  Wat  Drai  Dry-  Satu  (C3) — Geo	ary Indicators (2 or more-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial	e required) (MLRA 1, 2
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B*  Aquatic Inver  Hydrogen Su  Oxidized Rhiz  Presence of F	ed Leaves (B9) (ex 2, 4A, and 4B) 11) Hebrates (B13) Ilfide Odor (C1) zospheres along l Reduced Iron (C4	xcept Living Roots	Seconda  Wat  Drai  Dry-  Satu  S(C3) — Geo	ary Indicators (2 or more-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial morphic Position (D2) Illow Aquitard (D3)	e required) (MLRA 1, 2
Type:	ed; check all that apply)  — Water-Staine  MLRA 1, 2  — Salt Crust (B:  — Aquatic Inver  — Hydrogen Su — Oxidized Rhiz — Presence of R	ed Leaves (B9) (ex 2, 4A, and 4B) 11) debrates (B13) defide Odor (C1) zospheres along to Reduced Iron (C4 Reduction in Tilled	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  (C3)  Sha  FAC	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Couration Visible on Aerial morphic Position (D2) Illow Aquitard (D3) Season Table (D5)	e required) (MLRA 1, 2  Imagery (CS
Type:	ed; check all that apply)  Water-Staine  MLRA 1, 2  Salt Crust (B:  Aquatic Inver  Hydrogen Su  Oxidized Rhiz  Presence of I  Recent Iron F	ed Leaves (B9) (e: 2, 4A, and 4B) 11) debrates (B13) difide Odor (C1) zospheres along to Reduced Iron (C4 Reduction in Tilled dressed Plants (D	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  S(C3)  Geo Sha  FAC  Rais	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial emorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (L	e required) (MLRA 1, 2  (Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B: Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or St B7) Other (Explai	ed Leaves (B9) (ex 2, 4A, and 4B) 11) debrates (B13) defide Odor (C1) zospheres along to Reduced Iron (C4 Reduction in Tilled	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  S(C3)  Geo Sha  FAC  Rais	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Couration Visible on Aerial morphic Position (D2) Illow Aquitard (D3) Season Table (D5)	e required) (MLRA 1, 2  C2) Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B: Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or St B7) Other (Explai	ed Leaves (B9) (e: 2, 4A, and 4B) 11) debrates (B13) difide Odor (C1) zospheres along to Reduced Iron (C4 Reduction in Tilled dressed Plants (D	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  S(C3)  Geo Sha  FAC  Rais	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial emorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (L	e required) (MLRA 1, 2  C2) Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B: Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or St B7) Other (Explai	ed Leaves (B9) (e: 2, 4A, and 4B) 11) debrates (B13) difide Odor (C1) zospheres along to Reduced Iron (C4 Reduction in Tilled dressed Plants (D	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  S(C3)  Geo Sha  FAC  Rais	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial emorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (L	e required) (MLRA 1, 2  C2) Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 3  Salt Crust (B: Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or St B7) Other (Explai	ed Leaves (B9) (e: 2, 4A, and 4B) 11) 1ebrates (B13) Iffide Odor (C1) zospheres along (Reduced Iron (C4) Reduction in Tilled tressed Plants (Din in Remarks)	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  S(C3)  Geo Sha  FAC  Rais	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial emorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (L	e required) (MLRA 1, 2  C2) Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandaric Inverty)  Hydrogen Su  Oxidized Rhia  Presence of Facent Iron Face	ed Leaves (B9) (example 2, 4A, and 4B) 11) Hebrates (B13) Hifide Odor (C1) zospheres along leaduced Iron (C4) Reduction in Tilled tressed Plants (Din in Remarks)	xcept Living Roots () d Soils (C6)	Seconda  Wat  Drai  Dry- Satu  S(C3)  Geo Sha  FAC  Rais	ary Indicators (2 or more er-Stained Leaves (B9) AA, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial emorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (L	e required) (MLRA 1, 2  C2) Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B: Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or St B7) Other (Explain	ed Leaves (B9) (example 2, 4A, and 4B) 11) 1ebrates (B13) Ilfide Odor (C1) zospheres along to the complex of th	xcept Living Roots (a) 1 Soils (C6) (LRR A)	Seconda  Wat  Drai  Dry- Satu  S(C3) — Geo Sha  FAC  Rais  Fros	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (Leave Hummocks (D6))	e required) (MLRA 1, 2  (Imagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron I Stunted or St Other (Explain  No Depth (inches	ed Leaves (B9) (e. 2, 4A, and 4B) 11) 1ebrates (B13) Iffide Odor (C1) zospheres along (Reduced Iron (C4) Reduction in Tilled tressed Plants (Din in Remarks)  es):	Living Roots  ) d Soils (C6) 1) (LRR A)	Seconda  Wat  Drai  Dry- Satu  S(C3) — Geo  Sha  FAC  Rais  Fros	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (Leave Hummocks (D6))	e required) (MLRA 1, 2  (MLRA 1, 2  Limagery (CS
Type:	ed; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B' Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron I Stunted or St Other (Explain  No Depth (inches	ed Leaves (B9) (e. 2, 4A, and 4B) 11) 1ebrates (B13) Iffide Odor (C1) zospheres along (Reduced Iron (C4) Reduction in Tilled tressed Plants (Din in Remarks)  es):	Living Roots  ) d Soils (C6) 1) (LRR A)	Seconda  Wat  Drai  Dry- Satu  S(C3) — Geo  Sha  FAC  Rais  Fros	ary Indicators (2 or more er-Stained Leaves (B9) A, and 4B) nage Patterns (B10) Season Water Table (Curation Visible on Aerial morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (Leave Hummocks (D6))	e required) (MLRA 1, 2  (MLRA 1, 2  Limagery (CS

Project/Site: Connick	Ranch		city/County: Fernd	Sampling Date: 10 161
Applicant/Owner:TWC				Slate: CA Sampling Point: UIT3
nvestigator(s): LW/AG			Section, Township, R	lange:
	ndplair	\	Local relief (concave	convex, none): On Care linear Slope (%):
				Long Datum:
Soil Map Unit Name:				NWI classification:
are climatic / hydrologic conditions on th				The state of the s
re Vegetation, Soil, or I			. 1	e "Normal Circumstances" present? Yes No
re Vegetation, Soil, or F	Hydrology	_ naturally pro	blematic? / V (If n	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - At	tach site ma	ap showing	sampling point	locations, transects, important features, etc
Hydrophytic Vegetation Present?	Yes X	No		
Hydric Soil Present?	Yes X	No	Is the Sample	
Wetland Hydrology Present?	Yes X	No	within a Wetla	and? Yes No
Remarks:				
EGETATION - Use scientific	names of pl	ants.		
Teon Stratum /Dist		Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:			Species? Status	Number of Dominant Species 2
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant 2
3				Species Across All Strata: (B)
7			= Total Cover	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:  OBL species 20 x1 = 20
3				OBL species 20 x1= 20 FACW species 0 x2'=
4				FAC species 50 x3 = 150
5,				FACU species 30 x4= 20
Harb Stratum (Blat size:		10	= Total Cover	UPL species
Herb Stratum (Plot size:		45	Y FAC	Column Totals: 100 (A) 290 (B)
Sticornia Da.	12	20	V OR	2 9
Cirsium VIII.		- 5	A FACIL	Prevalence Index = B/A =
Achillery MAR	1	5	FACH	Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation
Hupachaeris ra		10	FACU	2 - Dominance Test is >50%
Bulmex cr.	· L	15	FAC	X 3 - Prevalence Index is ≤3.0¹
Plantago la.		10	FACU	4 - Morphological Adaptations¹ (Provide supporting
				data in Remarks or on a separate sheet)
1				
3.				5 - Wetland Non-Vascular Plants¹
3				5 - Wetland Non-Vascular Plants' Problematic Hydrophytic Vegetation¹ (Explain)
3. 3				Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and welland hydrology must
8			= Tolal Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
8			- Tolal Cover	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and welland hydrology must
3			- Total Cover	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.  Hydrophytic
3		100		Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation
8		100	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation

Sampling Point: UT3-W

Depth Matrix	Redox	Features			
(inches) Color (moist) %	Color (moist)	% Type	Loc <sup>2</sup>	Texture	Remarks
9-18 104R3/2 90	) 104R4/4	10 6	M	SILT LOI	m
ype: C=Concentration, D=Depletion,			ted Sand Gr		tion: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to					s for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	•			Muck (A10)
Histic Epipedon (A2) Black Histic (A3)	Stripped Matrix (S Loamy Mucky Min		of MI DA 41		Parent Material (TF2) Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Ma		JE MILITA I)		(Explain in Remarks)
Depleted Below Dark Surface (A11)				0000	(=apidin in nondina)
Thick Dark Surface (A12)	Redox Dark Surfa			3Indicators	of hydrophytic vegetation and
_ Sandy Mucky Mineral (S1)	Depleted Dark Sur	rface (F7)			d hydrology must be present,
_ Sandy Gleyed Malrix (S4)	Redox Depression	ns (F8)		unless	disturbed or problematic.
estrictive Layer (if present):					
Туре:					1/
Depth (inches):				Hydric Soil P	resent? Yes 🔼 No
//	of observer	1 FROM 2	Sultho	2 10 6	ZPTH = FSO = Ridox
AND MAIL WITH	AND SERVEY AND VAN	HOM 2	Soltho work	13 A. P.	2 PTH = FCO = RIDOR 2 - 2) Peker RNC
PUTOX CONCENTALAM IN DAILY COLORA TOROLOGY	DE CHATRIEVA	FROM E	SultAce Landa	TO B	z PTH = FCO = Ridox 2 - 2) Reken Kinc
POROLOGY  /etland Hydrology Indicators:		HOM Z	Sul Ho Note A		ary Indicators (2 or more required)
POROLOGY  Tetland Hydrology Indicators:	uired; check all that apply)	HOM ENT		Second	ary Indicators (2 or more required)
TOROLOGY  Tetland Hydrology Indicators:	uired; check all that apply) Water-Staine			Second	ary Indicators (2 or more required)
TDROLOGY  Tetland Hydrology Indicators:  Timary Indicators (minimum of one required)  Surface Water (A1)	uired; check all that apply) Water-Staine	d Leaves (B9) ( 2, 4A, and 4B)		Second	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2
POROLOGY  Tetland Hydrology Indicators:  Timary Indicators (minimum of one required)  Surface Water (A1)  High Water Table (A2)	uired; check all that apply)  Water-Staine  MLRA 1, 2  Salt Crust (B	d Leaves (B9) ( 2, 4A, and 4B)		Second Wa	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
PUROLOGY  Tetland Hydrology Indicators:  Timary Indicators (minimum of one required by the content of the conte	uired; check all that apply)  Water-Staine  MLRA 1, 2  Sall Crust (B:  Aquatic Inver	d Leaves (B9) ( <b>2, 4A, and 4B)</b> 11)		Second Wa Dra Dra	ary Indicators (2 or more required) fer-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2)
Port Concentration  Toronto To	uired; check all that apply)  — Water-Staine  MLRA 1, 2  — Salt Crust (Bound in the control of t	d Leaves (B9) ( 2, 4A, and 4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along	except	Second  Wa  Dra  Dry Sat	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2)
Port Concentration  Port C	uired; check all that apply)  Water-Staine  MLRA 1, 2  Salt Crust (B'  Aquatic Inver  Hydrogen Su  Oxidized Rhiz  Presence of F	d Leaves (B9) ( 2, 4A, and 4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C	except  Living Roof	Second  Wa  Dra  Dry  Sat  Sts (C3)  Second	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 24A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	uired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B' Aquatic Inver Hydrogen Sul Oxidized Rhiz Presence of F	d Leaves (B9) ( 2, 4A, and 4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C	except  Living Root  4)  d Soils (C6)	Second  Wa  Dra  Dry  Sat  (C3)  Sha  FAC	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Portion (A)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	uired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B' Aquatic Inver Hydrogen Sul Oxidized Rhiz Presence of F Recent Iron F	d Leaves (B9) ( 2, 4A, and 4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Tille ressed Plants (I	except  Living Root  4)  d Soils (C6)	Second  Wa  Dra  Dry  Sat  Sts (C3)  FAC  Rai	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 24A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
PROLOGY  etland Hydrology Indicators:  imary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	uired; check all that apply)  Water-Staine  MLRA 1, 2  Salt Crust (B*  Aquatic Inver  Hydrogen Sul  Oxidized Rhiz  Presence of F  Recent Iron R  Stunted or Str	d Leaves (B9) ( 2, 4A, and 4B) 11) tebrates (B13) Ifide Odor (C1) zospheres along Reduced Iron (C Reduction in Tille ressed Plants (I	except  Living Root  4)  d Soils (C6)	Second  Wa  Dra  Dry  Sat  Sts (C3)  FAC  Rai	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
POROLOGY  Vetland Hydrology Indicators: rimary Indicators (minimum of one requirement)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (B*  Aquatic Inver  Hydrogen Sui  Oxidized Rhiz  Presence of F  Recent Iron F  Stunted or Str  (B7)  Other (Explaints)	d Leaves (B9) (cell 2, 4A, and 4B) (11) tebrates (B13) (Ifide Odor (C1) zospheres along Reduced Iron (Cell Reduction in Tiller (Cell Remarks)	except  Living Root 4) 2d Soils (C6)	Second  Wa  Dra  Dry  Sat  Sts (C3)  FAC  Rai	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Caparophic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Portion Value (B4)  Iron Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surfaceld Observations:	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandaric Inverty)  Aquatic Inverty  Hydrogen Sulty  Oxidized Rhizy  Presence of Freent Iron Freed Stanted or Stanted or Stanted or Stanted S	d Leaves (B9) (cell (B9) (cell (B9) (B9) (B9) (B9) (Cell (B9) (B9) (B9) (Cell (B9) (B9) (B9) (Cell (B9) (B9) (B9) (B9) (B9) (Cell (B9) (B9) (B9) (B9) (Cell (B9) (B9) (B9) (B9) (Cell (B9) (B9) (B9) (Cell (B9) (B9) (B9) (B9) (Cell (B9) (B9) (B9) (Cell (B9) (B9) (B9) (Cell (B9) (C	except  Living Root 4) 2d Soils (C6)	Second  Wa  Dra  Dry  Sat  Sts (C3)  FAC  Rai	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Caparophic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Portion Value (A)  Portion (B)	wired; check all that apply)  Water-Staine  MLRA 1, 2  Salt Crust (B'  Aquatic Inveries Hydrogen Sui  Oxidized Rhiz  Presence of Financial Recent Iron Financial Stunted or Structed or Structed (B7)  (B7)  Other (Explainment)  Depth (incheing Depth (incheing Structed)	d Leaves (B9) (2, 4A, and 4B) (11) tebrates (B13) lifide Odor (C1) cospheres along Reduced Iron (CReduction in Tille ressed Plants (In in Remarks)	except  Living Root 4) ed Soils (C6) 01) (LRR A)	Second  Wa  Dra  Dry  Sat  Sha  FAC  Fro	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Caprophic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface field Observations: urface Water Present? //ater Table Present? Yes Saturation Present? Yes Surface Water Present? Yes Saturation Present? Yes Saturation Present? Yes Surface Water Present? Yes Saturation Present?	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandaric Inverty)  Aquatic Inverty  Hydrogen Sulty  Oxidized Rhizy  Presence of Freent Iron Freed Stanted or Stanted or Stanted or Stanted S	d Leaves (B9) (2, 4A, and 4B) (11) tebrates (B13) lifide Odor (C1) cospheres along Reduced Iron (CReduction in Tille ressed Plants (In in Remarks)	except  Living Root 4) ed Soils (C6) 01) (LRR A)	Second  Wa  Dra  Dry  Sat  Sts (C3)  FAC  Rai	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Csomorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
/DROLOGY // Jetland Hydrology Indicators: rimary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface field Observations: urface Water Present?  // Yes	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandard Crust)  Aquatic Inverty Hydrogen Sulty Oxidized Rhizty Presence of Facent Iron Facent Ir	d Leaves (B9) (c2, 4A, and 4B) 11) 1tebrates (B13) Iffide Odor (C1) 2cospheres along Reduced Iron (C) Reduced Iron (C) Reduction in Tille ressed Plants (I n in Remarks)  25: 0-15' 25: 0-15' 25: 0-15' 25: 0-15'	except  Living Rood 4) ed Soils (C6) 01) (LRR A)  Wetla	Second  Wa  Dra  Dry  Sat  Sha  FAC  Rai  Fro	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface field Observations: urface Water Present? //ater Table Present? Yes saturation Present? Yes	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandard Crust)  Aquatic Inverty Hydrogen Sulty Oxidized Rhizty Presence of Facent Iron Facent Ir	d Leaves (B9) (c2, 4A, and 4B) 11) 1tebrates (B13) Iffide Odor (C1) 2cospheres along Reduced Iron (C) Reduced Iron (C) Reduction in Tille ressed Plants (I n in Remarks)  25: 0-15' 25: 0-15' 25: 0-15' 25: 0-15'	except  Living Rood 4) ed Soils (C6) 01) (LRR A)  Wetla	Second  Wa  Dra  Dry  Sat  Sha  FAC  Rai  Fro	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 24A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
// / / / / / / / / / / / / / / / / / /	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandard Crust)  Aquatic Inverty Hydrogen Sulty Oxidized Rhizty Presence of Facent Iron Facent Ir	d Leaves (B9) (c2, 4A, and 4B) 11) 1tebrates (B13) Iffide Odor (C1) 2cospheres along Reduced Iron (C) Reduced Iron (C) Reduction in Tille ressed Plants (I n in Remarks)  25: 0-15' 25: 0-15' 25: 0-15' 25: 0-15'	except  Living Rood 4) ed Soils (C6) 01) (LRR A)  Wetla	Second  Wa  Dra  Dry  Sat  Sha  FAC  Rai  Fro	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
/DROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one requirement) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface field Observations: urface Water Present? //ater Table Present? Yes saturation Present? Yes	wired; check all that apply)  Water-Staine MLRA 1, 2  Salt Crust (Bandard Crust)  Aquatic Inverty Hydrogen Sulty Oxidized Rhizty Presence of Facent Iron Facent Ir	d Leaves (B9) (c2, 4A, and 4B) 11) 1tebrates (B13) Iffide Odor (C1) 2cospheres along Reduced Iron (C) Reduced Iron (C) Reduction in Tille ressed Plants (I n in Remarks)  25: 0-15' 25: 0-15' 25: 0-15' 25: 0-15'	except  Living Rood 4) ed Soils (C6) 01) (LRR A)  Wetla	Second  Wa  Dra  Dry  Sat  Sha  FAC  Rai  Fro	ary Indicators (2 or more required) ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (Caprophic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)

그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	coad Loc	tion, Township, Range: ral relief (concave, convex, none): \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
		Long: Datum:
oil Map Unit Name:		NWI classification:
못하는 아이들이 이번 아이를 하는데 그렇게 나에면 아니면 하는데 되는데 이 없는 것이 되었다.		Yes No (If no, explain in Remarks.)
		urbed? Are "Normal Circumstances" present? Yes No
e Vegetation, Soil, or Hydrology _	naturally probler	natic? (If needed, explain any answers in Remarks.)
UMMARY OF FINDINGS - Attach site	map showing sa	mpling point locations, transects, important features, etc
	No No	Is the Sampled Area within a Wetland? Yes No
Remarks:		
A vere does not pa	SS PI	
, 0		
EGETATION – Use scientific names of	of plants.	
ree Stratum (Plot size:)		minant Indicator Dominance Test worksheet:
ree Stratum (Plot size:)		Number of Dominant Species
		Total Number of Dominant
	= T	otal Cover Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
apling/Shrub Stratum (Plot size:		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
		OBL species x1 =
		FACW species X2 = 10
		FAC species X3 = X70
	= T	otal Cover UPL species
erb Stratum (Plot size:)	45	Y FAC Column Totals: $100$ (A) $310$ (B)
Agen his holan	75	V TAC 2 1
Van Man James	15	Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:
Private OCC	5	1 - Rapid Test for Hydrophytic Vegetation
		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
		data in Remarks or on a separate sheet)
		5 - Wetland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
-		Problematic Hydrophytic Vegetation (Explain)     Indicators of hydric soil and wetland hydrology must
-	100 -	be present, unless disturbed or problematic.
oody Vine Stratum (Plot size:)		Null COTO
		—— Hydrophytic
		Vegetation Present? Yes
A	= To	otal Cover
Bare Ground in Herb Stratum		

Profile Description: (Describe to the de	pth needed to docun	nent the i	ndicator	or confirm	n the abse	ence of i	ndicators.)	
Depth Matrix		x Features		12	+	.2	Barrie No.	
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc2	Textur	1	Remarks	
0-12 10910 13 100		_0_			SIH	Jour	1	
12-18 109163/2 100	)	0	_	-	11			
				-				
			2000					
				•				
	. ———				-			
	1 00 U - 040 00 - 50	-					energy and	
Type: C=Concentration, D=Depletion, RI				ed Sand G			n: PL=Pore Lining, N	
Hydric Soil Indicators: (Applicable to a			ed.)				or Problematic Hydi	ic Soils":
Histosol (A1)	Sandy Redox (S						ick (A10)	
Histic Epipedon (A2)	Stripped Matrix				-		ent Material (TF2)	
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky M			MLRA 1)			allow Dark Surface (1	F12)
Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix		)			Other (E	xplain in Remarks)	
Thick Dark Surface (A12)	Redox Dark Sur				3lnd	icatore of	f hydrophytic vegetat	on and
Sandy Mucky Mineral (S1)	Depleted Dark S		7)				ydrology must be pre	
Sandy Gleyed Matrix (S4)	Redox Depressi		.,				sturbed or problemati	
Restrictive Layer (if present):	1 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 /	0 40 4 44			1	04.62.67.07.	AND REPORT FOR SERVICE	
restrictive Layer (ii present).								
The state of the s								1
Type:	omalies	in	ma	trix	The second	4 2 1 1 1	sent? Yes	no X
Type:	omalies alerial s	OUVE	ma ce (	trix	The second	4 2 1 1 1		np5
Type:	omaties alerial s	OUVE	ma ce (	trix	The second	4 2 1 1 1		no X
Type:	omalies alerial s	OUVO	ma ce (	trix	T G T T T	4 2 1 1 1		no X
Type:			ma ce (	trix 1500	1 to	lor	in clur nstruct	nps
Type:	ed; check all that apply	n			1 to	lor	in clur nstruct	nps birr
Type:	ed; check all that apply	/) ned Leave	es (B9) ( <b>e</b> .		1 to	econdary	In clur n Struct Undicators (2 or more Stained Leaves (89)	nps birr
Type:	ed; check all (hat apply Water-Stair MLRA 1	/) ned Leave	es (B9) ( <b>e</b> .		1 to	econdary Water	IN Clur NET uct Indicators (2 or more Stained Leaves (89)	nps birr
Type:	ed; check all that apply Water-Stair MLRA 1 Salt Crust (	/) ned Leave I, <b>2, 4A, a</b> (B11)	es (B9) (e. ind 4B)		1 to	econdary Water 4A Draina	In Clur MINICALORS (2 or more Stained Leaves (B9) and 4B) age Patterns (B10)	e required)
Type:	ed; check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates	es (B9) (e. ind <b>4B)</b> s (B13)		to s	econdary Water 4A Draina Dry-Se	Indicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (6	e required) (MLRA 1, 2
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates Sulfide Od	es (B9) (e. ind 4B) s (B13) dor (C1)	xcept	to s	econdary Water 4A Draina Dry-Se Salura	Indicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Gation Visible on Aeria	e required) (MLRA 1, 2
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates Sulfide Od hizospher	es (B9) (e. nd 4B) s (B13) dor (C1) res along	xcept Living Roc		econdary Water 4A Draina Dry-Sa	Indicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2)	e required) (MLRA 1, 2
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates Sulfide Od hizospher	es (B9) (e: ind 4B) s (B13) dor (C1) res along d Iron (C4	xcept Living Roc	S S S S S S S S S S S S S S S S S S S	econdary Water 4A Draina Dry-Sa	Indicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Gation Visible on Aeria	e required) (MLRA 1, 2
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iron	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates Sulfide Od hizospher of Reducein Reduction	es (B9) (e. Ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Sa Satura Geom	Indicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2)	e required) (MLRA 1, 2
Type:	ed; check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates Sulfide Od hizospher of Reducein Reduction	es (B9) (e. Ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Sa Geom Shallo FAC-N	Indicators (2 or more-Stained Leaves (89), and 48) age Patterns (810) eason Water Table (0 ation Visible on Aerial orphic Position (D2) aw Aquitard (D3)	e required) (MLRA 1, 2
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  B7)  Other (Expl	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduced n Reductio Stressed	es (B9) (e: Ind 4B) Ind 4B) Ind (B13) Ind (C1) Ind	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Calion Visible on Aerial orphic Position (D2) w Aquitard (D3) Neutral Test (D5)	e required) (MLRA 1, 2 lmagery (C
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  B7)  Other (Expl	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduced n Reductio Stressed	es (B9) (e: Ind 4B) Ind 4B) Ind (B13) Ind (C1) Ind	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (L	e required) (MLRA 1, 2 (magery (C:
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  B7)  Other (Expl	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduced n Reductio Stressed	es (B9) (e: Ind 4B) Ind 4B) Ind (B13) Ind (C1) Ind	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (L	e required) (MLRA 1, 2 (magery (C:
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  B7)  Other (Expl	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduced n Reduction Stressed	es (B9) (e: Ind 4B) Ind 4B) Ind (B13) Ind (C1) Ind	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (L	e required) (MLRA 1, 2 (magery (C:
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 5  Oxidized R  Presence of Recent Iror  Stunted or  B7)  Other (Expl	ned Leave 1, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reducer n Reductio Stressed lain in Rer	es (B9) (e: Ind 4B) Ind 4B) Ind (B13) Ind (C1) Ind	xcept Living Roc l) d Soils (C6	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (L	e required) (MLRA 1, 2 (magery (C:
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 8  Oxidized R  Presence of Recent Iron  Stunted or  Other (Expl  (B8)  Depth (inc	ned Leave 1, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reducei Reductio Stressed lain in Rer	es (B9) (e: Ind 4B) Ind 4B) Ind (B13) Ind (C1) Ind	xcept  Living Roc  J Soils (C6 1) (LRR A	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised Frost-l	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (Leave Hummocks (D6))	e required) (MLRA 1, 2 lmagery (C
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Expl  (B8)  Depth (inc.	ned Leave 1, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reducer n Reductio Stressed lain in Rer	es (B9) (e. Ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks)	xcept  Living Roc  I)  d Soils (C6  1) (LRR A	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised Frost-l	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (L	e required) (MLRA 1, 2 lmagery (C
Type:	ed; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or  Other (Expl  (B8)  Depth (inc.	ned Leave 1, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reducer n Reductio Stressed lain in Rer	es (B9) (e. Ind 4B) s (B13) dor (C1) res along d Iron (C4 on in Tilled Plants (D marks)	xcept  Living Roc  I)  d Soils (C6  1) (LRR A	Sols (C3)	econdary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raised Frost-l	Andicators (2 or more-Stained Leaves (B9), and 4B) age Patterns (B10) eason Water Table (Cation Visible on Aerial orphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (Leave Hummocks (D6))	e required) (MLRA 1, 2 lmagery (C

oject/Site: Connick Raw	Cit	ty/County: Fern	delle Humbold Sampling Date: THE
oplicant/Owner:	-		State: CA Sampling Point: 10/15/20
		ection, Township, Ra	
ndform (hillslope, terrace, etc.): 4lood		and the second of the second of	convex, none): CONCOUR Niveal Slope (%):
bregion (LRR):	Lat:		Long: Datum:
il Map Unit Name:			NWI classification:
e climatic / hydrologic conditions on the site ty			
			"Normal Circumstances" present? Yes No
e Vegetation, Soil, or Hydrolog	gy naturally proble	ematic? / (If ne	eeded, explain any answers in Remarks.)
JMMARY OF FINDINGS - Attach	site map showing s	ampling point l	ocations, transects, important features, etc.
lydrophytic Vegetation Present? Yes	<u> </u>		William No. 1
lydric Soil Present? Yes		Is the Sampled within a Wetlar	
Vetland Hydrology Present? Yes	No	Within a Wetlan	163 2 110
Remarks:			
	0-		
GETATION – Use scientific name	s of plants.	10-1-	
	Absolute D	Dominant Indicator	Dominance Test worksheet:
ree Stratum (Plot size:)		Species? Status	Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata:  (B)
	7		
	Ø =	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
apling/Shrub Stratum (Plot size:			Prevalence Index worksheet:
	<del></del>		Total % Cover of:Multiply by:
•			OBL species x 1 =
			FACW species $\frac{5}{100}$ x 2 = $\frac{10}{1000}$
			FAC species
Color of Color of Color	<u>Ø</u> =	Total Cover	FACU species
erb Stratum (Plot size:)	HA	4 EAC	Column Totals: 100 (A) 325 (B)
Achilles mille	15	N FACU	
Plantogo larce	5	N FACU	Prevalence Index = B/A = 3.25  Hydrophytic Vegetation Indicators:
Agranis stablon	25	4 FAC	1 - Rapid Test for Hydrophytic Vegetation
pamer cr.	5	N FACW	2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.01
			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants <sup>1</sup>
0			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	16/1	Total Cover	be present, unless disturbed or problematic.
loody Vine Stratum (Plot size:			
			Hydrophytic Vegetation
	d -	Total Cover	Present? Yes No
Bare Ground in Herb Stratum	1-4-	Total Cover	
emarks:	C MI	o soil	of with only
A VUICION CONCINCIONA	1 telland	PEOPLE VIOL	what on not stown as
DUDCHIVIANON + TICH	Sec and Like	1000	and a harding
MUNICIPALITY COVE	optimie in	140 0030	1000 1100

Profile Description: (Describe to the de Depth Matrix		x Features	uicatoi	or commi	ii the absence t	indicators.)
(inches) Color (moist) %	Color (moist)	%	Type'	Loc2	Texture	Remarks
7-18 104R3/7. 82	2.544/1	15	C	m	SIH loan	
10 12 12 02	19				OH TOWN	
				-		
<del></del>	· /					
Type: C=Concentration, D=Depletion, RN	M=Reduced Matrix. CS	=Covered o	or Coate	ed Sand G	rains <sup>2</sup> l oca	tion: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to a	II LRRs, unless other	wise noted	1.)	u outro o		s for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redox (S					Muck (A10)
Histic Epipedon (A2)	Stripped Matrix	and the same of th				Parent Material (TF2)
Black Histic (A3)	Loamy Mucky M		(excep	MLRA 1)		Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed N		( p			(Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix				0101	A
Thick Dark Surface (A12)	Redox Dark Sur				3Indicators	of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark S		)			hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressi	ons (F8)				disturbed or problematic.
lestrictive Layer (if present):						
Type:						
Depth (inches):					Hydric Soil P	resent? Yes No
emarks:					11 11 - 13 - 17 - 17 - 17 - 17	
YDROLOGY			<u> </u>			
C-83 24 - 14 KTV**						
Vetland Hydrology Indicators:	ed; check all that apply	)			Second	ary Indicators (2 or more required)
Vetland Hydrology Indicators: Primary Indicators (minimum of one require	The state of the s		(B0) (e	vcent		ary Indicators (2 or more required)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1)	Water-Stair	ned Leaves		xcept	Wa	ter-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) _ High Water Table (A2)	Water-Stair MLRA 1	ned Leaves , 2, 4A, and		xcept	Wa	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) _ High Water Table (A2) _ Saturation (A3)	Water-Stair MLRA 1 Salt Crust (	ned Leaves , <b>2, 4A, an</b> (B11)	d 4B)	xcept	Wa Dra	ter-Stained Leaves (B9) ( <b>MLRA 1, 2</b> , <b>4A, and 4B)</b> inage Patterns (B10)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Waler Marks (B1)	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv	ned Leaves , <b>2, 4A, an</b> B11) ertebrates (	d 4B) (B13)	xcept	Wa Dra Dry	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 8	ned Leaves , <b>2, 4A, an</b> B11) erlebrates ( Sulfide Odo	d 4B) (B13) r (C1)		Wa Dra Dry Sat	ter-Stained Leaves (B9) ( <b>MLRA 1, 2</b> <b>4A, and 4B)</b> inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R	ned Leaves , <b>2, 4A, an</b> B11) ertebrates ( Gulfide Odo hizosphere	d 4B) (B13) r (C1) s along	Living Roo	Wa Dra Dry Sat ts (C3) Geo	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2)
Vetland Hydrology Indicators:  rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 5 Oxidized Ri Presence o	ned Leaves , <b>2</b> , <b>4A</b> , and B11) ertebrates ( Gulfide Odo hizospheres f Reduced	d 4B) (B13) r (C1) s along lron (C4	Living Roo	Wa Dra Dry Sat ats (C3) Geo Sha	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3)
Vetland Hydrology Indicators:  Irimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized Ri Presence o Recent Iror	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphered if Reduced n Reduction	d 4B) (B13) r (C1) s along Iron (C4) i in Tilled	Living Roo l) d Soils (C6	Wa Dra Dry Sat ats (C3) Geo Sha	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B6) Surface Soil Cracks (B6)	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or	ned Leaves , 2, 4A, and B11) erlebrates ( Sulfide Odo hizospheres of Reduced on Reduction Stressed Pl	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo l) d Soils (C6	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or Other (Expl	ned Leaves , 2, 4A, and B11) erlebrates ( Sulfide Odo hizospheres of Reduced on Reduction Stressed Pl	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo l) d Soils (C6	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or Other (Expl	ned Leaves , 2, 4A, and B11) erlebrates ( Sulfide Odo hizospheres of Reduced on Reduction Stressed Pl	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo l) d Soils (C6	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Sparsely Vegetated Concave Surface	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 5 Oxidized RI Presence o Recent Iror Stunted or (B8)	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphered f Reduced n Reduction Stressed Plain in Rem	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo l) d Soils (C6	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Irimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Boundation Visible on Aerial Imagery (Boundation Visible Observations:  urface Water Present?  Yes	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or Other (Expl	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphered f Reduced n Reduction Stressed Plain in Rem	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo l) d Soils (C6	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Irimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface ield Observations:  urface Water Present? Yes	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 5 Oxidized RI Presence o Recent Iror Stunted or (B8)	ned Leaves , 2, 4A, and B11) erlebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pilain in Rem	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo l) d Soils (C6	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Sparsely Vegetated Concave Surface (B1) Surface Water Present? Ves Water Table Present? Ves Saturation Present? Ves Surface Mater Ves Saturation Present?	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror Stunted or S Other (Expl	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: if Reduced in Reduction Stressed Plain in Remi	d 4B) (B13) r (C1) s along lron (C4) i in Tilled lants (D	Living Roo d Soils (C6 1) (LRR A	Wa Dra Dry Sat tts (C3) Geo Sha FA(	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface ield Observations: Surface Water Present? Ves Vater Table Present? Ves Includes capillary fringe)	Water-Stair MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Stunted or (  B8)  No Depth (inc Depth (inc Depth (inc	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pl lain in Remi	d 4B) (B13) r (C1) s along lron (C4) in Tilled lants (D arks)	Living Roo d Soils (C6 1) (LRR A)	Wa Dra Dry Sat ats (C3) Geo Sha FAC FAC Fac	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface Sield Observations: Surface Water Present? Ves Vater Table Present? Ves Includes capillary fringe)	Water-Stair MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Stunted or (  B8)  No Depth (inc Depth (inc Depth (inc	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pl lain in Remi	d 4B) (B13) r (C1) s along lron (C4) in Tilled lants (D arks)	Living Roo d Soils (C6 1) (LRR A)	Wa Dra Dry Sat ats (C3) Geo Sha FAC FAC Fac	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Vater Table Present? Vater Table Present? Ves Includes capillary fringe) Describe Recorded Data (stream gauge, m	Water-Stair MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Stunted or (  B8)  No Depth (inc Depth (inc Depth (inc	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pl lain in Remi	d 4B) (B13) r (C1) s along lron (C4) in Tilled lants (D arks)	Living Roo d Soils (C6 1) (LRR A)	Wa Dra Dry Sat ats (C3) Geo Sha FAC FAC Fac	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface ield Observations: Surface Water Present? Ves Vater Table Present? Ves Includes capillary fringe)	Water-Stair MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Stunted or (  B8)  No Depth (inc Depth (inc Depth (inc	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pl lain in Remi	d 4B) (B13) r (C1) s along lron (C4) in Tilled lants (D arks)	Living Roo d Soils (C6 1) (LRR A)	Wa Dra Dry Sat ats (C3) Geo Sha FAC FAC Fac	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Ves Vater Table Present? Yes aturation Present? Yes recludes capillary fringe) escribe Recorded Data (stream gauge, m	Water-Stair MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Stunted or (  B8)  No Depth (inc Depth (inc Depth (inc	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pl lain in Remi	d 4B) (B13) r (C1) s along lron (C4) in Tilled lants (D arks)	Living Roo d Soils (C6 1) (LRR A)	Wa Dra Dry Sat ats (C3) Geo Sha FAC FAC Fac	ter-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 pmorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Vetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Ves Vater Table Present? Yes aturation Present? Yes recludes capillary fringe) escribe Recorded Data (stream gauge, m	Water-Stair MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Stunted or (  B8)  No Depth (inc Depth (inc Depth (inc	ned Leaves , 2, 4A, and B11) ertebrates ( Sulfide Odo hizosphere: of Reduced of Reduction Stressed Pl lain in Remi	d 4B) (B13) r (C1) s along lron (C4) in Tilled lants (D arks)	Living Roo d Soils (C6 1) (LRR A)	Wa Dra Dry Sat ats (C3) Geo Sha FAC FAC Fac	ter-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagery (C9 omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)

		stern Mountains, Valleys, and Coast Region	
Project/Site: Connide Rance	City/Cour	nty: Ferndale / Humbold sampling Date: 1	5/15/1
pplicant/Owner: TWC		State: CA Sampling Point: U	1177
avoetigator(s): AC/CS	Section,	Township, Range:	
andform (hillslope, terrace, etc.): PNI /Y	oad Local rel	ief (concave, convex, none): The line at Slope	e (%):
		Long: Datum	
oil Map Unit Name:		NWI classification:	
re climatic / hydrologic conditions on the site typica			
보다 하나 하나 하나 하나 이 이 박사들이 되어졌다. 이번 하나 하나 하는 이 사람들이 모든 아니다 하나 사람들이다.		?// Are "Normal Circumstances" present? Yes	No
re Vegetation, Soil, or Hydrology _			
		ing point locations, transects, important fea	tures, etc
	No A	the Sampled Area	
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	140	thin a Wetland? Yes No	
		4.4	
Remarks: Adols not pass	I'L to	vege	
/EGETATION – Use scientific names o	f plants.		
Tree Stratum (Plot size:)	Absolute Domina	nt Indicator Dominance Test worksheet:	
		Number of Dominant Opedies	– (A)
1 2			(v,
3.		Total Number of Dominant	(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			No.
2		OBL species x 1 =	r
4.		FACVV species X2= X2=	7
5.		FAC species <u>85</u> x3 = <u>25</u>	A 1
Katan San	= Total 0	FACU species x 4 = 00  Cover UPL species x 5 = 00  When the species x 5 =	
Herb Stratum (Plot size:)  1)	45 V	FIA C. Column Totals: 100 (A) 31	
1. Halasans	15 1		
10h Com	18 0	Prevalence Index = B/A = 3.15  Hydrophytic Vegetation Indicators:	<u> </u>
Aansh S Shi	30 Y	1 - Rapid Test for Hydrophytic Vegetat	ion
5.			1011
6		\overline{\overline	
7		4 - Morphological Adaptations (Provid	e supporting
В		data in Remarks or on a separate s	neet)
9.)		5 - Welland Non-Vascular Plants <sup>1</sup> Problematic Hydrophytic Vegetation <sup>1</sup> (I	Evalaia)
10		Indicators of hydric soil and wetland hydro	
11		be present, unless disturbed or problemation	
Woody Vine Stratum (Plot size:)	= Total C	over	
1,		Hydrophytic	
2		Vegetation Present? Yes No	7
% Bare Ground in Herb Stratum	= Total C	over resNo	<u> </u>
Remarks:	1	- A Comment of the second of t	11.5
Milestation comment	(1) 10 h LUI	Caecies not graning	
Ser V-C TO	111	0 0 0	
My grophytes Chishe	N for on ophi	poes not pass PI	)

Profile Description: (Describe to the	e depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	100 200 301 00 000 000
(inches) Color (moist) 9		Texture Remarks
0-12 10412-13 10		siltloun firm
712 too compailer	(	
1 to CO Lither Mr		
Type: C=Concentration D=Depletion	, RM=Reduced Matrix, CS=Covered or Coated Sand Gr	pion 2 position DI - Poro Living Manager
	to all LRRs, unless otherwise noted.)	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A1	1) Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		
Depth (inches):	omaties present in	Hydric Soil Present? Yes No
Depth (inches):	omaties present in not consistent, our build bern	Hydric Soil Present? Yes No
Depth (inches):  Remarks:  IN Clips + and  Modernal to  YDROLOGY	maties present in not consistent, on build bern	Hydric Soil Present? Yes No
Depth (inches):	maties present in not consistent, of build bern	Hydric Soil Present? Yes No
Depth (inches):	omaties present in not consistent, in build berm	Hydric Soil Present? Yes No No No No No No
Depth (inches):	omatiles present in an apply)  _ Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)
Depth (inches):  Remarks:  CODO CARPS + ARR  POROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required)
Depth (inches):  Remarks:  CODO CAIPS + AND  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2
Depth (inches):	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Depth (inches):  Remarks:  YOROLOGY  Vetland Hydrology Indicators:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C
Depth (inches):  Remarks:  YOROLOGY  Vetland Hydrology Indicators:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Rool</li> </ul>	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C
Depth (inches):  Remarks:  COD CAPS + APS  POROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recomment of the position of the positi	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  ts (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)
Depth (inches):  Remarks  Cold ChipS + and  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recomment of the primary Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):  Remarks:  CODO  CAPS  POROLOGY  Vetland Hydrology Indicators:  Inimary Indicators (minimum of one recommend)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  s (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Depth (inches):  Demarks:  CODO  CAPS  CODO  COD	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  ry (B7)  Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 3  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  ry (B7)  Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  sts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Depth (inches):  Remarks:  PODD CAPS  POROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface ield Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  sts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Depth (inches):  Remarks  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recomment of the primary Indicators (minimum of one recomment of the primary Indicators (minimum of one recomment of the primary Indicators (Management Office of the primary Indicators (Man	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)  Depth (inches): 0 - 12	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  sts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one red Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surface (B1) Surface Water Present?  Ves Vater Table Present?  Ves Vater Table Present?	Water-Stained Leaves (B9) (except  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)  Depth (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Cits (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Depth (inches):  Remarks  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recomment of the primary Indicators (minimum of one recomment of the primary Indicators (minimum of one recomment of the primary Indicators (Management Office of the primary Indicators (Man	Water-Stained Leaves (B9) (except  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)  Depth (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  sts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surfacient (Concave Surfacient)  Field Observations:  Surface Water Present?  Ves  Saturation Present?  Yes  Saturation Present?  Yes  Includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)  Depth (inches):  No  Depth (inches):  Wetland  Wetland	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C as (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surfacient (Concave Surfacient)  Field Observations:  Surface Water Present?  Ves  Saturation Present?  Yes  Saturation Present?  Yes  Includes capillary fringe)	Water-Stained Leaves (B9) (except  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)  Depth (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Depth (inches):  Remarks:  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recommend)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surfacient (Concave Surfacient)  Field Observations:  Surface Water Present?  Ves  Saturation Present?  Yes  Saturation Present?  Yes  Includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rool  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Ty (B7)  Other (Explain in Remarks)  Depth (inches):  No  Depth (inches):  Wetland  Wetland	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Connick Ranch City/County: Ferndale/Himboldsampling Date: UIT7-Project/Site: Applicant/Owner: TWC Investigator(s): Section, Township, Range: Local relief (concave, convex, none) CONCAVE / NOVE Slope (%): Landform (hillslope, terrace, etc.): Subregion (LRR): Lat: NWI classification: Soil Map Unit Name: 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? NO Are "Normal Circumstances" present? Yes \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. NO X Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? 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 = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: Prevalence Index worksheet: Total % Cover of: OBL species FACW species FAC species FACU species = Total Cover UPL species Herb Stratum (Plot size: Column Totals: / OO\_ (A) Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% ND3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 100 = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum

Depth Matrix	Redox Features	Table Blasse
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
FID 1041512 70	1 2.31 14 10 C M	SIH loam tirm
		-17
<del></del>		*1
Type: C=Concentration D=Depletion F	RM=Reduced Malrix, CS=Covered or Coaled Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
_ Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	
_ Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
<ul> <li>Depleted Below Dark Surface (A11)</li> </ul>		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Restrictive Layer (if present):	Redox Depressions (F8)	unless disturbed or problematic.
Type:	<del></del>	
Depth (inches):		Hydric Soil Present? Yes No
YDROLOGY		
YDROLOGY Wetland Hydrology Indicators:	uired; check all that apply)	Secondary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators:	uired; check all that apply) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ		
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
YDROLOGY Vetland Hydrology Indicators: Irimary Indicators (minimum of one requestrated Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
POROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one requestrates Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2</li> <li>4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requestriated Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)
YDROLOGY Vetland Hydrology Indicators: Irimary Indicators (minimum of one requestrated Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living R</li> <li>Presence of Reduced Iron (C4)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9  Coots (C3)  Shallow Aquitard (D3)
YDROLOGY Vetland Hydrology Indicators: Vimary Indicators (minimum of one requestriance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 coots (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3)  C6)  □ FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) γ Ω FAC-Neutral Test (D5)  A) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 coots (C3) □ Geomorphic Position (D2) □ Shallow Aquitard (D3)  C6)  □ FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) γ Ω FAC-Neutral Test (D5)  A) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface  Sield Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (  Stunted or Stressed Plants (D1) (LRR (B7))  (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) γ Ω FAC-Neutral Test (D5)  A) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface (B6)  Field Observations:  Surface Water Present?  Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (  Stunted or Stressed Plants (D1) (LRR  (B7)  Other (Explain in Remarks)  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9 coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) \(\sum_D\) FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Ves  Water Table Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Poet (B8)  No Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)   FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Ves  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Poe (B8)  Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9 coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) \(\sum_D\) FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Poet (B8)  No Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 toots (C3)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Ves Mater Table Present? Yes Saturation Present? Yes includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Ce (B8)  No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 toots (C3)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Waler (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Ce (B8)  No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 toots (C3)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface  Vegetated Co	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Ce (B8)  No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 toots (C3)
Vetland Hydrology Indicators:  Irimary Indicators (minimum of one requestrians)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surfactive Conc	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR (B7) Other (Explain in Remarks)  Ce (B8)  No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 toots (C3)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Connick Rauch City/County: Ferndal/HVM bold + Sampling Date: U17 Applicant/Owner: TWC Sampling Point: 10/13 Investigator(s): Section, Township, Range: road Landform (hillslope, terrace, etc.): \_ le Vee Local relief (concave, convex, none): \[ \lambda \alpha \rangle \rangle \lambda \rangle \lambda \rangle \rangl Long: Subregion (LRR): Lat: Datum: Soil Map Unit Name: \_\_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic?  ${\cal N}$  (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? No Yes boundern on abrup 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: (A) Total Number of Dominant (B) Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species **FACW** species FAC species **FACU** species = Total Cover UPL species Herb Stratum (Plot size: 1. Holcus lanans. Column Totals: Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 5. Tankacomo 2 - Dominance Test is >50% 103 - Prevalence Index is ≤3.01 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 10.\_ <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum

rofile Description: (Describe to the		F			
Depth Matrix (inches) Color (moist)	% Color (maist)	Features Type	Loc <sup>2</sup>	Texture	Remarks
	78 2.544/1	7 1	m	- 11	
10 1041C-112	10 234 44			Soft learn	)
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Type: C=Concentration, D=Depletion	n, RM=Reduced Matrix, CS=	Covered or Coal	ted Sand Gr	ains. <sup>2</sup> Locatio	n: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable	to all LRRs, unless otherw	vise noted.)		Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5	5)		2 cm Mi	uck (A10)
Histic Epipedon (A2)	Stripped Matrix (S			Red Par	ent Material (TF2)
Black Histic (A3)	Loamy Mucky Mi		ot MLRA 1)	Very Sh	allow Dark Surface (TF12)
_ Hydrogen Sulfide (A4)	Loamy Gleyed M			Other (E	Explain in Remarks)
Depleted Below Dark Surface (A1					
Thick Dark Surface (A12)	Redox Dark Surfa				f hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark St				ydrology must be present,
_ Sandy Gleyed Matrix (S4)	Redox Depressio	ons (F8)		unless dis	sturbed or problematic.
estrictive Layer (if present):					
Type:					(/
				CAMBOTA THE STANDARD	
emarks:  Octo not meet  (educed (72),	wefland soil Varigation	indicate	rs as	may be	x chromanot due to
Total State	wefland soil Varigation als churing	indicato in soil d levee c	rs as	may be	
emarks:  OCS not meet  (educed (72),  IMPORTED WHEN  OROLOGY  Vetland Hydrology Indicators:	als aming	lever c	rs as	may be	x chromanot due to
emarks:  DOES not meet  I reduced (72).  I M DOTTED materi	equired; check all that apply)	ievee c	011577	matri May be ruction	x chromanot due to
emarks:  OCS not meet  (leduced (72),  IM DOTHED MAKEN  /DROLOGY  /etland Hydrology Indicators:  rimary Indicators (minimum of one re  _ Surface Water (A1)	equired; check all that apply)  Waler-Stain	ed Leaves (B9) (	011577	matri May be vetren Secondar Water	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2
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emarks:  OCS not rice to the control of the control	equired; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13)	011577	Secondar  Water  Drain  Dry-S	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) eason Water Table (C2)
emarks:  OCES not ret  (lduced (72),  MOTHED water  (DROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	equired; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve	ed Leaves (B9) ( 2, 4A, and 4B) 311) ertebrates (B13) ulfide Odor (C1)	except	Secondar  Water  Drain  Dry-S  Satur	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (CS
emarks:  OCS not rice to the control of the control	equired; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh	ed Leaves (B9) ( 2, 4A, and 4B) 311) ertebrates (B13) ulfide Odor (C1) nizospheres along	except g Living Roo	Secondar  Water  Drain  Dry-S  Saturn  S(C3)  Georgia	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Cstorphic Position (D2)
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emarks:  OCS not meet  (educed (72))  (DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	equired; check all that apply)  Water-Stains MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13) ulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Tilla	except g Living Roo (4) ed Soils (C6	Secondar  Water  Drain  Dry-S  Satur  (C3) Geom  Shalle  FAC-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 n, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Cs. porphic Position (D2) ow Aquitard (D3) Neutral Test (D5)
emarks:  OCS not meet  (leduced (72),  IMPORTED MARKET  /DROLOGY  /etland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	equired; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Stunted or Si	ed Leaves (B9) ( 2, 4A, and 4B) 311) ertebrates (B13) ulfide Odor (C1) nizospheres along FReduced Iron (C) Reduction in Tilli Stressed Plants (I	except g Living Roo (4) ed Soils (C6	Secondar  Secondar  Water  Drain  Dry-S  Satur  (C3) Geom  Shallo  FAC-  Raise	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Cs torphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
emarks:  OCS not meet  (lduced (72)  (M) When when  DROLOGY  Vetland Hydrology Indicators: rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image	equired; check all that apply)  Waler-Stains MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Stunted or Si  ery (B7)  Other (Explains)	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13) ulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Tilla	except g Living Roo (4) ed Soils (C6	Secondar  Secondar  Water  Drain  Dry-S  Satur  (C3) Geom  Shallo  FAC-  Raise	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 n, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Cs norphic Position (D2) ow Aquitard (D3) Neutral Test (D5)
emarks:  OCS Not Meet  (Cuced (72)  (DROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Waler (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Sur	equired; check all that apply)  Waler-Stains MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Stunted or Si  ery (B7)  Other (Explains)	ed Leaves (B9) ( 2, 4A, and 4B) 311) ertebrates (B13) ulfide Odor (C1) nizospheres along FReduced Iron (C) Reduction in Tilli Stressed Plants (I	except g Living Roo (4) ed Soils (C6	Secondar  Secondar  Water  Drain  Dry-S  Satur  (C3) Geom  Shallo  FAC-  Raise	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (CS corphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
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emarks:  OCS Not Meet  (ldwced (72)  IM Whee Water  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imag.  Sparsely Vegetated Concave Surfice Water Present?  Yes	equired; check all that apply)  Waler-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S ery (B7) Tother (Explain	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13) ulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I ain in Remarks)	except g Living Roo (4) ed Soils (C6	Secondar  Secondar  Water  Drain  Dry-S  Satur  (C3) Geom  Shallo  FAC-  Raise	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (CS corphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
emarks:  OCES Not Meet  (Cuced (72)  (Marked Water)  (DROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Ves  Vater Table Present? Yes  Ves  Ves _	equired; check all that apply)  Water-Stains MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Stunted or Si  ery (B7)  Tace (B8)  Depth (inch-  Depth (inch-	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C Reduction in Tille Stressed Plants (I ain in Remarks)	except  g Living Roo (4) ed Soils (C6 D1) (LRR A)	Secondar  Water  Drain  Dry-S  Satur  Shalle  FAC-  Raise  Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 y, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C5 prophic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
rimary Indicators (minimum of one results)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Ves	equired; check all that apply)  Waler-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S ery (B7) face (B8)  Depth (inch No Depth (inch	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C Reduction in Tille Stressed Plants (I ain in Remarks)	except  g Living Roo (4) ed Soils (C6 D1) (LRR A)	Secondar  Water  Drain  Dry-S  Saturn  Shalle  FAC-  Raise  Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 y, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Cs. at
emarks:  OCS Not Meet  (Couced (72)  (Noted Water)  (Petland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surfice Water Present?  Vater Table Present?  Yes  aturation Present?  Yes  aturation Present?  Yes  Sparsely Yes  Saturation Present?	equired; check all that apply)  Waler-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S ery (B7) face (B8)  Depth (inch No Depth (inch	ed Leaves (B9) ( 2, 4A, and 4B) 311) entebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C Reduction in Tille Stressed Plants (I ain in Remarks)	except  g Living Roo (4) ed Soils (C6 D1) (LRR A)	Secondar  Water  Drain  Dry-S  Saturn  Shalle  FAC-  Raise  Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 y, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C5 prophic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
remarks:  OCES Not Meet  (Cuced (72)  (Cuced (72)  (Market Market)  (Petland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Vater Table Present?  Ves  aturation Present? Yes  rictudes capillary fringe)  escribe Recorded Data (stream gau	equired; check all that apply)  Waler-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S ery (B7) face (B8)  Depth (inch No Depth (inch	ed Leaves (B9) ( 2, 4A, and 4B) 311) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C Reduction in Tille Stressed Plants (I ain in Remarks)	except  g Living Roo (4) ed Soils (C6 D1) (LRR A)	Secondar  Water  Drain  Dry-S  Saturn  Shalle  FAC-  Raise  Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 y, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C5 prophic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
rimary Indicators (minimum of one results)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Ves	equired; check all that apply)  Waler-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S ery (B7) face (B8)  Depth (inch No Depth (inch	ed Leaves (B9) ( 2, 4A, and 4B) 311) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C Reduction in Tille Stressed Plants (I ain in Remarks)	except  g Living Roo (4) ed Soils (C6 D1) (LRR A)	Secondar  Water  Drain  Dry-S  Saturn  Shalle  FAC-  Raise  Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2 y, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C5 prophic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)

oject/Site: CONNICK RANC	tt city		Humbou Tsampling Date: 10 15
oplicant/Owner: TWC			State: CA Sampling Point: UIT9
vestigator(s): A. GOWER	\$ ( SCOT Se	ction, Township, Range:	
ndform (hillslope, terrace, etc.): _ Fu		cal relief (concave, convex,	none): CONCAVE / LINEDE Slope (%):
bregion (LRR):		Long:	Datum:
il Map Unit Name:		.*	NWI classification:
e climatic / hydrologic conditions on the		Yes X No	(If no, explain in Remarks.)
e Vegetation NO , Soil NO , or H			Circumstances" present? Yes No
e Vegetation ND, Soil ND, or Hy	TO THE PERSON OF	Marting to the second s	explain any answers in Remarks.)
			ons, transects, important features, et
lydrophytic Vegetation Present?	Yes No No		
ydric Soil Present?	Yes No	Is the Sampled Area	Yes No
letland Hydrology Present?	Yes No	within a Wetland?	res No
emarks:	1		21
		31	
	NAMES OF THE SECOND		
GETATION – Use scientific r		,	
ee Stratum (Plot size:		nacios2 Status	inance Test worksheet:
VIOLENCE TO SECURITION OF THE PROPERTY OF THE		Numi	per of Dominant Species Are OBL, FACW, or FAC:(A)
		1 1 ACTOR 1	Number of Dominant 2 (B)
		- Poros	ent of Dominant Species
San			Are OBL, FACW, or FAC: (A/E
pling/Shrub Stratum (Plot size:		Preva	alence Index worksheet:
			otal % Cover of: Multiply by:
		OBL :	species x1=
			V species x2 =
,			species $90 \times 3 = 270$
0	0 =	Total Cover	J species x 4 =
rb Stratum (Plot size:	1	UPLS	species x 5 =
Agrossis st.	65	TAC Colur	nn Totals: 100 (A) 310 (B
Hantas la.		N THOU	Prevalence Index = B/A = 31/0
tolcuso la		A I I I	ophytic Vegetation Indicators:
Kunney Cr.		the state of the s	- Rapid Test for Hydrophytic Vegetation
, 1		2.0	- Dominance Test is >50%
		/	- Prevalence Index is ≤3.0¹
	4.		<ul> <li>Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
			- Wetland Non-Vascular Plants <sup>1</sup>
15 M			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			ators of hydric soil and wetland hydrology must
	100 = 1	Fotal Cover be pro	esent, unless disturbed or problematic.
oody Vine Stratum (Plot size:			
			ophytic
		Vege	tation
	- <del>-</del>	Prese	ent? Yes No Ma
Bare Ground in Herb Stratum	<b></b> =1	Total Cover	ent? Yes'_ No

SOIL		Sampling Point OIT9-L
Profile Description: (Describe to the	depth needed to document the indicator or confirm	n the absence of indicators.)
Depth Malrix	Redox Features	
(inches) Color (moist) %		
O-18 104R31285	2.54414 15 CM	siltloam from
		VOISE DEDGELLA
	<del></del>	0 5 711
· · · · · · · · · · · · · · · · · · ·		
		<del></del>
		<del></del>
	RM=Reduced Matrix, CS=Covered or Coated Sand Gr	
Hydric Soil Indicators: (Applicable to		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
<ul><li>Depleted Below Dark Surface (A11</li><li>Thick Dark Surface (A12)</li></ul>	the state of the s	3
Sandy Mucky Mineral (S1)	Redox Dark Surface (F6)  Depleted Dark Surface (F7)	Indicators of hydrophytic vegetation and
Sandy Middle Matrix (S4)	Redox Depressions (F8)	welland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):		unless disturbed or problematic.
Type:		3.7
Depth (inches):		Hydric Soil Present? Yes No
Remarks.		Hydric Soil Present? Tes No
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one req	uired, check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roo	ts (C3) X Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	) / // FAC-Neutral Test (D5) // D
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagen	(B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surfa	ce (B8)	
Field Observations:		
Surface Water Present? Yes	No X Depth (inches). 7 10"	
Water Table Present? Yes	No Depth (inches):!	A
Saturation Present? Yes	No Depth (inches): II Wetla	and Hydrology Present? Yes No
(includes capillary fringe)		7
Describe Recorded Data (stream gauge	, monitoring well, aerial photos, previous inspections), i	if available:
Remarks:		1.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4
Assume winter h	your based on Topo st	rong redox + soil
Tindicatore in	relatively undistribed	Incotino
Marine 1	The state of the s	loconion

Project/Site: CONNICK RANC+	+	City/County: FRNA	E/HUMBOLDT	Sampling Date: 10/10/1
Applicant/Owner: TWC			State: CA	Sampling Point: VITIL-
Investigator(s): A GOWEL &	L. WEBB	Section, Township, Ra		
Landform (hillslope, terrace, etc.):	VEE/ROW	Local relief (concave,	convex, none): CONCHI	Slope (%): 2
Subregion (LRR):	Lat:		Long:	Dalum:
Soil Map Unit Name:			NWI classific	cation:
Are climatic / hydrologic conditions on the	site typical for this time of y	ear? YesX_ No _	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or H	ydrology significantly	disturbed? No Are	'Normal Circumstances" p	present? Yes X No
Are Vegetation, Soil, or H	ydrology naturally pr	roblematic? ND (If no	eeded, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Att	ach site map showing	g sampling point l	ocations, transects	s, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No	Is the Sampled within a Wetlan	Area	No X
Remarks:			9)	
VEGETATION – Use scientific r	names of plants.			
Tree Stratum (Plot size:	-	Species? Status	Dominance Test work Number of Dominant S That Are OBL, FACW,	pecies
2			Total Number of Domir Species Across All Stra	nant
4	d	= Total Cover	Percent of Dominant S	pecies ///
Sapling/Shrub Stratum (Plot size:1			That Are OBL, FACW, Prevalence Index wor	rksheet:
2.			Total % Cover of: OBL species	
3			FACW species	
4			FAC species 7	5 x3= 225
5	- ch		FACU species 1	) x4= 40
Herb Stratum (Plot size:	_4	_ = Total Cover	UPL species	
1. Kumex CT.	10	N PAC	Column Totals: 100	$\frac{0}{2}$ (A) $\frac{340}{3}$ (B)
2 Holcus la.	65	Y FAC	Prevalence Index	= B/A = 3.40
3. Plantago da.		MACH	Hydrophytic Vegetati	
4. Targydoum d.		N PAUL	The second secon	Hydrophytic Vegetation
		70 100	2 - Dominance Tes	
7.			NO3 - Prevalence Ind	ex is ≤3.0° Adaptations¹ (Provide supporting
8.			data in Remark	s or on a separate sheet)
9.			5 - Wetland Non-V	ascular Plants <sup>1</sup>
10.			Problematic Hydro	phytic Vegetation¹ (Explain)
11.	1.0			il and wetland hydrology must
Woody Vine Stratum (Plot size:	100	= Total Cover	be present, unless dist	urbed of problematic.
1			Hydrophytic	
2.			Vegetation	A
d	Ø	_= Total Cover	Present? Ye	es No <u>//</u>
% Bare Ground in Herb Stratum				
IP=131 from wet V		11 1	1	1000

rofile Description: (Describe to the de Depth Matrix	Redo	x Features			
nches) Color (moist) %	Color (moist)		Type'	Loc <sup>2</sup>	Texture Remarks
0-18 10483/3 100	0 -	0	hammer	_	sit loam
	_				
		-			
					-
		-			
	-				
ype: C=Concentration, D=Depletion, RI	M=Reduced Matrix, CS	S=Covered o	or Coated	d Sand Gr	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to a	all LRRs, unless othe	rwise noted	1.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redox (	S5)			2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix				Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky N		(except	MLRA 1)	
_ Hydrogen Sulfide (A4)	Loamy Gleyed				Other (Explain in Remarks)
_ Depleted Below Dark Surface (A11)	Depleted Matrix				3
_ Thick Dark Surface (A12)	Redox Dark Su				<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark		)		wetland hydrology must be present, unless disturbed or problematic.
_ Sandy Gleyed Matrix (S4) estrictive Layer (if present):	Redox Depress	ions (F8)			unless distance of problematic.
Type:					1.2
туре.					W. M. D. II D
Donth (inches):					Hydric Soil Present? Yes No \
Depth (inches):emarks:					Hydric Soil Present? Yes No
emarks: 'DROLOGY					Hydric Soil Present? Yes No
emarks:  /DROLOGY /etland Hydrology Indicators:	red: check all that appl	v)			Secondary Indicators (2 or more required)
emarks:  'DROLOGY  'etland Hydrology Indicators: rimary Indicators (minimum of one requir			5 (B9) (ex	cept	Secondary Indicators (2 or more required)
emarks:  'DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)	Water-Sta	ined Leaves		cept	Secondary Indicators (2 or more required)
emarks:  'DROLOGY  fetland Hydrology Indicators: rimary Indicators (minimum of one requir _ Surface Water (A1) _ High Water Table (A2)	Water-Sta	ined Leaves 1, 2, 4A, and		ccept	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2
emarks:  'DROLOGY  fetland Hydrology Indicators: rimary Indicators (minimum of one requir _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3)	Water-Sta MLRA Salt Crust	ined Leaves 1, 2, 4A, and (B11)	d 4B)	cept	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)
emarks:  'DROLOGY  fetland Hydrology Indicators: rimary Indicators (minimum of one requir _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1)	Water-Sta MLRA Salt Crust Aquatic In	ined Leaves 1, <b>2, 4A,</b> and (B11) vertebrates (	(B13)	cept	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
emarks:  "DROLOGY  Tetland Hydrology Indicators: rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odol	(B13) or (C1)		Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Ca
emarks:  /DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one requir _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leaves  1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres	d 4B) (B13) or (C1) es along L	Living Roc	Secondary Indicators (2 or more required)  Water-Stained Leaves (89) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Cats (C3)  Geomorphic Position (D2)
emarks:  "DROLOGY  Tetland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leaves  1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced	(B13) or (C1) es along L Iron (C4)	Living Roo )	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
POROLOGY  Tetland Hydrology Indicators:  Timary Indicators (minimum of one require)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leaves  1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction	(B13) or (C1) es along L fron (C4) or in Tilled	.iving Roc ) I Soils (C6	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Companies (C3))  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
emarks:  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one requir _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3) _ Algal Mat or Crust (B4) _ Iron Deposits (B5) _ Surface Soil Cracks (B6)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction r Stressed Pl	(B13) or (C1) es along L Iron (C4) or in Tilled	.iving Roc ) I Soils (C6	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Companies (C3))  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
rimary Indicators:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Ex	ined Leaves  1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction	(B13) or (C1) es along L Iron (C4) or in Tilled	.iving Roc ) I Soils (C6	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Companies of the companies of the compani
rimary Indicators:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Ex	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction r Stressed Pl	(B13) or (C1) es along L Iron (C4) or in Tilled	.iving Roc ) I Soils (C6	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Casts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) 0 / b  Raised Ant Mounds (D6) (LRR A)
rimary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface ield Observations;	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Ex	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction r Stressed Pl plain in Rem	(B13) or (C1) es along L Iron (C4) or in Tilled	.iving Roc ) I Soils (C6	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3  (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) O / D  Raised Ant Mounds (D6) (LRR A)
rimary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface ield Observations;	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized If  Presence  Recent Iro  Stunted or  Other (Expect (B8))  Depth (in	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction r Stressed Pl plain in Rem ches):	(B13) or (C1) es along L Iron (C4) or in Tilled	.iving Roc ) I Soils (C6	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Casts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) 0 / b  Raised Ant Mounds (D6) (LRR A)
rimary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface ield Observations; urface Water Present? Vater Table Present?	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized If  Presence  Recent Irc  Stunted or  Other (Expected)  (B7)  Depth (in	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction r Stressed Pl plain in Rem ches): ches):	(B13) or (C1) es along L Iron (C4) or in Tilled	Living Roo )   Soils (C6  ) (LRR A	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3  (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) O / D  Raised Ant Mounds (D6) (LRR A)
rimary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface (B4) Iron Deposits (B5) Surface Water Present? Vater Table Present? Ves Includes capillary fringe)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Expense) (B7) Depth (in No Depth (in	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction Stressed Pl plain in Rem  ches): ches): ches):	(B13) (B13) or (C1) es along L Iron (C4) on in Tilled Plants (D1 nearks)	Living Roo )   Soils (C6  ) (LRR A	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Citorial Calculus (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) O / b  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
rimary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (Sparsely Vegetated Concave Surface ield Observations: urface Water Present? Vater Table Present? Yes aturation Present? Yes Indicators:	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Expense) (B7) Depth (in No Depth (in	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction Stressed Pl plain in Rem  ches): ches): ches):	(B13) (B13) or (C1) es along L Iron (C4) on in Tilled Plants (D1 nearks)	Living Roo )   Soils (C6  ) (LRR A	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (Citorial Calculus (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) O / b  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
rimary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface ield Observations; urface Water Present? Yes	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Expense) (B7) Depth (in No Depth (in	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction Stressed Pl plain in Rem  ches): ches): ches):	(B13) (B13) or (C1) es along L Iron (C4) on in Tilled Plants (D1 nearks)	Living Roc )   Soils (C6  ) (LRR A	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) O b  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
rimary Indicators (minimum of one requires Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery ( Sparsely Vegetated Concave Surface (B4) Iron Deposits (B5) Surface Water Present? Vater Table Present? Ves Includes capillary fringe)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Expense) (B7) Depth (in No Depth (in	ined Leaves 1, 2, 4A, and (B11) vertebrates ( Sulfide Odor Rhizospheres of Reduced on Reduction Stressed Pl plain in Rem  ches): ches): ches):	(B13) (B13) or (C1) es along L Iron (C4) on in Tilled Plants (D1 nearks)	Living Roc )   Soils (C6  ) (LRR A	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5) O b  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

			Avmbold Sampling Date: 10/15/2
	- ICANION		State: Sampling Point: VIT/I-
Applicant/Owner: 1070	( SCATT / LIVE)		
nvestigator(s): A GOVER \$	Theodolain	Section, Township, Ra	convex, none) CON (LUR / INCUT Slope (%): 2
			Long: Datum:
Soil Map Unit Name:			NWI classification:
are climatic / hydrologic conditions on th			
			Normal Circumstances" present? Yes No
re Vegetation, Soil, or F	Hydrology naturally pr	oblematic? (If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - At	tach site map showing	sampling point le	ocations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No No Yes	Is the Sampled within a Wetlar	~
Remarks: ASSWALD V	verland hy	(10	
/EGETATION – Use scientific	names of plants.		
		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	) <u>% Cover</u>	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
1 2			
3.			Total Number of Dominant Species Across All Strata:  (B)
4.			
A LOSSIE AND DESCRIPTION	P	_ = 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:
2	<del></del>	<del></del>	OBL species x1 =
3			FACW species x2=
5			FAC species x3 =
<u> </u>	d	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size:	1	VI to	UPL species x5 = 0
1. Agrostis st.		J HAC	Column Totals: 100 (A) 305 (B)
2 Holcus Ja.		TAC	Prevalence Index = B/A = 3.05
3. Plantago la		N FACU	Hydrophytic Vegetation Indicators:
4			1 - Rapid Test for Hydrophytic Vegetation
5			2 - Dominance Test is >50%
6			103 - Prevalence Index is ≤3.01
7			<ul> <li>4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
8			5 - Wetland Non-Vascular Plants¹
9			Problematic Hydrophytic Vegetation <sup>†</sup> (Explain)
10.			Indicators of hydric soil and wetland hydrology must
11	160	2= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:			
1			Hydrophytic Vegetation
2	1 0	= Total Cover	Present? Yes No
% Bare Ground in Herb Stratum	P P	Total Cover	
Remarks:	1	. 0	
TP=6 from wet	boundary (	Iow angle.	Slope)

Depth Matrix (inches) Color (moist) %		x Features %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	rks
D-18 104R3/2 91	N 10483/3	In	(0	M	Cill lower	Ain-	+ redos
0-10 10-16-18-11	0 1011-13	152			111100	1205 10	and march
						closes	OF MILET
		. بست				F	6
		-					
Type: C=Concentration, D=Depletion,				d Sand G		ion: PL=Pore Linir	
ydric Soil Indicators: (Applicable t	o all LRRs, unless other	wise noted	d.)			for Problematic I	Hydric Soils':
_ Histosol (A1)	Sandy Redox (S					fluck (A10)	
Histic Epipedon (A2)	Stripped Matrix			بالمالية الماليدي		arent Material (TF2	
Black Histic (A3)	Loamy Mucky N			MLRA 1)		hallow Dark Surfa	
Hydrogen Sulfide (A4)	Loamy Gleyed I				Other	(Explain in Remarl	(0)
<ul> <li>Depleted Below Dark Surface (A11 Thick Dark Surface (A12)</li> </ul>	Depleted Matrix Redox Dark Sur				3Indicators	of hydrophytic veg	etation and
Sandy Mucky Mineral (S1)	Depleted Dark S		7)			hydrology must be	
Sandy Gleyed Matrix (S4)	Redox Depress		,			disturbed or proble	
estrictive Layer (if present):							
Type:							(/
Depth (inches):					Hydric Soil Pr	resent? Yes	No X
Remarks:							
remarks:							
YDROLOGY Vetland Hydrology Indicators:	quired; check all that apply	0				ary Indicators (2 or	more required)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one rec			s (B9) (e)	ccept	Seconda	ary Indicators (2 or er-Stained Leaves	564 0 167 Ct 56 1
YDROLOGY Vetland Hydrology Indicators: Vrimary Indicators (minimum of one recommend) Surface Water (A1)	Water-Stai	ned Leaves		ccept	Seconda Wat		564 6 16 TO F
YDROLOGY  Vetland Hydrology Indicators:  Vrimary Indicators (minimum of one recomposed water (A1)  High Water Table (A2)	Water-Stai	ned Leaves 1, 2, 4A, an		ccept	Seconda Wat	er-Stained Leaves	(B9) (MLRA 1, 2
YDROLOGY Vetland Hydrology Indicators: Irimary Indicators (minimum of one recomposed water (A1) High Water Table (A2) Saturation (A3)	Water-Stai MLRA ' Salt Crust	ned Leaves 1, 2, 4A, an (B11)	nd 4B)	cept	Seconda Wat Drai	er-Stained Leaves A, and 4B)	(B9) (MLRA 1, 2
POROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one recomply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stai MLRA Sall Crust Aquatic Inv	ned Leaves 1, 2, 4A, an (B11) vertebrates	nd 4B) (B13)	ccept	Seconds Wat Drai Dry-	er-Stained Leaves A, and 4B) nage Patterns (B1	(B9) (MLRA 1, 2 0) ble (C2)
POROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one recomment)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	Water-Stai MLRA Sall Crust Aquatic Inv Hydrogen	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odd	(B13) or (C1)		Seconda  Wat  Drai  Dry- Satu	er-Stained Leaves A, and 4B) nage Patterns (B1 Season Water Tat	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9
YDROLOGY Vetland Hydrology Indicators: Vrimary Indicators (minimum of one recomment of the property of the pro	Water-Stai MLRA Sall Crust Aquatic Inv Hydrogen Oxidized R	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odd thizosphere	nd 4B) (B13) or (C1) es along l	Living Roo	Seconda  Wat  Drai  Dry  Satu	er-Stained Leaves A, and 4B) nage Patterns (B1 Season Water Tat Iration Visible on A	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (CS
POROLOGY  Vetland Hydrology Indicators: rimary Indicators (minimum of one recomply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R	ned Leaves  1, 2, 4A, an  (B11)  vertebrates  Sulfide Odo  chizosphere  of Reduced	nd 4B) (B13) or (C1) es along l	Living Roc	Seconda  Wat  Drai  Dry- Satu  Statu  Sha	er-Stained Leaves  A, and 4B)  nage Patterns (B1  Season Water Tat  uration Visible on A  morphic Position (	(B9) (MLRA 1, 2 0) ble (C2) herial Imagery (C5 D2)
YDROLOGY Vetland Hydrology Indicators: Vimary Indicators (minimum of one recomposition (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iro	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odd thizosphere	nd 4B)  (B13) or (C1) es along l I Iron (C4 on in Tilled	Living Roo ) I Soils (C6	Seconda  Wat  Drai  Dry  Satu  Sha  Sh	er-Stained Leaves A, and 4B) nage Patterns (B1 Season Water Tat uration Visible on A morphic Position ( Ilow Aquitard (D3)	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C5 D2)
YDROLOGY  Vetland Hydrology Indicators:  Yimary Indicators (minimum of one recomposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of  Recent Iron  Stunted or	ned Leaves  1, 2, 4A, an  (B11)  vertebrates  Sulfide Odo  chizosphere  of Reduced  n Reduction	nd 4B)  (B13) or (C1) es along l I Iron (C4 on in Tilled	Living Roo ) I Soils (C6	Seconds  — Wat  — Drai  — Dry- — Satu Ols (C3) — Geo Sha  S) — Rais	er-Stained Leaves  A, and 4B)  nage Patterns (B1  Season Water Tataration Visible on Aumorphic Position (Illow Aquitard (D3)  S-Neutral Test (D5)	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)
VDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one rec Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Ty (B7)  OMLRA  Aquatic Inv  Request  MITTER  MI	ned Leaves  1, 2, 4A, an  (B11)  vertebrates  Sulfide Odo  thizosphere  of Reduced  n Reduction  Stressed P	nd 4B)  (B13) or (C1) es along l I Iron (C4 on in Tilled	Living Roo ) I Soils (C6	Seconds  — Wat  — Drai  — Dry- — Satu Ols (C3) — Geo Sha  S) — Rais	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat aration Visible on A morphic Position ( Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)
VDROLOGY Vetland Hydrology Indicators: Irimary Indicators (minimum of one recomposite (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imager	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Ty (B7)  OMLRA  Aquatic Inv  Request  MITTER  MI	ned Leaves  1, 2, 4A, an  (B11)  vertebrates  Sulfide Odo  thizosphere  of Reduced  n Reduction  Stressed P	nd 4B)  (B13) or (C1) es along l I Iron (C4 on in Tilled	Living Roo ) I Soils (C6	Seconds  — Wat  — Drai  — Dry- — Satu Ols (C3) — Geo Sha  S) — Rais	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat aration Visible on A morphic Position ( Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)
YDROLOGY Vetland Hydrology Indicators: Vimary Indicators (minimum of one recompliance) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imager Sparsely Vegetated Concave Surfacield Observations:	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  ry (B7)  Other (Exp	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P dain in Rem	nd 4B)  (B13) or (C1) es along l I Iron (C4 on in Tilled	Living Roo ) I Soils (C6	Seconds  — Wat  — Drai  — Dry- — Satu Ols (C3) — Geo Sha  S) — Rais	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat aration Visible on A morphic Position ( Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one recompositions) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imager Sparsely Vegetated Concave Surfacield Observations:	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  ace (B8)	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo chizosphere of Reduced in Reduction Stressed P clain in Rem	nd 4B)  (B13) or (C1) es along l I Iron (C4 on in Tilled	Living Roo ) I Soils (C6	Seconds  — Wat  — Drai  — Dry- — Satu Ols (C3) — Geo Sha  S) — Rais	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat aration Visible on A morphic Position ( Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recomplete Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager  Sparsely Vegetated Concave Surface Water Present?  Ves  Saturation Present?  Yes	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  ace (B8)  Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P clain in Rem ches):	(B13) or (C1) es along l d Iron (C4) in in Tilled Plants (D' narks)	Living Roo ) I Soils (C6 I) (LRR A	Seconda  Wat  Drai  Dry- Satu  Sha  Sha  Fros	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat uration Visible on A morphic Position ( Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D st-Heave Hummocl	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)
Primary Indicators (minimum of one recompany Indicators (Malany Indicators	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  ace (B8)  Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P clain in Rem ches):	(B13) or (C1) es along l d Iron (C4) in in Tilled Plants (D' narks)	Living Roo ) I Soils (C6 I) (LRR A	Seconda  Wat  Drai  Dry- Satu  Sha  Sha  Fros	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat uration Visible on A morphic Position ( Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D st-Heave Hummocl	(B9) (MLRA 1, 2 0) ole (C2) derial Imagery (C9 D2) 06) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one recomposition of the process)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager  Sparsely Vegetated Concave Surfaction of the process of th	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  ace (B8)  Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P clain in Rem ches):	(B13) or (C1) es along l d Iron (C4) in in Tilled Plants (D' narks)	Living Roo ) I Soils (C6 I) (LRR A	Seconda  Wat  Drai  Dry- Satu  Sha  Sha  Fros	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat uration Visible on A morphic Position ( Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D st-Heave Hummocl	(B9) (MLRA 1, 2 0) ole (C2) derial Imagery (C9 D2) 06) (LRR A)
Vetland Hydrology Indicators:  Verimary Indicators (minimum of one recomment)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager  Sparsely Vegetated Concave Surfacield Observations:  Surface Water Present?  Ves	Water-Stai  MLRA  Sall Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iron  Stunted or  Other (Exp  ace (B8)  Depth (inc	ned Leaves 1, 2, 4A, an (B11) vertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed P clain in Rem ches):	(B13) or (C1) es along l d Iron (C4) in in Tilled Plants (D' narks)	Living Roo ) I Soils (C6 I) (LRR A	Seconda  Wat  Drai  Dry- Satu  Sha  Sha  Fros	er-Stained Leaves  A, and 4B) nage Patterns (B1 Season Water Tat uration Visible on A morphic Position ( Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D st-Heave Hummocl	(B9) (MLRA 1, 2 0) ole (C2) verial Imagery (C9 D2)

Subregion (LRR):Soil Map Unit Name:				convex, none : DY (COY   The assispe (%): 2  Long: Datum:
	drologys	ignificantly distu	urbed? N Are "	(If no, explain in Remarks.)  Normal Circumstances" present? Yes No  eded, explain any answers in Remarks.)
				ocations, transects, important features, et
Hydrophytic Vegetalion Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	X	Is the Sampled within a Wetlan	
Remarks				
EGETATION – Use scientific n	ames of plan	ts.		
Free Stratum (Plot size:  Sapling/Shrub Stratum (Plot size:  Herb Stratum (Plot size:  Cus la  Cus la		% Cover Sp	otal Cover  PAC  PAC  N FAC  N FAC	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  OBL species  FACW species  FACW species  FACU species  FACU species  FACU species  Column Totals:  100  Multiply by:  Multiply by:  FACW Species  FACU species  FACU species  FACU species  FACU species  Total  A = 00  FACU species  FACU
10		700 = To	otal Cover	Problematic Hydrophylic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation Present?  Yes No

Depth Ma	trix		Redox	Feature							
(inches) Color (moi		6	(moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture		R	emarks	
3-12 104 E31	2 10	0			-		5121	25/11			
106 10163	2 95	IOYR	414	5	-		514	LOPVA.			
Type: C=Concentration, D						d Sand Gr	rains. <sup>2</sup> L			Lining, M=I	
Hydric Soil Indicators: (A	pplicable to				ed.)					tic Hydric	Soils":
Histosol (A1)			ly Redox (S5 ped Matrix (S					cm Muck	(A10) Material	(TEO)	
Histic Epipedon (A2) Black Histic (A3)			ped Matrix (S ny Mucky Mir		1) (excent	MI RA 1)				urface (TF1	2)
Hydrogen Sulfide (A4)		The second secon	ny Gleyed Ma			MILION I			ain in Rer		-,
Depleted Below Dark S	urface (A11		eted Matrix (I								
Thick Dark Surface (A1			ox Dark Surfa							vegetation	
Sandy Mucky Mineral (			eted Dark Su		=7)					st be prese	nt,
Sandy Gleyed Matrix (S		Read	x Depression	ns (F8)	-		unie	ess distur	bed of pro	blematic.	
Restrictive Layer (if prese	nıy.										
Type: Depth (inches):							Hydric Sc	il Drocon	t2 Voc		No X
Deput (mortes).											
Remarks:											
Remarks: YDROLOGY	tors:	uired; check a	ll (hat apply)				Sec	43.07.70		2 or more r	A23-36-1
Remarks: YDROLOGY Wetland Hydrology Indica	tors:		Water-Staine	ed Leav		xcept	Sec	Water-Sta	ained Lea	2 or more r ves (B9) (N	A20-08-
YDROLOGY  Vetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)	tors:		Water-Staine MLRA 1,	ed Leav 2, 4A, a		xcept	<u>Sec</u>	Water-Sta	ained Lea nd 4B)	ves (B9) (I	A20-08-
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	tors:	_	Water-Staine MLRA 1, Salt Crust (B	ed Leav <b>2, 4A,</b> a 311)	and 4B)	xcept	<u>Sec</u>	Water-Sta <b>4A, ar</b> Drainage	ained Lea nd 4B) Patterns	ves (B9) ( <b>I</b> (B10)	/ILRA 1, 2
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	tors: n of one req		Water-Staine MLRA 1, Salt Crust (B Aquatic Inve	ed Leav 2, 4A, a 311) ertebrate	and 4B) es (B13)	xcept	Sec	Water-Sta 4A, ar Drainage Dry-Seas	ained Lea nd 4B) Patterns on Water	ves (B9) ( <b>I</b> (B10) Table (C2)	/ILRA 1, 2
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	tors: n of one req		Water-Staine MLRA 1, Salt Crust (B Aquatic Inve	ed Leav 2, 4A, a 311) rtebrate ulfide Od	and 4B) es (B13) dor (C1)		Sec	Water-Sta <b>4A</b> , ar Drainage Dry-Seas Saturation	ained Leand 4B) Patterns on Water Nisible o	ves (B9) (M (B10) Table (C2) on Aerial In	/ILRA 1, 2
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	tors: n of one req		Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi	ed Leav 2, 4A, a 311) Intebrate ulfide Od izosphe	es (B13) dor (C1) eres along	Living Roo	<u>Sec</u>	Water-Sta 4A, ar Drainage Dry-Seas Saturation Geomorp	ained Lea nd 4B) Patterns on Water n Visible o hic Positi	ves (B9) (M (B10) Table (C2) on Aerial In on (D2)	/ILRA 1, 2
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	tors: n of one req		Water-Staine MLRA 1, Salt Crust (B Aquatic Inveited Hydrogen Stain Could be continued to the continued to th	ed Leav 2, 4A, a 311) rtebrate ulfide Od izosphe Reduce	es (B13) dor (C1) res along ed Iron (C4	Living Roo	<u>Sec</u>	Water-Sta <b>4A</b> , ar Drainage Dry-Seas Saturation Geomorp Shallow A	ained Lea nd 4B) Patterns on Water n Visible on hic Positi	(B10) (B10) Table (C2) on Aerial In on (D2) (D3)	MLRA 1, 2
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	tors: n of one req		Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi	ed Leav 2, 4A, a 311) rtebrate ulfide Od izosphe Reduce Reducti	es (B13) dor (C1) res along ed Iron (C4 on in Tilled	Living Roo l) d Soils (C6	<u>Sec</u>	Water-Sta 4A, ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu	ained Lea nd 4B) Patterns on Water n Visible o hic Position Aquitard (I	ves (B9) (M (B10) Table (C2) on Aerial In on (D2)	nagery (CS
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	tors: n of one req		Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I	ed Leav 2, 4A, a 311) Intebrate Ulfide Od izosphe Reduce Reducti	es (B13) dor (C1) res along ed Iron (C4 on in Tilled	Living Roo l) d Soils (C6	<u>Sec</u>	Water-Sta <b>4A</b> , ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	ained Lea nd 4B) Patterns on Water n Visible o hic Positi Aquitard (I	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS
YDROLOGY  Vetland Hydrology Indicate Primary Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	tors: n of one req	— — — — — — — — — — —	Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S	ed Leav 2, 4A, a 311) Intebrate Ulfide Od izosphe Reduce Reducti	es (B13) dor (C1) res along ed Iron (C4 on in Tilled	Living Roo l) d Soils (C6	<u>Sec</u>	Water-Sta <b>4A</b> , ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	ained Lea nd 4B) Patterns on Water n Visible o hic Positi Aquitard (I	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS
YDROLOGY  Wetland Hydrology Indica  Primary Indicators (minimur  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Ac	tors: n of one req	— — — — — — — — — — —	Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	ed Leav 2, 4A, a 311) Intebrate Ulfide Od izosphe Reducti Stressed ain in Re	es (B13) dor (C1) eres along ed Iron (C4 on in Tilled Plants (D emarks)	Living Roo l) d Soils (C6	<u>Sec</u>	Water-Sta <b>4A</b> , ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	ained Lea nd 4B) Patterns on Water n Visible o hic Positi Aquitard (I	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS
Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A Sparsely Vegetated Co	tors: n of one req  i)  ii)  erial Imager, ncave Surfa	y (B7) ce (B8)	Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	ed Leav 2, 4A, a 311) Intebrate ulfide Or izosphe Reduce Reducti stressed ain in Re	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D emarks)	Living Roo l) d Soils (C6	<u>Sec</u>	Water-Sta <b>4A</b> , ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	ained Lea nd 4B) Patterns on Water n Visible o hic Positi Aquitard (I	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS
Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Action of Control	tors: n of one req  S) erial Imagen ncave Surfa  Yes Yes	y (B7) ce (B8) No	Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	ed Leave 2, 4A, 2 311) Intebrate ulfide Ocizosphe Reducti Stressed ain in Research (See See See See See See See See See Se	es (B13) dor (C1) eres along ed Iron (C4 on in Tilled Plants (D ermarks)	Living Roo d Soils (C6 1) (LRR A)	<u>Sec</u>	Water-Str 4A, ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	ained Lea nd 4B) Patterns on Water n Visible o thic Positi Aquitard (I tral Test ( nt Mound ave Humn	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS
YDROLOGY  Vetland Hydrology Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A	tors: n of one req  in of one req  i	y (B7) ce (B8) No No	Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla  Depth (inch-	ed Leave 2, 4A, 2 311) Intebrate of izosphe Reducti Stressed ain in Research (Sees):	es (B13) dor (C1) eres along ed Iron (C4 on in Tilled Plants (D ermarks)	Living Roo d Soils (C6 1) (LRR A)	Sec	Water-Str 4A, ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	ained Lea nd 4B) Patterns on Water n Visible o thic Positi Aquitard (I tral Test ( nt Mound ave Humn	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS
Process  YDROLOGY  Wetland Hydrology Indicates  Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A Sparsely Vegetated Co Field Observations: Surface Water Present?  Water Table Present?  Saturation Present?  Saturation Present?	tors: n of one req  in of one req  i	y (B7) ce (B8) No No	Water-Staine MLRA 1, Salt Crust (B Aquatic Invertigation Hydrogen Su Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla  Depth (inch-	ed Leave 2, 4A, 2 311) Intebrate of izosphe Reducti Stressed ain in Research (Sees):	es (B13) dor (C1) eres along ed Iron (C4 on in Tilled Plants (D ermarks)	Living Roo d Soils (C6 1) (LRR A)	Sec	Water-Str 4A, ar Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	ained Lea nd 4B) Patterns on Water n Visible o thic Positi Aquitard (I tral Test ( nt Mound ave Humn	ves (B9) (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	nagery (CS

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Conick Runch City/County: Forndale Humbold Sampling Date: 10 State: CA Sampling Point: W Applicant/Owner: ILW Section, Township, Range: Investigator(s): Landform (hillslope, terrace, etc.): + 0 od plan Local relief (concave, convex, none): 0 M(MR, 11 MW Slope (%): Lat: \_\_\_\_\_ Long: \_\_\_\_ Subregion (LRR): NWI classification: Soil Map Unit Name: 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? No \_\_\_\_ Are "Normal Circumstances" present? Yes  $\searrow$ \_\_\_ No \_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic?  $\mathcal N$  (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? 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 \_\_\_\_ = Total Cover That Are OBL, FACW, or FAC: 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 \_\_\_\_\_ x 4 = \_\_\_\_\_ = Total Cover UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Herb Stratum (Plot size: \_\_\_ Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% \_ 3 - Prevalence Index is ≤3.0¹ \_\_\_ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 100 = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stralum

Sampling Point: <u>UITI3-</u>W

Depth	Matrix		Red	ox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	104R 3/2	100					SI-T LOAM	
8-18	10483/2	<u> </u>	104R 4/4				SILT LOAM	
	Concentration, D=Dep I Indicators: (Applic					d Sand Gr		Pore Lining, M=Matrix.
Histoso Histic I Black I Hydrog Depleto Thick I Sandy	The state of the s		Sandy Redox Stripped Matrix Loamy Mucky Loamy Gleyed Depleted Matrix Redox Dark Stripped Dark Redox Depres	(S5) x (S6) Mineral (F1 Matrix (F2) ix (F3) urface (F6) Surface (F	) (except	MLRA 1)	2 cm Muck (A1 Red Parent Ma Very Shallow I Other (Explain	0) Iterial (TF2) Park Surface (TF12) In Remarks)  phytic vegetation and gy must be present,
	Layer (if present):		Redox Depres	310113 (1 0)			T diffess disturbed	or problematic.
Type:	Layer (ii present).							
Depth (i	nchae):		7				Hydric Soil Present?	Vac X No
YDROLO	OGY ydrology Indicators:	5						
rimary Ind	icators (minimum of o	ne required; cl	heck all that app	ly)			Secondary Indica	ators (2 or more required)
High W Saturat	e Water (A1) /ater Table (A2) tion (A3)		MLRA Sall Crust	ained Leave 1, 2, 4A, a t (B11) overtebrates	nd 4B)	xcept	<b>4A, and 4</b> Drainage Pa	tterns (B10)
Sedime Drift De	Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)		Hydrogen Oxidized I	Sulfide Od Rhizospher of Reduced	or (C1) es along l	2 b c c 2	Saturation V	Water Table (C2) isible on Aerial Imagery (C9 Position (D2) itard (D3)
Iron De Surface Inundal	eposits (B5) e Soil Cracks (B6) tion Visible on Aerial II ly Vegetated Concave		Recent Iro	on Reduction r Stressed I plain in Rer	n in Tilled Plants (D1	Soils (C6)	) / <u>VQ</u> FAC-Neutral Raised Ant N	~/
ield Obse	rvations:		Ú.		11			
	e Present? Y	es No es No	Depth (in	iches): <u>0-1</u> iches): <u>0-</u> iches): 0-1	8	- Matia	and Hydrology Present?	Yes X No
ncludes ca	ecorded Data (stream			000				, to NO
Remarks:	ASSUME WINT	ZIZ HY DE	010GY Lu	L TD	SWIM	offen.	LOCATION A	7 L

WETLAND DETE	RMINATION D	ATA FORM	1 – Western Mour	ntains, Valleys, and Coast Region
Project/Site: Onnick		C	:ity/county:Forndu	Sampling Date: 10/16/13
Applicant/Owner:			,,,,	State: CA Sampling Point: UITIS
nvestigator(s):/AG			Section Township Ran	nge:
	Cours Iron	10	ecolor, rownship, rear	convex, none): CMCWP line ay Slope (%): /C
andform (hillslope, terrace, etc.):				
				Long: Datum:
ioil Map Unit Name: are climatic / hydrologic conditions on			1	
are Vegetation, Soil, o	r Hydrology	significantly d	isturbed? / Are 1	Normal Circumstances" present? Yes X No
				eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map	showing	sampling point lo	ocations, transects, important features, etc
Hydrophylic Vegetalion Present?				
Hydric Soil Present?	Yes		Is the Sampled within a Wetlan	d? Yes No
Welland Hydrology Present?	Yes	No 🔼	within a victian	
Remarks:				
N V 1777 - E				
/EGETATION – Use scientifi	c names of pla	7		[B. 7]
Tree Stratum (Plot size:	)		Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4		6		Percent of Dominant Species
A CONTRACTOR OF THE SAME SAME		(1)	= 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 = O
4				FACW species $x = 0$ FAC species $x = 240$
5.				FAC species $\frac{80}{20}$ x 3 = $\frac{240}{80}$
		-9	= Total Cover	UPL species
Herb Stratum (Plot size:	)	75	Y TAC.	Column Totals: 100 (A) 320 (B)
1 HOICUS XX.		- 13	TOC.	
De la transfer		10	WENT	Prevalence Index = B/A = 3, 2  Hydrophytic Vegetation Indicators:
Bung Q Ar		10	( FACU)	1 - Rapid Test for Hydrophylic Vegetation
5.				2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0¹
7.				4 - Morphological Adaptations¹ (Provide supportin
8				data in Remarks or on a separate sheet)
9				5 - Welland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation¹ (Explain)
11		- 161		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Marata Van Chatum (Blat sing)	\$	100	= Total Cover	oo process, consequences
Woody Vine Stratum (Plot size:				Middle Colored
2.				Hydrophytic Vegetation
	rl	0	= Total Cover	Present? Yes No 7/
% Bare Ground in Herb Stratum	Ψ			
Remarks:	e as he	drochen	es domina	ted by Single FAC
Toescies on	Bestone o	2 7000	el Iroad, (	orrob & ated by
assence de	soil hadri	dri g	rollors.	down or C by 73.0
IS Army Corns of Engineers	71 800	WIDHA	od barna - kom	Western Mountains, Valleys, and Coast - Version 2.0

-	-		
	<i>r</i> 1		

Sampling Point. UIT15-U

Depthf	Matrix		Redo	x Feature	S						
(inches) Color (m	noist)	%	Color (moist)	_ %	_Type <sup>1</sup>	Loc2	Texture	-/		Remarks	
0-10 101R3	12	100		-	-	-	SIA.	Leytva			
D-18 10483	12	98	10YR 4/4	2	C	M	SISTE	oylygn:	7	Stinct	10200
<u></u>		-		-					101	4-05	100
								- 3	PCT	coes	NO+1
								_ 1	VICE	ness	deporty -
									FL	)	
	- 0										
							_	-			
	5 5 1						. 20	-	DI D		
Type: C=Concentration, ydric Soil Indicators:						d Sand Gr				re Lining, M <b>natic Hydr</b>	
Histosol (A1)	(Applicas	ie to all L			eu.,			cm Muck		natic riyur	c cons .
Histic Epipedon (A2)		-	<ul><li>Sandy Redox (</li><li>Stripped Matrix</li></ul>					ed Parent		al (TF2)	
Black Histic (A3)		-	Loamy Mucky I		1) (except	MLRA 1)				Surface (T	F12)
Hydrogen Sulfide (A4	4)	_	_ Loamy Gleyed			311-11 M. 1. 19		her (Expl			/
Depleted Below Dark		A11)	Depleted Matrix		•						
Thick Dark Surface (		_	Redox Dark Su				3Indica	tors of hy	drophy	tic vegetati	on and
_ Sandy Mucky Minera	I (S1)	_	_ Depleted Dark	Surface (F	7)		wet	land hydr	ology n	nust be pre	sent,
Sandy Gleyed Matrix			_ Redox Depress	sions (F8)			unle	ess disturl	bed or	problemation	
estrictive Layer (if pre	sent):										
Type:							10000				
Depth (inches):							Hydric So	il Presen	it? Y	es	No X
emarks:											
/DROLOGY	cators:										
/DROLOGY Vetland Hydrology India		required;	check all that appi	<b>v</b> )			Sec	ondary Inc	dicators	s (2 or more	required)
/DROLOGY /etland Hydrology Indi		required;			es (B9) ( <b>e</b> :	kcept					
POROLOGY  Vetland Hydrology Indicators (minimary Indicators (Minimary Surface Water (A1)	um of one	required;	Water-Sta	ined Leave		kcept		Water-Sta	ained L		
'DROLOGY /etland Hydrology Indi- rimary Indicators (minim _ Surface Water (A1) _ High Water Table (A2	um of one	required;	Water-Sta	ined Leave 1, 2, 4A, a		kcept	= 2	Water-Sta 4A, ar	ained L nd 4B)	eaves (B9)	
'DROLOGY  'etland Hydrology Indirimary Indicators (minim _ Surface Water (A1) _ High Water Table (A2 _ Saturation (A3)	um of one	required;	Water-Sta MLRA Salt Crust	ined Leave <b>1, 2, 4A,</b> a (B11)	and 4B)	ĸcept		Water-Sta <b>4A, ar</b> Drainage	ained L n <b>d 4B)</b> Patteri	eaves (B9) ns (B10)	(MLRA 1, 2
TDROLOGY  Tetland Hydrology Indiction Timary Indicators (minim Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	um of one	required;	Water-Sta MLRA Salt Crust Aquatic In-	ined Leave 1, 2, 4A, a (B11) vertebrate	and 4B) s (B13)	xcept		Water-Sta <b>4A, ar</b> Drainage Dry-Seas	ained L 1 <b>d 4B)</b> Patteri on Wal	eaves (B9) ns (B10) ter Table (C	(MLRA 1, 2
'DROLOGY  'etland Hydrology Indictimary Indicators (minim  Surface Water (A1)  High Water Table (A2  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B	um of one	required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Od	and 4B) s (B13) dor (C1)	cept		Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation	ained L nd 4B) Patten on Wal n Visibl	eaves (B9) ns (B10) ter Table (C e on Aerial	(MLRA 1, 2
/DROLOGY /etland Hydrology Indictionary Indicators (minimary Indicators	um of one 2) 32)	required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizosphei	and 4B) s (B13) dor (C1) res along l	Living Root	s (C3)	Water-Sta 4A, ar Drainage Dry-Seas Saturation Geomorp	ained L nd 4B) Patteri on Wal n Visibl	eaves (B9) ns (B10) ter Table (Ce on Aerial sition (D2)	(MLRA 1, 2,
/DROLOGY /etland Hydrology India rimary Indicators (minim _ Surface Water (A1) _ High Water Table (A2 _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B3) _ Drift Deposits (B3) _ Algal Mat or Crust (B-	um of one 2) 32)	required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizosphei of Reduce	s (B13) dor (C1) res along I d Iron (C4	Living Root	s (C3)	Water-Sta 4A, ar Drainage Dry-Seas Saturation Geomorp Shallow A	ained L  nd 4B) Pattern on Wal n Visibl hic Pos	eaves (B9)  ns (B10)  ter Table (Ce on Aerial  sition (D2)  1 (D3)	( <b>MLRA 1, 2,</b> 2) Imagery (C9
/DROLOGY /etland Hydrology Indicators (minimal properties of the p	um of one 2) 32) 4)	required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizosphei of Reduce n Reduction	s (B13) dor (C1) res along I d Iron (C4 on in Tilled	Living Root	s (C3)	Waler-Sta 4A, ar Arainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitard	eaves (B9) ns (B10) ter Table (Ce on Aerial sition (D2)	(MLRA 1, 2, 2) 2) Imagery (C9
/DROLOGY /etland Hydrology Indirimary Indicators (minimal Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (	um of one 2) 32) 4) B6)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reduction	s (B13) dor (C1) res along l d Iron (C4 on in Tilled Plants (D2	Living Root ) I Soils (C6)	s (C3)	Water-Sta 4A, ar Arainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised An	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou	eaves (B9)  ns (B10)  ter Table (Ce on Aerial  sition (D2)  t (D3)  st (D5)	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
TOROLOGY  Tetland Hydrology Indictionary Indicators (minimal of the surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	um of one 2) 32) 4) B6) Aerial Ima	agery (B7)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reduction	s (B13) dor (C1) res along l d Iron (C4 on in Tilled Plants (D2	Living Root ) I Soils (C6)	s (C3)	Water-Sta 4A, ar Arainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised An	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou	eaves (B9)  ns (B10)  ter Table (Color and Aerial  sition (D2)  of (D3)  of (D5)  of (D6) (L	(MLRA 1, 2, 2) Imagery (CS 2) RR A)
/DROLOGY /etland Hydrology Indiversimary Indicators (minimals) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (C4)	um of one 2) 32) 4) B6) Aerial Ima	agery (B7)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce in Reduction Stressed	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D4 marks)	Living Root ) I Soils (C6)	s (C3)	Water-Sta 4A, ar Arainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised An	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou	eaves (B9)  ns (B10)  ter Table (Color and Aerial  sition (D2)  of (D3)  of (D5)  of (D6) (L	(MLRA 1, 2, 2) Imagery (CS 2) RR A)
/DROLOGY /etland Hydrology Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (Marks (B1))  — Saturation (A3)  — Water Marks (B1)  — Sediment Deposits (B3)  — Algal Mat or Crust (B- — Iron Deposits (B5)  — Surface Soil Cracks ( — Inundation Visible on — Sparsely Vegetated Colleted Observations:	um of one 2) 32) 4) B6) Aerial Ima	agery (B7) urface (B8	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce in Reduction Stressed	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D4 marks)	Living Root ) I Soils (C6)	s (C3)	Water-Sta 4A, ar Arainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised An	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou	eaves (B9)  ns (B10)  ter Table (Color and Aerial  sition (D2)  of (D3)  of (D5)  of (D6) (L	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
/DROLOGY /etland Hydrology Indirimary Indicators (minimary Indicators (minimary Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B- Iron Deposits (B5)  Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Collected Observations:  urface Water Present?	um of one 2) 32) 4) B6) Aerial Ima Concave S	agery (B7) urface (B8	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce in Reduction Stressed plain in Re	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D* marks)	Living Root ) I Soils (C6)	s (C3)	Water-Sta 4A, ar Arainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised An	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou	eaves (B9)  ns (B10)  ter Table (Color and Aerial  sition (D2)  of (D3)  of (D5)  of (D6) (L	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Collected Observations: urface Water Present?	num of one 2) 32) 4) B6) Aerial Ima Concave S Yes Yes	agery (B7) urface (B8 No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction Stressed blain in Re- ches):	s (B13) s (B13) dor (C1) res along I d Iron (C4 on in Tilleo Plants (D' marks)	Living Root ) I Soils (C6) I) (LRR A)	s (C3)	Water-Sta  4A, ar  4A, ar  Drainage  Dry-Seas  Saturation  Geomorp  Shallow A  FAC-Neu  Raised Ai  Frost-Hea	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou ave Hui	eaves (B9)  ns (B10)  ter Table (Color and Aerial sition (D2)  if (D3)  st (D5)  of (D6) (Lemmocks (D	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
/DROLOGY /etland Hydrology Indirimary Indicators (minimal Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Collected Observations: urface Water Present? //ater Table Present? aturation Present?	um of one 2) 32) 4) B6) Aerial Ima Concave S Yes Yes Yes	agery (B7) urface (B8 No No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction Stressed blain in Re ches): Oches):	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D* marks)	Living Root ) I Soils (C6) I) (LRR A)	s (C3) NUO and Hydrolog	Water-Sta  4A, ar  4A, ar  Drainage  Dry-Seas  Saturation  Geomorp  Shallow A  FAC-Neu  Raised Ai  Frost-Hea	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou ave Hui	eaves (B9)  ns (B10)  ter Table (Color and Aerial sition (D2)  if (D3)  st (D5)  of (D6) (Lemmocks (D	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
/DROLOGY /etland Hydrology Indirimary Indicators (minimary Indicators (minimary Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B- Iron Deposits (B5)  Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Collected Observations:  urface Water Present?	um of one 2) 32) 4) B6) Aerial Ima Concave S Yes Yes Yes	agery (B7) urface (B8 No No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction Stressed blain in Re ches): Oches):	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D* marks)	Living Root ) I Soils (C6) I) (LRR A)	s (C3) NUO and Hydrolog	Water-Sta  4A, ar  4A, ar  Drainage  Dry-Seas  Saturation  Geomorp  Shallow A  FAC-Neu  Raised Ai  Frost-Hea	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou ave Hui	eaves (B9)  ns (B10)  ter Table (Color and Aerial sition (D2)  if (D3)  st (D5)  of (D6) (Lemmocks (D	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
/DROLOGY /etland Hydrology Indirimary Indicators (minimal Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Collected Observations: urface Water Present? //ater Table Present? aturation Present?	um of one 2) 32) 4) B6) Aerial Ima Concave S Yes Yes Yes	agery (B7) urface (B8 No No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction Stressed blain in Re ches): Oches):	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D* marks)	Living Root ) I Soils (C6) I) (LRR A)	s (C3) NUO and Hydrolog	Water-Sta  4A, ar  4A, ar  Drainage  Dry-Seas  Saturation  Geomorp  Shallow A  FAC-Neu  Raised Ai  Frost-Hea	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou ave Hui	eaves (B9)  ns (B10)  ter Table (Color and Aerial sition (D2)  if (D3)  st (D5)  of (D6) (Lemmocks (D	(MLRA 1, 2, 2) Imagery (C9 2 RR A)
/DROLOGY /etland Hydrology Indivirimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (minimary Indicators (Mater Marks (B1)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Colored Observations:  Uniface Water Present?  Vater Table Present?	um of one 2) 32) 4) B6) Aerial Ima Concave S Yes Yes Yes	agery (B7) urface (B8 No No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leave 1, 2, 4A, a (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction Stressed blain in Re ches): Oches):	s (B13) dor (C1) res along I d Iron (C4 on in Tilled Plants (D* marks)	Living Root ) I Soils (C6) I) (LRR A)	s (C3) NUO and Hydrolog	Water-Sta  4A, ar  4A, ar  Drainage  Dry-Seas  Saturation  Geomorp  Shallow A  FAC-Neu  Raised Ai  Frost-Hea	ained L nd 4B) Patteri on Wal n Visibl hic Pos Aquitaro tral Tes nt Mou ave Hui	eaves (B9)  ns (B10)  ter Table (Color and Aerial sition (D2)  if (D3)  st (D5)  of (D6) (Lemmocks (D	(MLRA 1, 2, 2) Imagery (CS 2) RR A)

			The state of the s	Intains, Valleys, and Coast Region
Project/Site: Connick		0	ity/County: LY 100	Mal Humbold Sampling Date: 10/16
Applicant/Owner: TWC				State: CA Sampling Point: VIT 5
Investigator(s): WAG	1-0:	S	ection, Township, Ra	ange:
				convex, none). CONTAIN Slope (%):
Subregion (LRR):		Lat:		Long: Datum:
Soil Map Unit Name:			17	NWI classification:
Are climatic / hydrologic conditions on the	e site typical for	this time of yea	r? Yes X No_	(If no, explain in Remarks.)
Are Vegetation, Soil, or F	łydrology	_ significantly d	isturbed? W Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or H	łydrology	_ naturally prob	lematic? N (If no	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - At	tach site ma	ap showing s	sampling point I	locations, transects, important features, et
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes 🗶	No	Is the Sampled within a Wetla	V
Remarks: A does not	pass 1	9 <u>T</u>		
VEGETATION – Use scientific	names of pl			
Tree Stratum (Plot size:		% Cover	Dominant Indicator Species? Status	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.				Total Number of Dominant
3				Species Across All Strata: (B)
4		8	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E
Sapling/Shrub Stratum (Plot size:	)	7	, 5.6.	Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2		<del></del>	<del></del>	OBL species O x 1 = O
3				FACW species O x 2 = O
4				FAC species $98 \times 3 = 294$
5		- A	Total Cover	FACU species x 4 = 8
Herb Stratum (Plot size:	)	7	= Total Cover	UPL speciesO x5=O
1 Aurostis st:		98	Y FAC	Column Totals: 100 (A) 302 (B)
2. Plantago la.			N FACU	Prevalence Index = B/A = 3,02
3				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.01
7				4 - Morphological Adaptations <sup>1</sup> (Provide supportin data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants <sup>1</sup>
9				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:	Y	100=	Total Cover	AND DATE OF THE PROPERTY AND PARTY A
1				Hydrophytic
2.		~~		Vegetation
7		0 =	Total Cover	Present? Yes No
% Bare Ground in Herb Stratum	01 1			10000
Remarks: TP is 2 from 1	met bou	now y	vege	Coes no pass PL

Sampling Point.

Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%_	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
2-8	101/3/2	100	-				SILT LON	40
18	101/8/5	90	107/24/4	10	=	(\$\dag{\psi} = \)	Sizi alt	_ distinct redox
Hydric Soil Histoso Histoso Histoso Black F Hydrog Deplete Thick D Sandy Sandy	Concentration, D=Dep I Indicators: (Application (A1) Epipedon (A2) Histic (A3) En Sulfide (A4) Ed Below Dark Surface Dark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4)	cable to all L - - -		wise note (S5) (S6) Mineral (F1 Matrix (F2 (F3) face (F6) Gurface (F	ed.)  ) (except		Indicator 2 cm Red Very Othe	ation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils <sup>3</sup> :  Muck (A10) Parent Material (TF2) Shallow Dark Surface (TF12) er (Explain in Remarks) rs of hydrophytic vegetation and and hydrology must be present, s disturbed or problematic.
	Layer (If present):							
Type: Depth (ir	anhoo):		<del></del> -				Hydric Soil	Present? Yes X No
YDROLO	-		)	-				FORE FLO, MATRIX
	icators (minimum of c		check all that apply	<i>'</i> )			Secon	dary Indicators (2 or more required)
mary mu			Water-Stai	ned Leave		ccept	W	ater-Stained Leaves (B9) (MLRA 1, 2,
Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface	e Water (A1) ater Table (A2) ion (A3) Marks (B1) ont Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave		Salt Crust of Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	(B11) ertebrates Sulfide Od hizospher of Reduced Reduction Stressed	s (B13) lor (C1) es along l d Iron (C4 on in Tilled Plants (D1	)   Soils (C6)	Dr Sa s (C3)	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9 ecomorphic Position (D2) sallow Aquitard (D3) sC-Neutral Test (D5)
Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel	ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) is Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave		Salt Crust of Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	(B11) ertebrates Sulfide Od hizospher of Reduced Reduction Stressed	s (B13) lor (C1) es along l d Iron (C4 on in Tilled Plants (D1	)   Soils (C6)	Dr Sa s (C3)	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9 comorphic Position (D2) sallow Aquitard (D3) sC-Neutral Test (D5)
Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel	ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) is Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations:	e Surface (B8	Salt Crust of Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iron Stunted or Other (Exp	(B11) ertebrates Sulfide Od hizospher of Reduced n Reductio Stressed dain in Rer	s (B13) lor (C1) es along l d Iron (C4 on in Tilled Plants (D1	)   Soils (C6)	Dr Sa s (C3)	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9 comorphic Position (D2) sallow Aquitard (D3) sC-Neutral Test (D5)
Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel ield Obser	ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ler Present? Y	e Surface (B8	Salt Crust i Aquatic Inv Hydrogen i Oxidized R Presence o Recent Iror Stunted or Other (Exp Depth (incompose)	(B11) rertebrates Sulfide Od hizospher of Reduceto Reductio Stressed lain in Rer	s (B13) lor (C1) es along l d Iron (C4 on in Tilled Plants (D1 marks)	)   Soils (C6)  ) (LRR A)	— Dr Sa s (C3) ↓ Ge Sh — Ra — Fre	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9 comorphic Position (D2) sallow Aquitard (D3) sC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel ield Obsel surface Water Table	ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ler Present? Present? Y Present? Y Present? Y	e Surface (B8 es No es No es No	Salt Crust i Aquatic Inv Hydrogen i Oxidized R Presence o Recent Iror Stunted or Other (Exp Depth (incompose o	(B11) ertebrates Sulfide Od hizospher of Reduced n Reductio Stressed lain in Rer hes): hes):	s (B13) lor (C1) es along l d Iron (C4 on in Tilled Plants (D1 marks)	)   Soils (C6)  ) (LRR A)  -  -  -   Wetla	— Dr Sa s (C3) ↓ Ge Sh — Ra — Fro nd Hydrology	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9 comorphic Position (D2) sallow Aquitard (D3) sC-Neutral Test (D5)
Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obsel Surface Water Table Saturation P	ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aerial I y Vegetated Concave rvations: ler Present? Present? Y	e Surface (B8 es No es No es No	Salt Crust i Aquatic Inv Hydrogen i Oxidized R Presence o Recent Iror Stunted or Other (Exp Depth (incompose o	(B11) ertebrates Sulfide Od hizospher of Reduced n Reductio Stressed lain in Rer hes): hes):	s (B13) lor (C1) es along l d Iron (C4 on in Tilled Plants (D1 marks)	)   Soils (C6)  ) (LRR A)  -  -  -   Wetla	— Dr Sa s (C3) ↓ Ge Sh — Ra — Fro nd Hydrology	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9 comorphic Position (D2) sallow Aquitard (D3) sC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

ubregion (LRR):		- /		convex, none)
oil Map Unit Name:	unic all all the 12		11.2	NWI classification:
e climatic / hydrologic conditions on		The section of the same and		
				"Normal Circumstances" present? Yes No
e Vegetation, Soil, c	or Hydrology	naturally proble	matic? N a (If no	eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS - A	Attach site n	nap showing sa	mpling point l	ocations, transects, important features, et
Hydrophylic Vegetalion Present?	Yes	_ No _X_	I Caracter	
Hydric Soil Present?	Yes		Is the Sampled	
Vetland Hydrology Present?	Yes	_ No _X	within a Wetla	ndr fesNo
Remarks:				
EGETATION – Use scientifi	ic names of p	plants.	. 1, 1 2	
			ominant Indicator	Dominance Test worksheet:
ree Stratum (Plot size:		-	pecies? Status	Number of Dominant Species
)				That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant Species Across All Strata:  (B)
		17		
		a =	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B
Sapling/Shrub Stratum (Plot size: _	)	70		Prevalence Index worksheet:
·				Total % Cover of: , Multiply by:
•				OBL species x 1 =
,				FACW species x 2 = 10
4				FAC species 60 x3 = 180
		B.	Total Cover	FACU species <u>25</u> x4= <u>100</u>
lerb Stratum (Plot size;	)	70	Total Cover	UPL species x5 =
Acrosh St.		30	Y JAC	Column Totals: <u>90</u> (A) <u>690</u> (B)
polous la.		30	Y the	Prevalence Index = B/A =
Grsum VV		10	W ACU	Hydrophytic Vegetation Indicators:
Planting la		_5	N TAGU	1 - Rapid Test for Hydrophytic Vegetation
Achilles m.		10	N TACW	2 - Dominance Test is >50%
PONCY ().	-		to the so	23 - Prevalence Index is ≤3.01
				4 - Morphological Adaptations¹ (Provide supportine data in Remarks or on a separate sheet)
				5 - Welland Non-Vascular Plants <sup>1</sup>
),				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		90 =T	otal Cover	be present, unless disturbed or problematic.
loody Vine Stratum (Plot size:	)			
				Hydrophytic
		- N		Vegetation Present? Yes No
	10	_ <del>//</del> =T	otal Cover	
Bare Ground in Herh Stratum				
Bare Ground in Herb Stratum	ave all	7-11 00	F. 17965	not bass Pt.

Depth (inches) Color (moist)  0-13 2.5 13/2  13-18 2.5 14/2	%		x Features							
0-13 2.543/	2 15 6	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Text	ıre		Remark	(S
13-18 2.544	100	_	-	-	_	IHB	coum			
	<u> </u>	104R3/4	5	<u>C</u>	WIPL	SiH1	oun C	ridis	red	chaun
							<u> </u>			
Type: C=Concentration, D=D	epletion, RM=		=Covered	or Coale	d Sand G					, M=Matrix.
Hydric Soil Indicators: (App	licable to all	LRRs, unless other	wise note	d.)		Inc	licators f	or Proble	ematic Hy	dric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surfi	ace (A11)	Sandy Redox (S Stripped Matrix Loamy Mucky N Loamy Gleyed N Depleted Matrix	(S6) lineral (F1 Matrix (F2)		MLRA 1)	į	Red Par Very Sh	allow Da	rial (TF2) k Surface Remarks)	
Thick Dark Surface (A12)	, , , ,	Redox Dark Sur				3In	dicators o	f hydroph	vtic veget	lation and
Sandy Mucky Mineral (S1)		Depleted Dark S		7)				the second secon	must be p	
Sandy Gleyed Matrix (S4)		Redox Depressi	ons (F8)				unless di	sturbed o	r problema	atic.
Restrictive Layer (if present)										
Type:										V
Depth (inches):						Hydrid	Soil Pre	sent?	Yes	No
	s:									
YDROLOGY Wetland Hydrology Indicator Primary Indicators (minimum o		l; check all that apply	r)				Secondar	y Indicato	ors (2 or m	nore required)
Vetland Hydrology Indicator		Water-Stair		The second second	xcept		Water		Leaves (E	nore required) 39) (MLRA 1,
Vetland Hydrology Indicator Primary Indicators (minimum o Surface Water (A1)		Water-Stair	ned Leave	The second second	xcept		Water 4A Drain	r-Stained , <b>and 4B</b> age Patte	Leaves (E ) erns (B10)	39) ( <b>MLRA 1</b> ,
Vetland Hydrology Indicator Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv	ned Leave I, <b>2, 4A</b> , ai (B11) ertebrates	nd 4B)	xcept		Water  4A Drain	r-Stained <b>a, and 4B</b> age Patte eason W	Leaves (E ) ems (B10) ater Table	39) ( <b>MLRA 1,</b>
Vetland Hydrology Indicator  Irimary Indicators (minimum or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv	ned Leave I, <b>2, 4A, a</b> i (B11) ertebrates Sulfide Od	or (C1)			Water 4A Drain Dry-S Satur	r-Stained a, <b>and 4B</b> age Patte eason W ation Visi	Leaves (E ) erns (B10) ater Table ble on Aer	39) ( <b>MLRA 1,</b> e (C2) rial Imagery (C
Vetland Hydrology Indicator rimary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R	ned Leave I, <b>2, 4A, a</b> l (B11) ertebrates Sulfide Od hizosphere	nd 4B) (B13) or (C1) es along	Living Roo		Water  4A Draine Dry-S Sature Geom	r-Stained A, and 4B age Patte eason W ation Visi	Leaves (E )  rms (B10) ater Table ble on Aer osition (D2	39) ( <b>MLRA 1,</b> e (C2) rial Imagery (C
Vetland Hydrology Indicator  Primary Indicators (minimum o  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 9 Oxidized R Presence c	ned Leave I, <b>2, 4A, a</b> (B11) rertebrates Sulfide Odi hizosphera of Reduced	nd 4B) (B13) or (C1) es along d Iron (C4	Living Roo	- - ots (C3)	Water  4A Drain Dry-S Sature Geom Shallo	r-Stained  , and 4B  age Patte eason W  ation Visi norphic Pe	Leaves (E)  rns (B10) ater Table ble on Aer osition (D2 rd (D3)	39) ( <b>MLRA 1,</b> e (C2) rial Imagery (C
Vetland Hydrology Indicator Primary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence co	ned Leave I, <b>2, 4A, a</b> I (B11) ertebrates Sulfide Odi hizosphere of Reduced	nd 4B) (B13) or (C1) es along d Iron (C4) in in Tille	Living Roo () d Soils (Ce	ots (C3)	Water  4A Drain: Dry-S Satur: Geom Shalld FAC-	r-Stained a, and 4B age Patte eason W ation Visi norphic Pow Dow Aquita	Leaves (E ) erns (B10) ater Table ble on Aer osition (D2 rd (D3) est (D5)	39) (MLRA 1, e (C2) rial Imagery (C
Vetland Hydrology Indicator  Irimary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	f ane required	Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror	ned Leave 1, 2, 4A, and (B11) ertebrates Sulfide Ode hizosphere of Reduceto Reductio Stressed F	or (C1) es along thron (C4) in in Tille	Living Roo () d Soils (Ce	ots (C3)	Water  4A Draina Dry-S Satura Geom Shalld FAC-I Raise	r-Stained a, and 4B age Patte eason W ation Visi norphic Pe ow Aquita Neutral Te d Ant Mo	Leaves (E)  rns (B10) ater Table ble on Aer osition (D2 rd (D3)	39) (MLRA 1, e (C2) rial Imagery (C 2)
Vetland Hydrology Indicator rimary Indicators (minimum or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca	f one required	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iron  Stunted or  Other (Exp	ned Leave 1, 2, 4A, and (B11) ertebrates Sulfide Ode hizosphere of Reduceto Reductio Stressed F	or (C1) es along thron (C4) in in Tille	Living Roo () d Soils (Ce	ots (C3)	Water  4A Draina Dry-S Satura Geom Shalld FAC-I Raise	r-Stained a, and 4B age Patte eason W ation Visi norphic Pe ow Aquita Neutral Te d Ant Mo	Leaves (E ) ems (B10) ater Table ble on Aer osition (D2 rd (D3) est (D5) unds (D6)	39) (MLRA 1, e (C2) rial Imagery (C 2)
Vetland Hydrology Indicator rimary Indicators (minimum or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca	f one required Il Imagery (B7 Ive Surface (E	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 5  Oxidized R  Presence c  Recent Iror  Stunted or  Other (Exp	ned Leave 1, 2, 4A, and (B11) ertebrates Sulfide Ode hizosphere of Reduced n Reduction Stressed F lain in Ren	or (C1) es along thron (C4) in in Tille	Living Roo () d Soils (Ce	ots (C3)	Water  4A Draina Dry-S Satura Geom Shalld FAC-I Raise	r-Stained a, and 4B age Patte eason W ation Visi norphic Pe ow Aquita Neutral Te d Ant Mo	Leaves (E ) ems (B10) ater Table ble on Aer osition (D2 rd (D3) est (D5) unds (D6)	39) (MLRA 1, e (C2) rial Imagery (C 2)
Vetland Hydrology Indicator  Irimary Indicators (minimum of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aeria  Sparsely Vegetated Concasted Observations:  urface Water Present?	f one required Il Imagery (B7 Ive Surface (B	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 5  Oxidized R  Presence co  Recent Iror  Stunted or  Other (Exp	ned Leave 1, 2, 4A, an (B11) ertebrates Sulfide Odd hizosphere of Reduceto n Reductio Stressed F lain in Ren hes):	or (C1) es along thron (C4) in in Tille	Living Roo () d Soils (Ce	ots (C3)	Water  4A Draina Dry-S Satura Geom Shalld FAC-I Raise	r-Stained a, and 4B age Patte eason W ation Visi norphic Pe ow Aquita Neutral Te d Ant Mo	Leaves (E ) ems (B10) ater Table ble on Aer osition (D2 rd (D3) est (D5) unds (D6)	39) (MLRA 1, e (C2) rial Imagery (C 2)
Vetland Hydrology Indicator  Vrimary Indicators (minimum or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aeria  Sparsely Vegetated Concative Con	f one required Il Imagery (B7 Ive Surface (B Yes N Yes N	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  Other (Exp  Depth (inc	ned Leave 1, 2, 4A, ar (B11) ertebrates Sulfide Odi hizosphere of Reduced n Reductio Stressed F lain in Ren hes): hes):	ind 4B)  is (B13)  or (C1)  es along  d Iron (C4)  in in Tille  Plants (D	Living Roo i) d Soils (Co 1) (LRR A	ots (C3)	Water  4A Drain: Dry-S Sature Geom Shalld FAC-I Raise Frost-	r-Stained  , and 4B age Patte eason W ation Visi norphic P ow Aquita Neutral T d Ant Mo Heave H	Leaves (E ) ems (B10) ater Table ble on Aer osition (D2 rd (D3) est (D5) unds (D6)	39) (MLRA 1, e (C2) rial Imagery (C 2)
Vetland Hydrology Indicator Primary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca ield Observations: surface Water Present? Vater Table Present? Includes capillary fringe)	I Imagery (B7 ave Surface (E Yes N Yes N	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 5  Oxidized R  Presence co  Recent Iror  Stunted or  Other (Exp  No Depth (inc	ned Leave 1, 2, 4A, ar (B11) ertebrates Sulfide Odd hizosphere of Reduceto n Reductio Stressed F lain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 in in Tille Plants (D narks)	Living Root  d Soils (C6 1) (LRR A	ots (C3)	Water  4A Drain: Dry-S Satur: Geom Shalld FAC-I Raise Frost-	r-Stained  , and 4B age Patte eason W ation Visi norphic P ow Aquita Neutral T d Ant Mo Heave H	Leaves (E ) ems (B10) ater Table ble on Aer osition (D2 rd (D3) est (D5) unds (D6)	39) (MLRA 1, e (C2) rial Imagery (C 2)
Wetland Hydrology Indicator Primary Indicators (minimum o Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca	I Imagery (B7 ave Surface (E Yes N Yes N	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 5  Oxidized R  Presence co  Recent Iror  Stunted or  Other (Exp  No Depth (inc	ned Leave 1, 2, 4A, ar (B11) ertebrates Sulfide Odd hizosphere of Reduceto n Reductio Stressed F lain in Ren hes): hes):	nd 4B) s (B13) or (C1) es along d Iron (C4 in in Tille Plants (D narks)	Living Root  d Soils (C6 1) (LRR A	ots (C3)	Water  4A Drain: Dry-S Satur: Geom Shalld FAC-I Raise Frost-	r-Stained  , and 4B age Patte eason W ation Visi norphic P ow Aquita Neutral T d Ant Mo Heave H	Leaves (E) arms (B10) ater Table ble on Aer osition (D2) rd (D3) est (D5) unds (D6) ummocks	39) (MLRA 1, e (C2) rial Imagery (C 2)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: Connich Ranch City/County: Imbeld+ Sampling Date: 10-17-Sampling Point: U Applicant/Owner: TWC Investigator(s): \_\_\_W/ ( Section, Township, Range: Landform (hillslope, terrace, etc.): Slavn terrace Local relief (concave, convex, none): doed leveral Subregion (LRR): Soil Map Unit Name: \_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_, Soil \_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? M Are "Normal Circumstances" present? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? M > 0 (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? within a Wetland? Wetland Hydrology Present? Yes X No 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: (B) Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species FACW species FAC species FACU species = Total Cover UPL species Herb Stratum (Plot size: \_\_\_\_\_) Column Totals: \_\_ Prevalence Index = B/A = Hydrophytic Vegetation Indicators: FALU \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation FACU ✓ 2 - Dominance Test is >50% 1/3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 100 = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum Remarks:

Profile Description: (Describe to the of Depth Matrix	Redo	x Feature	s			
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-7 25 13/2 10	n) —	-	-	~	51410	um
18 INTR 3/2- GC	5 10413/4	5	0	M	11	(small pickets fine
18 1016 12	10 110					Janous loun
		_				D 1 () 1
						Kenox distinct
	<del></del>	-				
Type: C=Concentration, D=Depletion, F	PM=Peduced Matrix CS	S=Covere	d or Coale	d Sand Gr	ains 21 no	cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to				d Carla Ci		ors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S					m Muck (A10)
Histic Epipedon (A2)	Stripped Matrix					Parent Material (TF2)
Black Histic (A3)	Loamy Mucky N		1) (except	MLRA 1)		y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed				Oth	er (Explain in Remarks)
Depleted Below Dark Surface (A11)						
Thick Dark Surface (A12)	Redox Dark Su	- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-				ors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark		=7)			and hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depress	ions (F8)			unles	ss disturbed or problematic.
Restrictive Layer (if present):						N .
Type:					0.000000	
Denth (inches):					Hydric Soil	Present? Yes No No
Depth (inches):Remarks:					100000000	
Remarks: YDROLOGY						
Pemarks:  YDROLOGY  Wetland Hydrology Indicators:	uired: check all that appli	Α.				ndary Indicators (2 or more required)
Primary Indicators:  Primary Indicators:	The her hellow a sign of the latest		os (B0) /o	voont	Seco	ndary Indicators (2 or more required)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requ  Surface Water (A1)	Water-Stai	ned Leav	3	xcept	Seco	Vater-Stained Leaves (B9) (MLRA 1,
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestrated water (A1)  High Water Table (A2)	Water-Stai	ned Leav 1, 2, 4A, a	3	xcept	<u>Seco</u> i	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestrate Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stai MLRA Salt Crust	ned Leav <b>1, 2, 4A,</b> ( (B11)	and 4B)	xcept	<u>Seco</u> r V	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Prainage Patterns (B10)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestions Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stai MLRA Salt Crust Aquatic In	ned Leav 1, 2, 4A, a (B11) vertebrate	and 4B) es (B13)	xcept	Secon V	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestrates and water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen	ned Leav 1, 2, 4A, i (B11) vertebrate Sulfide O	and 4B) es (B13) dor (C1)		<u>Seco</u> i V D D	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Paturation Visible on Aerial Imagery (C
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestrates Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	Water-Stai	ned Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide O	es (B13) dor (C1) res along	Living Roo	Secon V D S ts (C3) X G	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (Costomorphic Position (D2)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence	ned Leav 1, 2, 4A, i (B11) vertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) dors along ded Iron (C4	Living Roo	Secon V D S ts (C3) S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Prainage Patterns (B10) Pry-Season Water Table (C2) Esturation Visible on Aerial Imagery (Coemorphic Position (D2) Estallow Aquitard (D3)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stai MLRA Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iro	ned Leav 1, 2, 4A, i (B11) vertebrate Sulfide O Rhizosphe of Reduce n Reducti	es (B13) dor (C1) res along ed Iron (C4 on in Tilled	Living Roo l) d Soils (C6	<u>Secon</u> V S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Prainage Patterns (B10)  Pry-Season Water Table (C2)  Esturation Visible on Aerial Imagery (Ca)  Secomorphic Position (D2)  Challow Aquitard (D3)  AC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B6)  Surface Soil Cracks (B6)	Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence of Recent Iro Stunted or	ned Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Or Rhizosphe of Reduce n Reducti Stressed	es (B13) dor (C1) dors along ed Iron (C4 on in Tilled Plants (D	Living Roo l) d Soils (C6	Secon  V  C  Sts (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Esturation Visible on Aerial Imagery (Ca)  Esturation Position (D2)  Estallow Aquitard (D3)  AC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B6)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of  Recent Iro  Stunted or  (B7)  Other (Exp	ned Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Or Rhizosphe of Reduce n Reducti Stressed	es (B13) dor (C1) dors along ed Iron (C4 on in Tilled Plants (D	Living Roo l) d Soils (C6	Secon  V  C  Sts (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Prainage Patterns (B10)  Pry-Season Water Table (C2)  Esturation Visible on Aerial Imagery (Ca)  Secomorphic Position (D2)  Challow Aquitard (D3)  AC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of  Recent Iro  Stunted or  (B7)  Other (Exp	ned Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Or Rhizosphe of Reduce n Reducti Stressed	es (B13) dor (C1) dors along ed Iron (C4 on in Tilled Plants (D	Living Roo l) d Soils (C6	Secon  V  C  Sts (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Esturation Visible on Aerial Imagery (Ca)  Esturation Position (D2)  Estallow Aquitard (D3)  AC-Neutral Test (D5)
Primary Indicators:  Primary Indicators (minimum of one requested Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surfaceside Marks (B1)	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of  Recent Iro  Stunted or  (B7)  Other (Exp	ned Leav 1, 2, 4A, a (B11) vertebrate Sulfide Or Rhizosphe of Reduce n Reducti Stressed	es (B13) dor (C1) dors along ed Iron (C4 on in Tilled Plants (D	Living Roo l) d Soils (C6	Secon  V  C  Sts (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Esturation Visible on Aerial Imagery (Ca)  Esturation Position (D2)  Estallow Aquitard (D3)  AC-Neutral Test (D5)
Primary Indicators (minimum of one requestrements)  Primary Indicators (minimum of one requestrements)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surfaces  Field Observations:	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized R  Presence of Recent Iro Stunted or  (B7)  Other (Exp	ned Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed plain in Re	es (B13) dor (C1) dors along ed Iron (C4 on in Tilled Plants (D	Living Roo l) d Soils (C6	Secon  V  C  Sts (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Esturation Visible on Aerial Imagery (Ca)  Esturation Position (D2)  Estallow Aquitard (D3)  AC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requested in the property of the p	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or  (B7)  Depth (inc	ned Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed blain in Re ches): ches):	es (B13) dor (C1) dors along ed Iron (C4 on in Tilled Plants (D	Living Roo d Soils (C6 1) (LRR A)	Secon  V  C  Sts (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Education Visible on Aerial Imagery (Ca)  Edeomorphic Position (D2)  Education Aquitard (D3)  AC-Neutral Test (D5)  Acaised Ant Mounds (D6) (LRR A)  Prost-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requested in the property of the p	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  Dee (B8)  Depth (inc	ned Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed plain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roo i) d Soils (C6 1) (LRR A)	Secon  V  D  Sts (C3)  F  and Hydrolog	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Education Visible on Aerial Imagery (Ca)  Edeomorphic Position (D2)  Education Aquitard (D3)  AC-Neutral Test (D5)  Acaised Ant Mounds (D6) (LRR A)  Prost-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requested in the property of the p	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  Dee (B8)  Depth (inc	ned Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed plain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roo i) d Soils (C6 1) (LRR A)	Secon  V  D  Sts (C3)  F  and Hydrolog	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Education Visible on Aerial Imagery (Ca)  Edeomorphic Position (D2)  Education Aquitard (D3)  AC-Neutral Test (D5)  Acaised Ant Mounds (D6) (LRR A)  Prost-Heave Hummocks (D7)
Primary Indicators:  Primary Indicators (minimum of one requested Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface (B4)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  includes capillary fringe)  Describe Recorded Data (stream gauge,	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  Dee (B8)  Depth (inc	ned Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed plain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roo i) d Soils (C6 1) (LRR A)	Secon  V  D  Sts (C3)  F  and Hydrolog	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Education Visible on Aerial Imagery (Ca)  Edeomorphic Position (D2)  Education Aquitard (D3)  AC-Neutral Test (D5)  Acaised Ant Mounds (D6) (LRR A)  Prost-Heave Hummocks (D7)
Primary Indicators: Primary Indicators (minimum of one requested Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Surface Water Present? Ves Saturation Present? Yes Saturation Present?	Water-Stai  MLRA  Salt Crust  Aquatic Inv  Hydrogen  Oxidized F  Presence of Recent Iro  Stunted or Other (Exp  Dee (B8)  Depth (inc	ned Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reducti Stressed plain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roo i) d Soils (C6 1) (LRR A)	Secon  V  D  Sts (C3)  F  and Hydrolog	Vater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Parainage Patterns (B10)  Pary-Season Water Table (C2)  Education Visible on Aerial Imagery (Ca)  Edeomorphic Position (D2)  Education Aquitard (D3)  AC-Neutral Test (D5)  Acaised Ant Mounds (D6) (LRR A)  Prost-Heave Hummocks (D7)

roject/Site: Connick Ranch pplicant/Owner: TWC			State:	Sampling Point: UZ /
vestigator(s): LW/CS	Secti	on, Township, Ra	ange:	
andform (hillslope, terrace, etc.):	Loca	I relief (concave,	convex, none):	Slope (%):
ubregion (LRR):	Lat:		_ Long:	Datum:
				ation:
e climatic / hydrologic conditions on the site typic				
e Vegetation, Soil, or Hydrology _				
e Vegetation, Soil, or Hydrology _				The state of the s
UMMARY OF FINDINGS – Attach site				
	NoX			,
Hydric Soil Present? Yes	No	Is the Sample	d Area	No_X
Netland Hydrology Present? Yes	No	within a Wetla	na? Yes	NO A
	2			
EGETATION – Use scientific names of		sianat Indianta.	T Barriagana Tankunada	abaati.
ree Stratum (Plot size:)	% Cover Spe		Number of Dominant Sports Are OBL, FACW, of	pecies
			Total Number of Domin Species Across All Stra	
Section (Disable Objections / Districts		tal Cover	Percent of Dominant Sp That Are OBL, FACW, of	
Sapling/Shrub Stratum (Plot size:			Prevalence Index work	ksheet:
			Total % Cover of:	
			OBL species10	
			FACW species	
				×3=105
	<u> </u>	tal Cover	FACU species 25	
erb Stratum (Plot size:)	00 1	TAC		(A) 365 (B
festuca oc.	30	TACI)		
Taenathrum ca.	76	UPL	Prevalence Index	
Infolium fr	15	FACIL	Hydrophytic Vegetation	
Aranha ans.	10	052	2 - Dominance Tes	lydrophytic Vegetation
Phalans mi	5	UPL	3 - Prevalence Inde	
Rumerer	5	EA/	The second secon	x is ≤3.0 daptations¹ (Provide supportir
1001.3712			data in Remarks	captations (Provide supporting or on a separate sheet)
			5 - Welland Non-Va	
0				ohytic Vegetation <sup>1</sup> (Explain)
1				and wetland hydrology must
	100 = Tot	al Cover	be present, unless distu	rbed or problematic.
Voody Vine Stratum (Plot size:)				
			Hydrophytic	
			Vegetation	No_X_
			Present/ Vac	NO A
6 Bare Ground in Herb Stratum	= Tot	al Cover	Present? Yes	NO

Type: C=Concentration, D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	Remarks    H
Color (moist)	E pockets of mixed  Soll w) redox C+D  Similar to Sorfa  Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	E pockets of mixed  Soll w) redox C+D  Similar to Sorfa  Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present): Type: Depth (inches): Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3)  Remarks: Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Sali Crust (B11) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Depth (inches): Surface Water Present? Yes No Depth (inches):	Pockets of mixed  Soil w) redox C+D  Similar to Sorfa  Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  Iydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	Pockets of mixed  Soil w) redox C+D  Similar to Sorfa  Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coaled Sand Grains.  Iydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosoi (A1)	Pockets of mixed  Soil w) redox C+D  Similar to Sorfa  Location: PL=Pore Lining, M=Matrix.
All Histosol (A1) Sandy Redox (S5) Histosol (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present): Type: Depth (inches):  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 David To Affect (F8)  Remarks: Di 1 David To Crust (B4) David To Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Ield Observations: David To Company To Com	Similar to Sar fa
All Histosol (A1) Sandy Redox (S5) Histosol (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present): Type: Depth (inches):  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 David To Affect (F8)  Remarks: Di 1 David To Crust (B4) David To Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Ield Observations: David To Company To Com	Similar to Sar fa
Algebra Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Algebra Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
All Histosol (A1) Sandy Redox (S5) Histosol (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present): Type: Depth (inches):  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 David To Affect (F8)  Remarks: Di 1 David To Crust (B4) David To Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Ield Observations: David To Company To Com	
All Histosol (A1) Sandy Redox (S5) Histosol (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present): Type: Depth (inches):  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 S MIRAD David To Affect (F8)  Remarks: Di 1 David To Affect (F8)  Remarks: Di 1 David To Crust (B4) David To Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Ield Observations: David To Company To Com	
lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	
lydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  estrictive Layer (if present): Type: Depth (inches): Hydrogen Sulfide (A2)  Popth (inches): Hydrogen Sulfide (A2)  Surface Water (A1) Water Table (A2) Salturation (A3) Water Marks (B1) Salturation (A3) Salt Crust (B11) Sediment Deposits (B3) Nydrogen Sulfide Odor (C1) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	
Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (F1) (except MLRA 1)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Gleyed Matrix (F3)  Sandy Gleyed Matrix (S4)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4)  Redox Depressions (F8)  Loamy Mucky Mineral (F1) (except MLRA 1)  Loamy Gleyed Matrix (F2)  Depleted Batrix (F2)  Redox Depressions (F8)  Redox Depres depres (F6)  Redox Depressions (F8)  Redox Depressions (F8)  Redox Depres depres (F6)  Redox Depressions (F8)  Redox Depressions (F8)  Redox Depres depres (F6)  Redox Depressions (F8)  Redox D	2 cm Muck (A10)
Black Histic (A3)	Red Parent Material (TF2)
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Retrictive Layer (if present): Type: Depth (inches):	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present):  Type: Depth (inches): Hyce  Remarks: Hyce  Type Type Type  Depth (inches): Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply) Surface Water (A1) Water Table (A2) MLRA 1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Water No Popply Vegetated Concave Surface (B8)  Ield Observations:  Furface Water Present? Yes No Depth (inches): Deposits (Inches): Surface Water Present? Yes Depth (inches): Surface Water Present? Plants (Mater Table (B3))  Depth (inches): Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present?	
Thick Dark Surface (A12)	Other (Explain in Remarks)
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present):  Type:	Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present):  Type: Depth (inches):  Remarks:	welland hydrology must be present,
Restrictive Layer (if present):  Type:  Depth (inches):  Type:  Depth (inches):  Warrender of the attention of the required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Interface Water Present?  YDROLOGY  Hydrogen Sulfide Action (A2)  Saturation (A3)  Aquatic Invertebrates (B13)  Aquatic Invertebrates (B13)  Adjust or Crust (B4)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Sparsely Vegetated Concave Surface (B8)  Include the attention of the attention of the concave Surface (B8)  Include the attention of the attention of the concave Surface (B8)  Include the attention of the attention of the attention of the attention of the concave Surface (B8)  Include the attention of the	unless disturbed or problematic.
Type:	unless disturbed of problematic.
Depth (inches):	
Maintenance due to attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Compart on + attention 5 to 10 meet F  Che to Allow Meet To Che to Allow Meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 5 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attention 6 to 10 meet To Che Che I attenti	ric Soil Present? Yes No
Maintenance of the Attent of May Meth F  Child to Compact of the Attent of Charle  (DROLOGY  Vetland Hydrology Indicators: rimary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Indicators (Minimum of one required; check all that apply)  Water Apply  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Roots (C3)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Sparsely Vegetated Concave Surface (B8)  Incompact of the Active of Carles (B8)  Incompact of the Active of Carles (B8)  Incompact of the Active of Carles (B8)  Incompact of Carles (B8)  Depth (inches):  Depth (inches):	ile soil Flesent? TesNo
Surface Water (A1)	
Surface Water (A1)	Company of Comments and
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Secondary Indicators (2 or more required)
Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3 Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2
Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3 Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	4A, and 4B)
Water Marks (B1) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3 Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	Drainage Patterns (B10)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)  Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3  Algal Mat or Crust (B4) Presence of Reduced Iron (C4)  Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)  Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	Dry-Season Water Table (C2)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Depth (inches):  Depth (inches):  Doubt (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Saturation Visible on Aerial Imagery (C
Algal Mat or Crust (B4)	
Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6)  Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	
Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  ield Observations:  Urface Water Present?  Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)  ield Observations:  urface Water Present? Yes No Depth (inches):	Raised Ant Mounds (D6) (LRR A)
ield Observations: urface Water Present?  Yes No Depth (inches):	Frost-Heave Hummocks (D7)
urface Water Present? Yes No Depth (inches):	
/ater Table Present? Yes No _X_ Depth (inches):	1
	drology Present? Yes No
ncludes capillary fringe)	
escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if avail	
Jomeske:	able:
general above channel	
opagraphic high point above (hannel	able:

roject/Site: Connick S	anch	City	//County: <u>Ferr</u>	Sai	npling Date. 10-45
pplicant/Owner:		100		State: A Sar	
vestigator(s):					
andform (hillslope, terrace, etc.): <u>5/ ou</u>	igh side ed	ope Lo	cal relief (concave,	convex, none):	Slope (%): _5_
ubregion (LRR):	7	Lat:		Long:	Datum:
oil Map Unit Name:				NVI classification	
re climatic / hydrologic conditions on t	the site typical fo	or this time of year?	Yes X No_	(If no, explain in Rema	rks.)
re Vegetation, Soil, or					
re Vegetation, Soil, or					
UMMARY OF FINDINGS - A					
Hydrophytic Vegetation Present?	V-7-4-1-2-3-3-1-1-1-1	_ No		380	Control to Date of
Hydric Soil Present?	Yes X	No	Is the Sampled	I Area nd? Yes	Ü.
Wetland Hydrology Present?	Yes X	_ No	within a Wetla	nd? Yes _/\	NO
Remarks:					
EGETATION – Use scientific	names of p	lants.			
			ominant Indicator	Dominance Test workshe	et:
Tree Stratum (Plot size:			pecies? Status	Number of Dominant Specie	
				That Are OBL, FACW, or FA	AC: (A)
2				Total Number of Dominant	3 (8)
3				Species Across All Strata:	(B)
4.		- a =	Total Cover	Percent of Dominant Species That Are OBL, FACW, or FA	
Sapling/Shrub Stratum (Plot size:				Prevalence Index worksho	et:
	/			Total % Cover of:	Multiply by:
2/				OBL species	_ x1 =
3				FACW species	x 2 =
1/				FAC species	_ x3=
j		8-	Total Cover	FACU species	_ x 4 =
Herb Stratum (Plot size:	)	-	Total Gover	UPL species	
1. Anastra an.		15	Y 084	Column Totals:	_ (A) (B)
2. Judholism en.		20	Y FAC	Prevalence Index = B	/A =
. Agroshs st.		25	Y FAC	Hydrophytic Vegetation In	
1. Usmex Cr.		5	FAC	1 - Rapid Test for Hydro	ophytic Vegetation
Inhalian K.			FAC	2 - Dominance Test is	-50%
i. Civsium Yu		5	FACU	3 - Prevalence Index is	≤3.0 <sup>1</sup>
1 Jestica de		10-	FAC		tations <sup>1</sup> (Provide supportin
3. Holas la		5	FAC	data in Remarks or	A Delivery of the Control of the Con
9			<del></del>	5 - Welland Non-Vascu Problematic Hydrophyti	
10				Indicators of hydric soil and	50 N = 1 N N N N N N N N N N N N N N N N N
[1],	-	100	Total Value of the Control of the Co	be present, unless disturbed	
Noody Vine Stratum (Plot size:	· i	<u> 100 = 1</u>	Total Cover	1042012 105301 1011 ( 10 10 10 10 10 10 10 10 10 10 10 10 10	0.5.3.191-1-00-1-1-
1				Ludronbudio	
2.				Hydrophytic Vegetation	,
G.,		DX .	. (1.6.1)	Present? Yes	No
	15-	261 - 1	Total Cover	Auto-Charles and a second	
% Bare Ground in Herb Stratum	Ø	<u></u> =	Total Cover		

Profile Description: (Describe Depth Matrix			Feature				
(inches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
5-3 10483/2	100	_		_	-	Silt	
- 7 2,543/3	98	12483/4	2	7 - 7		-	
2 22 2 5 436	95	1011031	5	0	m		1.5
F-10 2,7/12	-12	10915-19	2	_	1.		
							-
						,	3 4
					_		
			_	-		-	-
Type: C=Concentration, D=De	pletion, RM=F	Reduced Matrix, CS	=Covered	d or Coate	d Sand G		ocation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Appli	cable to all L			ed.)			tors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	100	Sandy Redox (S					cm Muck (A10)
Histic Epipedon (A2)	-	Stripped Matrix (		Marie and	2021 8		ed Parent Material (TF2)
Black Histic (A3)	-	Loamy Mucky M			MLRA 1)		ery Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	(044)	Loamy Gleyed M		:)		0	her (Explain in Remarks)
<ul> <li>Depleted Below Dark Surfa</li> <li>Thick Dark Surface (A12)</li> </ul>	ce (ATT)	_ Depleted Matrix ✓ Redox Dark Surf				3Indica	tors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	7	Depleted Dark S					land hydrology must be present,
Sandy Mucky Millerar (S1) Sandy Gleyed Matrix (S4)		Redox Depression		-1			ess disturbed or problematic.
lestrictive Layer (if present):						1	4.40 mg 4.40 mg 1.30 mg 1.40 mg
Type:							\/
and the same of th						Hydric Sc	il Present? Yes X No
Denth (Inches):							
Depth (inches):						111411111111111111111111111111111111111	7 \
Pemarks: YDROLOGY				*			7 \
Remarks: YDROLOGY Vetland Hydrology Indicators		obo ob out the state of the sta	Δ.	×			7 \
Primary Indicators (minimum of		7				Sec	ondary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1)		Water-Stair	ned Leav		xcept	Sec	ondary Indicators (2 or more required) Water-Stained Leaves (B9) ( <b>MLRA 1, 2</b>
YDROLOGY Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2)		Water-Stair MLRA 1	ned Leav , 2, 4A, a		xcept	Sec	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
YDROLOGY Vetland Hydrology Indicators Vrimary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Stair MLRA 1 Salt Crust (	ned Leav , <b>2, 4A,</b> a B11)	and 4B)	xcept	Sec	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
YDROLOGY Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv	ned Leav , <b>2, 4A,</b> a B11) ertebrate	and 4B) s (B13)	xcept	Sec —	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)		Water-Stair MLRA 1 Salt Crust ( Aquatic Invo	ned Leav , <b>2, 4A, a</b> B11) ertebrate Sulfide Od	and 4B) es (B13) dor (C1)		Sec	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S Oxidized Ri	ned Leav , <b>2, 4A, a</b> B11) erlebrate Sulfide Od hizosphe	es (B13) dor (C1) res along	Living Roc	Sec	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Water-Stain MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o	ned Leav , <b>2, 4A</b> , a B11) erlebrate Sulfide Od hizosphe f Reduce	es (B13) dor (C1) res along ed Iron (C4	Living Roc	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized Ri Presence o Recent Iror	ned Leav , <b>2, 4A,</b> a B11) ertebrate Sulfide Oo hizosphe if Reduce in Reducti	es (B13) dor (C1) res along dor in Tilled	Living Roc i) d Soils (C6	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	:: one required;	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized Ri Presence o Recent Iror	ned Leav , <b>2, 4A,</b> a B11) ertebrate Sulfide Od hizosphe if Reduce i Reducti Stressed	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial	i: one required;	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or ( Other (Expl	ned Leav , <b>2, 4A,</b> a B11) ertebrate Sulfide Od hizosphe if Reduce i Reducti Stressed	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concar	i: one required;	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or ( Other (Expl	ned Leav , <b>2, 4A,</b> a B11) ertebrate Sulfide Od hizosphe if Reduce i Reducti Stressed	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concavicield Observations:	one required; one required; Imagery (B7) ve Surface (B	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) ertebrate Sulfide Oo hizosphe if Reduce a Reducti Stressed lain in Re	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concar  Field Observations:	i: one required; Imagery (B7) ve Surface (B:	Water-Stair MLRA 1 Salt Crust ( Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) ertebrate Sulfide Oo hizosphe if Reduce in Reducti Stressed lain in Re	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6	Sec ————————————————————————————————————	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concar  Field Observations:	i: one required; Imagery (B7) ve Surface (Bi Yes N Yes N	Water-Stair MLRA 1 Salt Crust ( Aqualic Inv Hydrogen S Oxidized RI Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) erlebrate Sulfide Ochizosphe if Reduce in Reducti Stressed ain in Re hes): hes):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6 1) (LRR A	Sec — — — — — — — — — — — — — — — — — — —	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial  Sparsely Vegetated Concar  Field Observations:  Surface Water Present?  Vater Table Present?	i: one required; Imagery (B7) ve Surface (Bi Yes N Yes N	Water-Stair MLRA 1 Salt Crust ( Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) erlebrate Sulfide Ochizosphe if Reduce in Reducti Stressed ain in Re hes): hes):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Roc i) d Soils (C6 1) (LRR A	Sec — — — — — — — — — — — — — — — — — — —	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concavitield Observations: Surface Water Present? Vater Table Present? Saturation Present? Saturation Present?	i: one required; Imagery (B7) ve Surface (B: Yes N Yes N	Water-Stair MLRA 1 Salt Crust ( Aquatic Invi Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) ertebrate Sulfide Ochizosphe if Reduce in Reducti Stressed lain in Re hes): hes): hes):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Root  d Soils (C6  1) (LRR A	ots (C3)	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial  Sparsely Vegetated Concar  Field Observations:  Surface Water Present?  Vater Table Present?	i: one required; Imagery (B7) ve Surface (B: Yes N Yes N	Water-Stair MLRA 1 Salt Crust ( Aquatic Invi Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) ertebrate Sulfide Ochizosphe if Reduce in Reducti Stressed lain in Re hes): hes): hes):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Root  d Soils (C6  1) (LRR A	ots (C3)	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Process  Process  Process  Primary Indicators (minimum of Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial  Sparsely Vegetated Concarticle (B4)  Surface Water Present?  Vater Table Present?  Saturation Present?  Saturation Present?  Saturation Present?  Saturation Present?  Social Cracks (B6)  Social Cracks (B6)  Includes Capillary fringe)  Describe Recorded Data (streat)	i: one required; Imagery (B7) ve Surface (B: Yes N Yes N	Water-Stair MLRA 1 Salt Crust ( Aquatic Invi Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) ertebrate Sulfide Ochizosphe if Reduce in Reducti Stressed lain in Re hes): hes): hes):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Root  d Soils (C6  1) (LRR A	ots (C3)	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concavitield Observations: Surface Water Present? Vater Table Present? Saturation Present? Saturation Present?	i: one required; Imagery (B7) ve Surface (B: Yes N Yes N	Water-Stair MLRA 1 Salt Crust ( Aquatic Invi Hydrogen S Oxidized Ri Presence o Recent Iror Stunted or S Other (Expl	ned Leav , 2, 4A, a B11) ertebrate Sulfide Ochizosphe if Reduce in Reducti Stressed lain in Re hes): hes): hes):	es (B13) dor (C1) res along ed Iron (C4 on in Tilled Plants (D	Living Root  d Soils (C6  1) (LRR A	ots (C3)	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

pplicant/Owner: TWC	cheri .	City/County; 1978	State: Sampling Point: <u>U3 T2</u>
evestigator(s): A6//S		Section, Township, Ra	
andform (hillolana torrano ala): VVII			convex, none) Convex line aslope (%):
androrm (nillstope, terrace, etc.). Lnc	cancer is	_ Local relief (concave,	Convex, Horie) (1) 10 Ct. 111 - 4 captope (76).
			Long: Datum:
oil Map Unit Name:			NWI classification:
e climatic / hydrologic conditions on the s			
e Vegetation, Soil, or Hyd	drology significantly	disturbed? Are	"Normal Circumstances" present? Yes No
re Vegetation, Soil, or Hyd	drology naturally pr	oblematic? No (If n	eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Atta	ch site map showing	g sampling point l	locations, transects, important features, et
	Yes No		
	Yes No	Is the Sampled within a Wetla	X
Netland Hydrology Present?	Yes No _X	Within a Wella	illu: 165NO
Remarks:			
EGETATION – Use scientific na	ames of plants.		
	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:		Species? Status	Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
			Species Across All Strata: (B)
	0	= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:		- 2577, 25,157	Prevalence Index worksheet:
			Total % Cover of: Multiply by:
¥			OBL species x 1 =
			FACW species
			FAC species 55 x3 = 165
			FACU species
	B	_ = Total Cover	150
lerb Stratum (Plot size:	6.0	1	7 070
Polygonumar.	30	- NL	Column Totals: 90 (A) 335 (B)
Cisium an		+ AC	Prevalence Index = B/A = 3,72
Rumex cr.		TAC	Hydrophytic Vegetation Indicators:
Festuca pe.	30	Y FAC	1 - Rapid Test for Hydrophytic Vegetation
Hipscheens ra.	5_	TACU	2 - Dominance Test is >50%
1			/VO3 - Prevalence Index is ≤3.01
			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
<u> </u>			data in Remarks or on a separate sheet)
k,			5 - Wetland Non-Vascular Plants <sup>1</sup>
0			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u> </u>			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	ND	_= Total Cover	be present, unless disturbed or problematic.
Voody Vine Stratum (Plot size:			
			Hydrophytic
			Vegetation
2			Drocont2 Voc No A
	A	= Total Cover	Present? Yes No

rofile Description: (Describe	to the depth needed			Commi	the absence of	mulcators.		
Depth Matrix (inches) Color (moist)	% Color	Redox Feature (moist) %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	0-511 R	emarks	
(inches) Color (moist)	A 7 7 CN	<u>-//. 7</u>	Type	M	Sandylday	1 RC	not more	t india
10 1F 1/2	- 10 1.21	1/6 -2	<u> </u>		Sura Made	201	11.4	Cara
1-18 L.5772	10 50	chote.			Sanot	20/0 61	OMB2.	4000
						50140	ami	red in
						(IOHR)	12 412	2%
					1	7.540	1/6	
						200	+ who	1
	·					india.	TO CO	X-
						INDICE	axurs	)
							-	
Type: C=Concentration, D=Dep	oletion, RM=Reduced	Matrix, CS=Covere	d or Coated	Sand Gra	ins. <sup>2</sup> Locat	ion: PL=Pore		
Hydric Soil Indicators: (Applic			ted.)			for Problema	itic Hydric Sc	oils":
Histosol (A1)		ly Redox (S5)				fuck (A10)	(TEA)	
Histic Epipedon (A2)		ped Matrix (S6)				arent Material		
Black Histic (A3)	1 <del></del>	ny Mucky Mineral (F		WLRA 1)		hallow Dark S (Explain in Re		
<ul> <li>Hydrogen Sulfide (A4)</li> <li>Depleted Below Dark Surfac</li> </ul>		ıy Gleyed Matrix (F2 eted Matrix (F3)	2)		Outer	(Explain in Ne	iliains)	
Thick Dark Surface (A12)		ox Dark Surface (F6)			3Indicators	of hydrophytic	vegetation ar	nd
Sandy Mucky Mineral (S1)	7-8	eted Dark Surface (F				hydrology mu		
Sandy Gleyed Matrix (S4)	Redo	x Depressions (F8)			unless	disturbed or pr	oblematic.	
Restrictive Layer (if present):								
Туре:					ANY ACTOR			V
Depth (inches):					Hydric Soil P	resent? Yes	s No	
243 St Rek			1 19th	274 W	1 /41= 144 TO	5	14 3	×
at the			4 1965. 1975.)x	574 W 1	1412 TO	What S	1/3	
	anti St o		S OUT.	E/K 1	HAL TO	5 5	163	
YDROLOGY	one required; check a	Il that apply)		E/K I		5		
YDROLOGY  Wetland Hydrology Indicators:	one required; check a	II that apply) Water-Stained Leav	ves (B9) ( <b>ex</b>	cept	Wai	er-Stained Lea		
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of of of of the control of	one required; check a	II that apply) Water-Stained Leav	ves (B9) ( <b>ex</b>	ecept	Wal	er-Stained Lea	aves (B9) ( <b>M</b> L	
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of	one required; check a	II that apply) Water-Stained Leav MLRA 1, 2, 4A, 3	ves (B9) (ex and 4B)	cept	Wal	er-Stained Lea IA, and 4B) nage Patterns	aves (B9) ( <b>ML</b> (B10)	
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of o  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	one required; check a	II that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate	ves (B9) (ex and 4B) es (B13)	cept	Wal Dra Dry.	er-Stained Lea A, and 4B) nage Patterns Season Wale	aves (B9) ( <b>ML</b> : (B10) r Table (C2)	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of	one required; check a	Il that apply) Water-Stained Leav MLRA 1, 2, 4A, 3 Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O	ves (B9) (ex and 4B) es (B13) dor (C1)		Wal Dra Dry Sali	er-Stained Lea A, and 4B) nage Patterns Season Wale uration Visible	aves (B9) ( <b>ML</b> (B10) r Table (C2) on Aerial Ima	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of of of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	one required; check a	II that apply)  Water-Stained Leav  MLRA 1, 2, 4A,  Salt Crust (B11)  Aquatic Invertebrate  Hydrogen Sulfide O  Oxidized Rhizosphe	res (B9) (ex and 4B) es (B13) dor (C1) eres along L	iving Root	Wal Dra Dry. Satu s (C3) Geo	er-Stained Lea IA, and 4B) nage Patterns Season Wate uration Visible umorphic Posit	aves (B9) ( <b>ML</b> (B10) r Table (C2) on Aerial Ima- ion (D2)	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of of of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	one required; check a	II that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce	res (B9) (ex and 4B) es (B13) dor (C1) eres along L ed Iron (C4)	.iving Root	Wal Dra Dry Satu s (C3) Geo Sha	er-Stained Lea IA, and 4B) nage Patterns Season Wate uration Visible umorphic Posit Ilow Aquitard (	aves (B9) ( <b>ML</b> (B10) r Table (C2) on Aerial Ima ion (D2) (D3)	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of of of of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	one required; check a	II that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct	res (B9) (ex and 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled	.iving Root ) Soils (C6)	Wal Dra Dry. Satu s (C3) Geo Sha FAC	er-Stained Lea IA, and 4B) nage Patterns Season Wate uration Visible umorphic Posit Ilow Aquitard ( C-Neutral Test	aves (B9) (ML (B10) r Table (C2) on Aerial Ima ion (D2) (D3) (D5)	RA 1, 2,
VDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of of of of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	one required; check a	Il that apply)  Water-Stained Leave MLRA 1, 2, 4A, 5  Salt Crust (B11)  Aquatic Invertebrate Hydrogen Sulfide O  Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct Stunted or Stressed	ves (B9) (ex and 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1	.iving Root ) Soils (C6)	Wal Dra Dry Satu s (C3) Geo Sha FAC Rais	er-Stained Lea IA, and 4B) nage Patterns Season Water In It is in the season water It is in t	aves (B9) (ML (B10) r Table (C2) on Aerial Ima ion (D2) (D3) (D5) ds (D6) (LRR	RA 1, 2,
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of of of of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial I	one required; check a	II that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct	ves (B9) (ex and 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1	.iving Root ) Soils (C6)	Wal Dra Dry Satu s (C3) Geo Sha FAC Rais	er-Stained Lea IA, and 4B) nage Patterns Season Wate uration Visible umorphic Posit Ilow Aquitard ( C-Neutral Test	aves (B9) (ML (B10) r Table (C2) on Aerial Ima ion (D2) (D3) (D5) ds (D6) (LRR	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of of of surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial I  Sparsely Vegetated Concaver	one required; check a	Il that apply)  Water-Stained Leave MLRA 1, 2, 4A, 5  Salt Crust (B11)  Aquatic Invertebrate Hydrogen Sulfide O  Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct Stunted or Stressed	ves (B9) (ex and 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1	.iving Root ) Soils (C6)	Wal Dra Dry Satu s (C3) Geo Sha FAC Rais	er-Stained Lea IA, and 4B) nage Patterns Season Water In It is in the season water It is in t	aves (B9) (ML (B10) r Table (C2) on Aerial Ima ion (D2) (D3) (D5) ds (D6) (LRR	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of orange)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Incompany Sparsely Vegetated Concaversited Observations:	Imagery (B7)	Il that apply)  Water-Stained Leav  MLRA 1, 2, 4A, Salt Crust (B11)  Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct Stunted or Stressed Other (Explain in Re	ves (B9) (ex and 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1 emarks)	.iving Root ) Soils (C6)	Wal Dra Dry Satu s (C3) Geo Sha FAC Rais	er-Stained Lea IA, and 4B) nage Patterns Season Water In It is in the season water It is in t	aves (B9) (ML (B10) r Table (C2) on Aerial Ima ion (D2) (D3) (D5) ds (D6) (LRR	RA 1, 2,
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of orange)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Incompany  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?	Imagery (B7) e Surface (B8)	Il that apply) Water-Stained Leave MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reducet Recent Iron Reduct Stunted or Stressed Other (Explain in Reduct Depth (inches):	res (B9) (exand 4B) es (B13) dor (C1) eres along Led Iron (C4) ion in Tilled I Plants (D1) emarks)	.iving Root ) Soils (C6)	Wal Dra Dry Satu s (C3) Geo Sha FAC Rais	er-Stained Lea IA, and 4B) nage Patterns Season Water In It is in the season water It is in t	aves (B9) (ML (B10) r Table (C2) on Aerial Ima ion (D2) (D3) (D5) ds (D6) (LRR	RA 1, 2,
VDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Inches Sparsely Vegetated Concavers (B4) Signification (B4) Signification (B5) Surface Water Present?  Water Table Present?	Imagery (B7) e Surface (B8)  Yes No	Il that apply) Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct Stunted or Stressed Other (Explain in Re	res (B9) (exand 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1) emarks)	.iving Root ) Soils (C6) ) (LRR A)	Wal Dra Dry Satu s (C3) Geo FAC Rais Fros	er-Stained Lea A, and 4B) mage Patterns Season Water uration Visible morphic Posit Illow Aquitard ( C-Neutral Test sed Ant Mound st-Heave Hum	aves (B9) (ML (B10) r Table (C2) on Aerial Ima- ion (D2) (D3) (D5) ds (D6) (LRR amocks (D7)	gery (C9)
VDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of orange)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Incompanies  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?  Vater Table Present?  Yater Table Present?	Imagery (B7) e Surface (B8)	Il that apply) Water-Stained Leave MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reducet Recent Iron Reduct Stunted or Stressed Other (Explain in Reduct Depth (inches):	res (B9) (exand 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1) emarks)	.iving Root ) Soils (C6) ) (LRR A)	Wal Dra Dry Satu s (C3) Geo Sha FAC Rais	er-Stained Lea A, and 4B) mage Patterns Season Water uration Visible morphic Posit Illow Aquitard ( C-Neutral Test sed Ant Mound st-Heave Hum	aves (B9) (ML (B10) r Table (C2) on Aerial Ima- ion (D2) (D3) (D5) ds (D6) (LRR amocks (D7)	gery (C9)
VDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Inches Sparsely Vegetated Concavers (B4) Signification (B4) Signification (B5) Surface Water Present?  Water Table Present?	Imagery (B7) e Surface (B8)  /es No /es No /es No	Il that apply) Water-Stained Leave MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide Of Oxidized Rhizosphe Presence of Reducet Recent Iron Reduct Stunted or Stressed Other (Explain in Reference of Stantal Control (Explain	res (B9) (exand 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1) emarks)	Living Root Soils (C6) (LRR A)	Wal  Wal  Dra  Dry  Salus (C3) — Gec  Sha  FAC  Rais  Fros	er-Stained Lea A, and 4B) mage Patterns Season Water uration Visible morphic Posit Illow Aquitard ( C-Neutral Test sed Ant Mound st-Heave Hum	aves (B9) (ML (B10) r Table (C2) on Aerial Ima- ion (D2) (D3) (D5) ds (D6) (LRR amocks (D7)	gery (C9)
VDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of orange)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Incompanies  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?  Water Table Present?  Yesturation Present?  Yesturation Present?	Imagery (B7) e Surface (B8)  /es No /es No /es No	Il that apply) Water-Stained Leave MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide Of Oxidized Rhizosphe Presence of Reducet Recent Iron Reduct Stunted or Stressed Other (Explain in Reference of Stantal Control (Explain	res (B9) (exand 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1) emarks)	Living Root Soils (C6) (LRR A)	Wal  Wal  Dra  Dry  Salus (C3) — Gec  Sha  FAC  Rais  Fros	er-Stained Lea A, and 4B) mage Patterns Season Water uration Visible morphic Posit Illow Aquitard ( C-Neutral Test sed Ant Mound st-Heave Hum	aves (B9) (ML (B10) r Table (C2) on Aerial Ima- ion (D2) (D3) (D5) ds (D6) (LRR amocks (D7)	gery (C9)
VDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of orange)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Incompanies  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?  Water Table Present?  Yesturation Present?  Yesturation Present?	Imagery (B7) e Surface (B8)  /es No /es No /es No	Il that apply) Water-Stained Leave MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide Of Oxidized Rhizosphe Presence of Reducet Recent Iron Reduct Stunted or Stressed Other (Explain in Reference of Stantal Control (Explain	res (B9) (exand 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1) emarks)	Living Root Soils (C6) (LRR A)	Wal  Wal  Dra  Dry  Salus (C3) — Gec  Sha  FAC  Rais  Fros	er-Stained Lea A, and 4B) mage Patterns Season Water uration Visible morphic Posit Illow Aquitard ( C-Neutral Test sed Ant Mound st-Heave Hum	aves (B9) (ML (B10) r Table (C2) on Aerial Ima- ion (D2) (D3) (D5) ds (D6) (LRR amocks (D7)	gery (C9)
VDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of orange)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial I Sparsely Vegetated Concave Field Observations:  Surface Water Present?  Water Table Present?  Yater Table Present?	Imagery (B7) e Surface (B8)  /es No /es No /es No	Il that apply) Water-Stained Leave MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide Of Oxidized Rhizosphe Presence of Reducet Recent Iron Reduct Stunted or Stressed Other (Explain in Reference of Stantal Control (Explain	res (B9) (exand 4B) es (B13) dor (C1) eres along L ed Iron (C4) ion in Tilled I Plants (D1) emarks)	Living Root Soils (C6) (LRR A)	Wal  Wal  Dra  Dry  Salus (C3) — Gec  Sha  FAC  Rais  Fros	er-Stained Lea A, and 4B) mage Patterns Season Water uration Visible morphic Posit Illow Aquitard ( C-Neutral Test sed Ant Mound st-Heave Hum	aves (B9) (ML (B10) r Table (C2) on Aerial Ima- ion (D2) (D3) (D5) ds (D6) (LRR amocks (D7)	RA 1, 2, gery (C9)

Project/Site: Connick	nar	ch	City/County: Fern	dale / Hum	Sampling Date: 10-19-
Applicant/Owner:			111	State: <u>CA</u>	Sampling Point:
nvestigator(s):			Section, Township, Ra	inge:	1
andform (hillslope, terrace, etc.):	oodplainf	mace	Local relief (concave,	convex, none): \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Slope (%):
Subregion (LRR):	. /	Lat:		_ Long:	Dalum:
oil Map Unit Name:					
re climatic / hydrologic conditions on					
re Vegetation, Soil, o					
re Vegetation, Soil, o					
SUMMARY OF FINDINGS - A					
Hydrophytic Vegetation Present?		No			, <b>.</b> ,
Hydric Soil Present?		No	Is the Sampled		No.
Wetland Hydrology Present?	Yes X	No	within a Wetla	nd? Yes X	No
Remarks:					
EGETATION – Use scientifi	c names of pl	lants.			
		Absolute	Dominant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:	2		Species? Status	Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domin	nant 🛷
3.				Species Across All Stra	
4				Percent of Dominant S	necies
0 - 15 - 10t - 1 0t - 1 0 1 1 1		0	= Total Cover	That Are OBL, FACW,	
Sapling/Shrub Stratum (Plot size:				Prevalence Index wor	ksheet:
				Total % Cover of:	Multiply by:
2.				OBL species	x 1 =
k <u> </u>				FACW species	x 2 =
5,				FAC species	x 3 =
		8	= Total Cover	Tarlow and the second s	x 4 =
Herb Stratum (Plot size:	)	7	, , s.a. co.u.		x 5 =
Argentin an		_35	Y OBL	Column Totals:	(A) (B)
Aartoshis st.		25	Y FAC	Prevalence Index	= B/A =
numer ca		10	- FAC	Hydrophytic Vegetation	on Indicators:
Festiva pe.		10	FAC		Hydrophytic Vegetation
Holwsla.			TAC	2 - Dominance Tes	
·				3 - Prevalence Inde	ex is ≤3.0 <sup>1</sup>
·					Adaptations1 (Provide supporting
J				The second secon	s or on a separate sheet)
<u>.</u>				5 - Welland Non-Va	
0.					ohytic Vegetation <sup>1</sup> (Explain)
1,				be present, unless distu	I and wetland hydrology must irbed or problematic.
Voody Vine Stratum (Plot size:	Α.	100	= Total Cover		
				Hydrophytic	
				Vegetation	
	al .	B	= Total Cover	Present? Yes	s_X No
% Bare Ground in Herb Stratum	0				
Remarks: $TP = 12^{\prime}$ for	m but	day.			

Depth Matrix	0/		Features		- Loc²	Tautura	Remarks
(inches) Color (moist)	_%_	Color (moist)	%_	Type <sup>1</sup>	_Loc	Texture	
2-2 10482/2	100		17		- 71	2114 100	lin
-18 2.549/1	40	1048314	10		01	SIL	
		1					
							· ·
<del></del>	-	-	-	==	1		
			_				
			_				The Table of the Control of the Cont
Type: C=Concentration, D=Dep					d Sand Gr		cation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applic	able to all			(d.)			ors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Redox (S	- Section				n Muck (A10) I Parent Material (TF2)
Histic Epipedon (A2) Black Histic (A3)		Stripped Matrix ( Loamy Mucky M		) (except	MI RA 1)		y Shallow Dark Surface (TF12)
Black Histic (A3) Hydrogen Sulfide (A4)		Loamy Gleyed M			MEIXA I)		er (Explain in Remarks)
Depleted Below Dark Surfac	e (A11)	Depleted Matrix				237	A POST OF THE PROPERTY OF
Thick Dark Surface (A12)	re-te	Redox Dark Surf	face (F6)			3Indicate	ors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Depleted Dark S	Company of the Party of	7)			ind hydrology must be present,
Sandy Gleyed Matrix (S4)		Redox Depressi	ons (F8)			unles	ss disturbed or problematic.
Restrictive Layer (if present):							
Type:						10.000 600	- X
Donth (inches):						Hydric Soil	Present? Yes /\ No
Depth (inches):							
YDROLOGY							
Remarks: YDROLOGY Wetland Hydrology Indicators:		is about all that apply	Δ.				
Remarks:  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of c				ne /PO) (n	voont	Seco	ndary Indicators (2 or more required)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of c		Water-Stair	ned Leave		xcept	Seco	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) ( <b>MLRA 1, 2</b> ,
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of company Surface Water (A1)  High Water Table (A2)		Water-Stair MLRA 1	ned Leave , 2, 4A, a		xcept	Secon V	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of c Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Stair MLRA 1 Salt Crust (	ned Leave , <b>2, 4A, a</b> (B11)	nd 4B)	xcept	<u>Seco</u> i	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) 1.
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of company Logicators (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv	ned Leave , <b>2, 4A, a</b> B11) ertebrates	nd 4B)	xcept	Secon V C C C	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) %. Orainage Patterns (B10) Ory-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of comparts of the compar		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv	ned Leave , <b>2, 4A, a</b> (B11) ertebrates Sulfide Od	nd 4B) s (B13) for (C1)		Secoi	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) 1.
Primary Indicators:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S Oxidized R	ned Leave , <b>2, 4A, a</b> B11) ertebrales Sulfide Od hizospher	nd 4B) s (B13) for (C1) res along	Living Roc	Secon V C C Sots (C3) C	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) 1. Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of comparts of the compar		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv	ned Leave I, <b>2, 4A, a</b> (B11) ertebrates Sulfide Od hizospher of Reducer	nd 4B) s (B13) for (C1) es along d Iron (C4)	Living Roc	Secon V C Sets (C3) G S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9
Primary Indicators (minimum of company Section (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S Oxidized RI	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduces on Reduction	nd 4B) s (B13) for (C1) es along d Iron (C4 on in Tilleo	Living Roc I) d Soils (C6	Secon V C S S S S S _	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ne required	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iror	ned Leave , <b>2</b> , <b>4A</b> , a (B11) ertebrates Sulfide Od hizospher of Reduced n Reduction Stressed	s (B13) for (C1) res along d Iron (C4 on in Tilled Plants (D	Living Roc I) d Soils (C6	Secon  V  C  Sols (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Staturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Schallow Aquitard (D3)
Primary Indicators (minimum of company Section (Mayor Marks (Mayor Mayor	ne required	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or (  Other (Expl	ned Leave , <b>2</b> , <b>4A</b> , a (B11) ertebrates Sulfide Od hizospher of Reduced n Reduction Stressed	s (B13) for (C1) res along d Iron (C4 on in Tilled Plants (D	Living Roc I) d Soils (C6	Secon  V  C  Sols (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5)
Primary Indicators:  Primary Indicators (minimum of company Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial	ne required	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iror Stunted or S Other (Expl	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduced n Reduction Stressed lain in Red	s (B13) for (C1) res along d Iron (C4 on in Tilled Plants (D	Living Roc I) d Soils (C6	Secon  V  C  Sols (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5)
Primary Indicators (minimum of company Section (Management Primary Indicators (minimum of company Indicators (Management Primary Indicators (Management Deposits (Management Depo	magery (B7 e Surface (E	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or s  Other (Expl	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduced n Reduction Stressed lain in Reduction	s (B13) for (C1) res along d Iron (C4 on in Tilled Plants (D	Living Roc I) d Soils (C6	Secon  V  C  Sols (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5)
Primary Indicators (minimum of company Section (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial  Sparsely Vegetated Concaversical (B4)  Field Observations:  Surface Water Present?	magery (B7 e Surface (B	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or S  Other (Expl.)	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduces on Reduction Stressed lain in Res hes):	s (B13) for (C1) res along d Iron (C4 on in Tilled Plants (D	Living Roc I) d Soils (C6 1) (LRR A	Secon  V  C  C  Sols (C3)  S  S  F  F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) Oralinage Ant Mounds (D6) (LRR A) Oralinage Patterns (B10) Oralinag
Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concaverield Observations: Surface Water Present? Vater Table Present?	magery (B7 e Surface (B es f	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or s  Other (Expl	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduces on Reduction Stressed lain in Res hes):	s (B13) for (C1) res along d Iron (C4 on in Tilled Plants (D	Living Roc I) d Soils (C6 1) (LRR A	Secon  V  C  Sols (C3)  S  S  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) Oralinage Ant Mounds (D6) (LRR A) Oralinage Patterns (B10) Oralinag
Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concave Field Observations: Surface Water Present? Vater Table Present? Saturation Present? Saturation Present?	magery (B7 e Surface (B es f es f	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or :  Other (Expl.)  No Depth (inc.)  Depth (inc.)	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduced n Reductio Stressed lain in Ren hes): hes):	nd 4B) s (B13) ior (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Root) d Soils (C6 1) (LRR A	Secon — V — C — S ols (C3) — G — S ) — F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) Oralinage Ant Mounds (D6) (LRR A) Oralinage Patterns (B10) Oralinag
Primary Indicators (minimum of of company Indicators)  Primary Indicators (minimum of of company Indicators)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial  Sparsely Vegetated Concavers  Field Observations:  Surface Water Present?	magery (B7 e Surface (B es f es f	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized R  Presence o  Recent Iror  Stunted or :  Other (Expl.)  No Depth (inc.)  Depth (inc.)	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduced n Reductio Stressed lain in Ren hes): hes):	nd 4B) s (B13) ior (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Root) d Soils (C6 1) (LRR A	Secon — V — C — S ols (C3) — G — S ) — F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) Oralinage Ant Mounds (D6) (LRR A) Oralinage Patterns (B10) Oralinag
Primary Indicators (minimum of of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Sparsely Vegetated Concavifield Observations: Surface Water Present? Vater Table Present? Saturation Present? Saturation Present? Second Concavifield Observations: Surface Water Present? Saturation Present? Second Concavifield Observations: Surface Water Present? Second Observations: Surface Water Present?	magery (B7 e Surface (B es f es f	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl.)  No Depth (inc.)  Depth (inc.)  Depth (inc.)	ned Leave 1, 2, 4A, a 1811) ertebrates Sulfide Od hizospher of Reduced n Reductio Stressed lain in Ren hes): hes):	nd 4B) s (B13) ior (C1) es along d Iron (C4 on in Tilled Plants (D marks)	Living Root) d Soils (C6 1) (LRR A	Secon — V — C — S ols (C3) — G — S ) — F	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) Oralinage Ant Mounds (D6) (LRR A) Oralinage Patterns (B10) Oralinag

Project/Sile: Connick Ras	city	/County: Ferry	date / HUM Sampling Date: 10-18-1
Applicant/Owner: TWC			State: A Sampling Point: U314
nvestigator(s): $AG/CS/LI$	Sec	ction, Township, Ra	ange:
andform (hillslope, terrace, etc.):	Loc	cal relief (concave,	convex, none): Incar/linearSlope (%):
Subregion (LRR):			/ / /
			NWI classification:
Are climatic / hydrologic conditions on the site typ			
		4	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology			*
			ocations, transects, important features, et
	NoX		
	No X	Is the Sample	Area
Wetland Hydrology Present? Yes _		within a Wetla	nd? Yes No
Remarks:			
EGETATION – Use scientific names	of plants.		
Troo Stratum (Dist size)		ominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		oecies? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
4.			Species Across All Strata: (B)
·	2-	Fotal Cover	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:  OBL species x 1 =
3			FACW species x2 =
4			FAC species 80 x3 = 240
5			FACU speciesO_ x4 = _O_
Harb Stratum (Blat size:	-6_=1	Total Cover	UPL species 20 x 5 = 100
Herb Stratum (Plot size:)  1. Polygonum ar.	20	V ML.	Column Totals: 100 (A) 340 (B)
2. Festica De.	35	V FAC	
3. Infoliumer.	10	FAC	Prevalence Index = B/A = 3.4
4. Cisium ar		FAG	Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation
5. Proper cr.		FAC	2 - Dominance Test is >50%
6. Lotus co.		FAC	MO 3 - Prevalence Index is ≤3.01
Tribolium re,	2.5	FAC	4 - Morphological Adaptations¹ (Provide supporting
8 Cisium ar.	2.5	FAC	data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation¹ (Explain)
11			¹Indicators of hydric soil and wetland hydrology must
an Araba and William		otal Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:	7		A CONTRACTOR
1,			Hydrophytic Vegetation
2	73-	-1-10-	Present? Yes No
% Bare Ground in Herb Stratum	_ <i>K</i> _=Te	otal Cover	7 T T T T T T T T T T T T T T T T T T T
Remarks:			V 1 7
77	3.0		Former IT9
KT 1	0 3.4		)

-	-		
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Sampling Point 1374-U

Depth Matri	X	h needed to docum Redox	Features			
inches) Color (moist		Color (moist)		pe¹ Loc	<sup>2</sup> Texture	Remarks
0-8 2.543	2 90	104 R 3/6	5	CY	1 sand	very compacted
7-18 2.543	2 100	2.1	0 -		sand	100ser than surf
211						
						-
					_	·
						-
Type: C=Concentration, D=I	Depletion, RM=	Reduced Matrix, CS	=Covered or	Coated San	d Grains. <sup>2</sup> Lo	ocation: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Ap	plicable to all L	RRs, unless other	wise noted.)			tors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	á	Sandy Redox (S	5)			cm Muck (A10)
Histic Epipedon (A2)		Stripped Matrix (				d Parent Material (TF2)
Black Histic (A3)	6	Loamy Mucky M		xcept MLR		ry Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	A Property of	Loamy Gleyed M	The second secon		00	her (Explain in Remarks)
Depleted Below Dark Sui		Depleted Matrix			3,	and the first and the form that the first of the
_ Thick Dark Surface (A12)		Redox Dark Surf				lors of hydrophytic vegetation and
<ul> <li>Sandy Mucky Mineral (S</li> <li>Sandy Gleyed Matrix (S4</li> </ul>		Depleted Dark S Redox Depression	and the same of th			and hydrology must be present, ess disturbed or problematic.
Sandy Gleyed Matrix (54 Restrictive Layer (if present		redux Depressio	יווס (רס)		uille	sa diatulued of problematic.
Type:	4:				100	
Depth (inches):		-			Hydric So	il Present? Yes No
Remarks:		0 .			,	
Celliaiks.					1201	1
Wm00 15 55	but "	only in	SWIFU	ce,	Mele	due to surface
* meets 55	but i	only in	swfa e m	ater	- 000	Lue to surface
Emple so	but 1	sour c	swfa e m	ater	- 000	. Lue to surface located on top
Amery S5 Compacting of leve	e) + lor	only in sour c-	swfo e m + re	dox	- 000	clue to surface located on top
TONDO CHINA	but 1	only in sour colonial	t re	dox	- 000	clue to surface located on top
on pa cting	but of	only in sour co	t re	dox	- 000	chue to surface located on top
YDROLOGY		Sow College Co	tre	dox	in C	clue to surface located on top
YDROLOGY Vetland Hydrology Indicate		20.00.00.00.00.00	tre	yox	Sect	
YDROLOGY Vetland Hydrology Indicates		Water-Stair	tre	9) (except	Sect	ondary Indicators (2 or more required)
YDROLOGY Vetland Hydrology Indicator Trimary Indicators (minimum  Surface Waler (A1)		Water-Stair	ned Leaves (E., 2, 4A, and 4	9) (except	Secondary Second	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY Vetland Hydrology Indicator  Surface Water (A1)  High Water Table (A2)		Water-Stain MLRA 1 Salt Crust (	ned Leaves (E., 2, 4A, and 4	39) (except	Second	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLOGY Vetland Hydrology Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)		Water-Stair MLRA 1 Salt Crust (I Aqualic Inve	) led Leaves (E , 2, 4A, and 4 B11)	39) (except 18)	Secondary Second	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
YDROLOGY Vetland Hydrology Indicator  Frimary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)		Water-Stain MLRA 1 Salt Crust (i Aqualic Invo Hydrogen S	ned Leaves (E., 2, 4A, and 4B11) ertebrates (B'Sulfide Odor (G	39) (except 1B)	Secondary Second	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)		Water-Stair MLRA 1 Salt Crust (I Aquatic Invo Hydrogen S Oxidized Ri	ned Leaves (E., 2, 4A, and 4B11) ertebrates (B'Sulfide Odor (G	B9) (except BB)	Secondary	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
YDROLOGY  Vetland Hydrology Indicator Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)		Water-Stain MLRA 1 Salt Crust (I Aquatic Invo Hydrogen S Oxidized Rt	ned Leaves (E, 2, 4A, and 4 B11) ertebrates (B' sulfide Odor (Caizospheres a	(19) (except (18) (13) (13) (14) (14)	Secondary	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
VEILAND Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Water-Stair MLRA 1 Salt Crust (I Aqualic Inve Hydrogen S Oxidized Ri Presence o Recent Iron	ned Leaves (E., 2, 4A, and 4B11) ertebrates (B'sulfide Odor (Conizospheres and Freduced Iron Reduction in	(3) (except as) (13) (14) (15) (16) (17) (17) (18) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	Second	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
YDROLOGY  Vetland Hydrology Indicator  Crimary Indicators (minimum  Surface Waler (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer	of one required	Water-Stain MLRA 1 Salt Crust (i Aquatic Invo Hydrogen S Oxidized Rt Presence o Recent Iron Stunted or S Other (Expl.	ned Leaves (E., 2, 4A, and 4B11) ertebrates (Brauffide Odor (Carizospheres at Reduced Iron Reduction in Stressed Plan	(39) (except (48) (13) (13) (14) (15) (16) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
VDROLOGY  Vetland Hydrology Indicator  Frimary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer  Sparsely Vegetated Cond	of one required	Water-Stain MLRA 1 Salt Crust (i Aquatic Invo Hydrogen S Oxidized Rt Presence o Recent Iron Stunted or S Other (Expl.	ned Leaves (E., 2, 4A, and 4B11) ertebrates (Brauffide Odor (Carizospheres at Reduced Iron Reduction in Stressed Plan	(39) (except (48) (13) (13) (14) (15) (16) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicator Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Conditions:	of one required ial Imagery (B7 ave Surface (B	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl.	ned Leaves (E., 2, 4A, and 4 B11) ertebrates (B' sulfide Odor (Conizospheres a f Reduced Iro Reduction in Stressed Plan ain in Remark	(39) (except (48) (13) (13) (14) (15) (16) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
VDROLOGY  Vetland Hydrology Indicator  Frimary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer  Sparsely Vegetated Cond	of one required ial Imagery (B7 cave Surface (B	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Expl.	ned Leaves (E., 2, 4A, and 4B11) ertebrates (Brailing Country of the Country of t	(3) (except lab) (13) (C1) (Long Living n (C4) (C4) (C4) (C5) (LR (S5) (C5) (C5) (C5) (C5) (C5) (C5) (C5) (C	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicator Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Conditions:	of one required ial Imagery (B7 cave Surface (B	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl.	ned Leaves (E., 2, 4A, and 4B11) ertebrates (Brailing Country of the Country of t	(39) (except lab) (13) (13) (14) (16) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
VDROLOGY  Vetland Hydrology Indicator  Primary Indicators (minimum  Surface Waler (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer  Sparsely Vegetated Conditional Conditions:  Surface Water Present?  Vater Table Present?	of one required ial Imagery (B7 cave Surface (B Yes N Yes N	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Expl.	red Leaves (E., 2, 4A, and 4B11) ertebrates (Brail and 4B1	(39) (except lab) (13) (13) (14) (16) (17) (18) (18) (19) (19) (19) (19) (19) (19) (19) (19	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
VDROLOGY  Vetland Hydrology Indicator  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer  Sparsely Vegetated Conditional Conditions:  Furface Water Present?  Vater Table Present?  Includes capillary fringe)	ial Imagery (B7 cave Surface (B Yes N Yes N	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Rt Presence or Recent Iron Stunted or S Other (Expl. 8) Depth (incl. Io Depth (incl.	red Leaves (E., 2, 4A, and 4B11) ertebrates (Brouldide Odor (Conizospheres at Reduced Iron Reduction in Remarkation in Remarka	(B9) (except BB) (13) (C1) (Illong Living In (C4) (Tilled Soils (D1) (LR (S))	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
VDROLOGY  Vetland Hydrology Indicator  Primary Indicators (minimum  Surface Waler (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer  Sparsely Vegetated Conditional Conditions:  Surface Water Present?  Vater Table Present?	ial Imagery (B7 cave Surface (B Yes N Yes N	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Rt Presence or Recent Iron Stunted or S Other (Expl. 8) Depth (incl. Io Depth (incl.	red Leaves (E., 2, 4A, and 4B11) ertebrates (Brouldide Odor (Conizospheres at Reduced Iron Reduction in Remarkation in Remarka	(B9) (except BB) (13) (C1) (Illong Living In (C4) (Tilled Soils (D1) (LR (S))	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
VDROLOGY  Vetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aer Sparsely Vegetated Conditional Cond	ial Imagery (B7 cave Surface (B Yes N Yes N	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Rt Presence or Recent Iron Stunted or S Other (Expl. 8) Depth (incl. Io Depth (incl.	red Leaves (E., 2, 4A, and 4B11) ertebrates (Brouldide Odor (Conizospheres at Reduced Iron Reduction in Remarkation in Remarka	(B9) (except BB) (13) (C1) (Illong Living In (C4) (Tilled Soils (D1) (LR (S))	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
VDROLOGY  Vetland Hydrology Indicator  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aer  Sparsely Vegetated Conditional Conditions:  Furface Water Present?  Vater Table Present?  Includes capillary fringe)	ial Imagery (B7 cave Surface (B Yes N Yes N	Water-Stain MLRA 1 Salt Crust (I Aqualic Invo Hydrogen S Oxidized Rt Presence or Recent Iron Stunted or S Other (Expl. 8) Depth (incl. Io Depth (incl.	red Leaves (E., 2, 4A, and 4B11) ertebrates (Brouldide Odor (Conizospheres at Reduced Iron Reduction in Remarkation in Remarka	(B9) (except BB) (13) (C1) (Illong Living In (C4) (Tilled Soils (D1) (LR (S))	Second   S	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

pplicant/Owner:					Sampling Point: <u>93</u>
vestigator(s): LW//S				ange:	
indform (hillslope, terrace, etc.):			Local relief (concave,	convex, none):	Slope (%): <u> </u>
bregion (LRR):		Lat:		_ Long:	Datum:
il Map Unit Name:				NWI classifi	cation:
e climatic / hydrologic conditions on	the site typical for	r this time of year	ar? Yes X No _	(If no, explain in F	Remarks.)
e Vegetation, Soil, or	r Hydrology	significantly	disturbed? 100 Are	"Normal Circumstances"	present? Yes X No
e Vegetation, Soil, or					
UMMARY OF FINDINGS – A					
lydrophytic Vegetation Present?	7	No	la dia Gamata	1 4000	
lydric Soil Present?	Yes 🔀		Is the Sampled within a Wetla	nd? Yes X	No
Vetland Hydrology Present?	Yes X	No	Within a Wena	ild: 165_Z	
emarks:					
GETATION – Use scientific	r names of n	lante			
1		Absolute	Dominant Indicator	Dominance Test work	ksheet:
ree Stratum (Plot size:	)	% Cover	Species? Status	Number of Dominant S	
·				That Are OBL, FACW,	or FAC: (A)
\ <u></u>			<del></del>	Total Number of Domin	
				Species Across All Stra	ata: (B)
-				Percent of Dominant S	pecies
apling/Shrub Stratum (Plot size:	1	1	= Total Cover	That Are OBL, FACW,	or FAC:
				Prevalence Index wo	
					Multiply by:
				The state of the s	x 1 =
					x 2 =
					x 3 =
		A	= Total Cover		x 4 =
erb Stratum (Plot size:	)	100	11		x 5 =
Agantina ar.		50	Y OBY	Column Totals:	(A) (E
Romerce		5	- LACW	Prevalence Index	c = B/A =
Agrosos St.		20_	Y FAC	Hydrophytic Vegetati	on Indicators:
			-FAC		Hydrophytic Vegetation
Fostura aux.			- VAC	✓ 2 - Dominance Test	
				3 - Prevalence Ind	
					Adaptations <sup>1</sup> (Provide supporti s or on a separate sheet)
				5 - Welland Non-V	
					phytic Vegetation <sup>1</sup> (Explain)
0				기 (공급 기업 등 기업 시설 시설 시설 시설	il and wetland hydrology must
1				be present, unless dist	
loody Vine Stratum (Plot size:	)	-	= Total Cover		
				Hydrophytic	
				Vegetation	Y
			= Total Cover	Present? Ye	es No
		1	A NOT THE PROPERTY OF THE PROP		
Bare Ground in Herb Stratum					

Depth Matrix			x Feature	S					
(inches) Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	e	Remar	ks
1-18 104R3/Z	90	7,54R4/6	10	0	m	Siltle	w		
			_						
			. —						
			-						
<del></del>			-			-	-		
			-	_					
Type: C=Concentration, D=De					ed Sand G			PL=Pore Lining	
lydric Soil Indicators: (Appl	icable to all L			ed.)				Problematic H	ydric Soils":
Histosol (A1)		_ Sandy Redox (					2 cm Mucl		
Histic Epipedon (A2)	1-	Stripped Matrix		41 /				t Material (TF2)	
Black Histic (A3)	, <del>-</del>	Loamy Mucky N			( WLRA 1)			ow Dark Surfac	
<ul><li>Hydrogen Sulfide (A4)</li><li>Depleted Below Dark Surfa</li></ul>	- 2ce (Δ11)	<ul><li>Loamy Gleyed</li><li>Depleted Matrix</li></ul>		-)		_	Oniei (EX	olain in Remarks	2)
Thick Dark Surface (A12)	200 (A11)	Redox Dark Su		C.		<sup>3</sup> Indi	cators of h	ydrophytic vege	etation and
Sandy Mucky Mineral (S1)	2	Depleted Dark						rology must be	
Sandy Gleyed Matrix (S4)	= =	Redox Depress	the state of the s					rbed or problem	
Restrictive Layer (if present):									
Type:		_						· ·	1
Depth (inches):						Hydric :	Soil Prese	nt? Yes	No
lemarks:									
YDROLOGY	e,								
Vetland Hydrology Indicators		check all that anni	W)			G	econdary l	ndicators (2 or r	more required)
Vetland Hydrology Indicators Primary Indicators (minimum of				oo (PO) (e	voont	<u>S</u>		ndicators (2 or r	
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1)		Water-Sta	ined Leav		xcept	S <sub>1</sub>	_ Water-S	tained Leaves (	
Vetland Hydrology Indicators  rrimary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)		Water-Sta	ined Leav 1, 2, 4A, a		xcept	<u>S</u>	_ Water-S 4A, a	tained Leaves (	B9) (MLRA 1, 2
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)		Water-Sta MLRA Salt Crust	ined Leav <b>1, 2, 4A,</b> a (B11)	and 4B)	xcept	<u>S</u>	_ Water-S 4A, a _ Drainag	tained Leaves ( and 4B) e Patterns (B10	(B9) ( <b>MLRA 1, 2</b>
Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)		Water-Sta MLRA Salt Crust Aquatic In	ined Leav 1, 2, 4A, a (B11) vertebrate	and 4B) es (B13)	xcept	S <sub>1</sub>	Water-S 4A, a Drainag Dry-Sea	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl	(B9) ( <b>MLRA 1, 2</b> ) e (C2)
Vetland Hydrology Indicators  Primary Indicators (minimum of  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Od	es (B13) dor (C1)			_ Water-S 4A, a _ Drainag _ Dry-Sea _ Saturati	itained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae	(B9) ( <b>MLRA 1, 2</b> ) e (C2) erial Imagery (C9
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe	es (B13) dor (C1) res along	Living Roo		Water-S 4A, a Drainag Dry-Sea Saturati	tained Leaves ( ind 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D	(B9) ( <b>MLRA 1, 2</b> ) e (C2) erial Imagery (C9
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Oo Rhizosphe of Reduce	es (B13) dor (C1) res along ed Iron (C4	Living Roo	ots (C3)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3)	(B9) ( <b>MLRA 1, 2</b> ) e (C2) erial Imagery (C9 )2)
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce in Reducti	and 4B) es (B13) dor (C1) res along ed Iron (C4 on in Tille	Living Roo (1) d Soils (Cl	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5)	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 )
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	f one required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce in Reducti Stressed	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo (1) d Soils (Cl	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria	f one required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce in Reducti Stressed	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo (1) d Soils (Cl	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5)	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca	f one required;	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oo Rhizosphe of Reduce in Reducti Stressed	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo (1) d Soils (Cl	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca	f one required; I Imagery (B7) ve Surface (B8	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leav 1, 2, 4A, 6 (B11) vertebrate Sulfide Oo Rhizosphe of Reduce in Reducti Stressed plain in Re	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo (1) d Soils (Cl	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca	I Imagery (B7) ve Surface (B8	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leav  1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo (1) d Soils (Cl	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca Gield Observations: Surface Water Present?	I Imagery (B7) ve Surface (B8 Yes No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re ches): ches):	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo 4) d Soils (Ce 1) (LRR A	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6 eave Hummocks	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Concarield Observations: Surface Water Present? Vater Table Present?	I Imagery (B7) ve Surface (B8	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leav 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re ches): ches):	es (B13) dor (C1) res along de Iron (C4) on in Tiller Plants (D	Living Roo 4) d Soils (Ce 1) (LRR A	ots (C3) \( \sum_{\text{c}} \)	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6 eave Hummocks	(B9) (MLRA 1, 2 ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca Gield Observations: Surface Water Present?	I Imagery (B7) ve Surface (B8  Yes No Yes No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leav  1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tiller Plants (D emarks)	Living Roo d Soils (Ct 1) (LRR A	ots (C3) 6) 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised Frost-He	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6 eave Hummocks	(B9) (MLRA 1, 2 ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca Tield Observations: Surface Water Present? Vater Table Present? Saturation Present? Includes capillary fringe)	I Imagery (B7) ve Surface (B8  Yes No Yes No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leav  1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tiller Plants (D emarks)	Living Roo d Soils (Ct 1) (LRR A	ots (C3) 6) 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised Frost-He	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6 eave Hummocks	(B9) (MLRA 1, 2 ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca Tield Observations: Surface Water Present? Vater Table Present? Saturation Present? Includes capillary fringe)	I Imagery (B7) ve Surface (B8  Yes No Yes No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leav  1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tiller Plants (D emarks)	Living Roo d Soils (Ct 1) (LRR A	ots (C3) 6) 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised Frost-He	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6 eave Hummocks	(B9) (MLRA 1, 2 ) e (C2) erial Imagery (C9 ) ) (LRR A)
Vetland Hydrology Indicators  Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aeria Sparsely Vegetated Conca Tield Observations: Surface Water Present? Vater Table Present? Staturation Present? Includes capillary fringe) Describe Recorded Data (streat	I Imagery (B7) ve Surface (B8  Yes No Yes No	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inc	ined Leav  1, 2, 4A, 6 (B11) vertebrate Sulfide Oc Rhizosphe of Reduce in Reducti Stressed blain in Re ches): ches): ches):	es (B13) dor (C1) res along ed Iron (C4 on in Tiller Plants (D emarks)	Living Roo d Soils (Ct 1) (LRR A	ots (C3) 6) 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19	Water-S 4A, a Drainag Dry-Sea Saturati Geomor Shallow FAC-Ne Raised Frost-He	tained Leaves ( and 4B) e Patterns (B10 son Water Tabl on Visible on Ae phic Position (D Aquitard (D3) utral Test (D5) Ant Mounds (D6 eave Hummocks	(B9) (MLRA 1, 2, ) e (C2) erial Imagery (C9 ) ) (LRR A)

oplicant/Owner:				State: <u></u>	
andform (hillslope, terrace, etc.):	ede a smalle				
ndiorm (nillslope, terrace, etc.). <u>/////</u>	rage spoils	100	Local relief (concave,	convex, none). 17211/2	7 Slope (70).
bregion (LRR):		Lat:			
il Map Unit Name:					ation: PEM1C
e climatic / hydrologic conditions on the	ne site typical for t	his time of yea	ar? Yes No _	(If no, explain in R	emarks.)
e Vegetation, SoilX, or I	Hydrology	significantly	disturbed? Are	Normal Circumstances" p	resent? Yes NoX
e Vegetation, Soil, or I	Hydrology	naturally pro	blematic? No (If ne	eded, explain any answe	rs in Remarks.)
JMMARY OF FINDINGS - A	ttach site ma <sub>l</sub>	showing	sampling point le	ocations, transects	, important features, etc
ydrophytic Vegetation Present?	Yes	No X	V 150 Text VI	800	
ydric Soil Present?	Yes	No X	Is the Sampled		No. X
Vetland Hydrology Present?	Yes	No _	within a Wetlar	id? Yes	NO
emarks:					
GETATION – Use scientific	names of pla	ints.			
		Absolute	Dominant Indicator	Dominance Test work	sheet:
ree Stratum (Plot size:	)	% Cover	Species? Status	Number of Dominant S	
	_			That Are OBL, FACW,	or FAC: (A)
				Total Number of Domin	_
			$\longrightarrow$	Species Across All Stra	ta: (B)
				Percent of Dominant Sp	pecies 75%
apling/Shrub Stratum (Plot size:	1	_0	= Total Cover	That Are OBL, FACW,	or FAC: 25% (A/B)
Children Character (1 for 5/20.				Prevalence Index wor	
					Multiply by:
					x 1 =
					x 2 =
/		4,7		FAC species	
		0	= Total Cover		× 4 =
erb Stratum (Plot size:		10	1 -101		x 5 =
Anmophila	v -	-42	FACW	Column rotals:	(A) (B)
	04	_ 10_	FACO	Prevalence Index	= B/A =
Colystana son		- 10	- V-	Hydrophytic Vegetation	
Campsonia Ch.			- NL		lydrophytic Vegetation
Kunier cr.			- 7	2 - Dominance Tes	
Ambroya chi		10	1 1/1	3 - Prevalence Inde	
			- NL	4 - Morphological A	daptations¹ (Provide supporting or on a separate sheet)
				5 - Wetland Non-Va	
					ohytic Vegetation <sup>1</sup> (Explain)
					and wetland hydrology must
1		15	= Total Cover	be present, unless distu	irbed or problematic.
oody Vine Stratum (Plot size:		-1)	Total Ouvel		
				Hydrophytic	
				Vegetation	∨
	_	0	= Total Cover	Present? Yes	s NoX
Bare Ground in Herb Stratum					

Sampling Point: <u>U4TP1</u>

Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc	Ze Texture Remarks
0-1 2,543/1 10	0 - 0	Sand mixed ul spoils
-18 2,544/2 91	0 10483/6 10	sitty clay loan (wived w/sa
Type: C=Concentration, D=Depletion, F lydric Soil Indicators: (Applicable to Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	<ul> <li>Sandy Redox (S5)</li> <li>Stripped Matrix (S6)</li> <li>Loamy Mucky Mineral (F1) (except MLR</li> <li>Loamy Gleyed Matrix (F2)</li> </ul>	Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) Red Parent Material (TF2)
_ Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	welland hydrology must be present,
_ Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
estrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Vetland Hydrology Indicators:		
Vetland Hydrology Indicators: rimary Indicators (minimum of one requestriance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR (B7))  (B7)  Other (Explain in Remarks)	4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (CS)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  s (C6) FAC-Neutral Test (D5)
Vetland Hydrology Indicators: rimary Indicators (minimum of one requestriance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR (B7))  (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (CS)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators: rimary Indicators (minimum of one requestriance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Indicators:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR (B7))  (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (CS)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  rrimary Indicators (minimum of one requestrimary Indicators (minimum of one requestrimary Indicators (minimum of one requestrimary Indicators (Maximum of one one one of one one one of one one of one	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR (B7)  Ce (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface (Surface Water Present?  Vater Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  Saturation Present?  Vater Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)      Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR (B7)     Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Ves Saturation Present? Yes Saturation Present? Yes Saturation Present? Yes Sincludes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)      Salt Crust (B11)     Aquatic Invertebrates (B13)     Hydrogen Sulfide Odor (C1)     Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)     Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LF (B7)     Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) s (C6) FAC-Neutral Test (D5) RR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) s (C6) FAC-Neutral Test (D5) RR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface (ield Observations:  Surface Water Present? Yes  Vater Table Present? Yes  Includes capillary fringe)  Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR (B7) Other (Explain in Remarks)  Ce (B8)  Depth (inches): No Depth (inches): No Depth (inches): No Depth (inches): No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Shallow Aquitard (D2) Shallow Aquitard (D3) s (C6) FAC-Neutral Test (D5) s (R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No

		City/County: 1000	date HUM Sampling Date: 10-31-
pplicant/Owner: TWC			State: Sampling Point: US TP
vestigator(s):		distribution of the form making	ange:
andform (hillslope, terrace, etc.): dredge Spe	115	Local relief (concave,	convex, none): <u>CanVEX</u> Slope (%): <u>&lt; 5</u>
ubregion (LRR):	Lat:		Long: Datum:
oil Map Unit Name:			NWI classification: PEM 1 C
re climatic / hydrologic conditions on the site typical for	this time of ve		
그 이 이 그 사람이 보고 아래를 하는 생각이 되었다. 이 이 아이는 이 없는 것 같아 없다고 있다.			
			"Normal Circumstances" present? Yes X No
re Vegelation, Soil, or Hydrology	_ naturally pro	blematic? // (If no	eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site ma	p showing	sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X	No		33.7
Hydric Soil Present? Yes		Is the Sampled	d Area nd? Yes No
Wetland Hydrology Present? Yes	No X	within a wetia	
Remarks: vege not growing		ychrophyte	23 Japarame
EGETATION – Use scientific names of pla			
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
ree Stratum (Flot Size)	70 COVET	_openies: _otatus_	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
			That Ale OBE, I ACTV, OF AC (A)
		$\overline{}$	Total Number of Dominant
			Species Across All Strata: (B)
	- B	= Total Cover	Percent of Dominant Species
apling/Shrub Stratum (Plot size:)	-	- Total Cover	That Are OBL, FACW, or FAC: 100 (A/B)
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
			OBL species 70 x1= 70
			FACW species $\sqrt{}$ $\times$ 2 = $\sqrt{}$ $\times$ 2 = $\sqrt{}$
			FAC species x 3 = 0
	0	= Total Cover	FACU species x 4 =
erb Stratum (Plot size:)	7>	-1	UPL species $x = 5 = 6$ Column Totals: $(0)$ (A) $(5)$ (B)
Sarcocornia pa	- 40	OBL	
Atriplex pr	15	N FAC	Prevalence Index = B/A =/5
lunex on	5_	N FAC	Hydrophytic Vegetation Indicators:
Disticulis sp.	10	N FACW	1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			X 3 - Prevalence Index is ≤3.01
			4 - Morphological Adaptations (Provide supporting
			data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants¹
D			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			¹Indicators of hydric soil and wetland hydrology must
	100	= Total Cover	be present, unless disturbed or problematic.
/oody Vine Stratum (Plot size:)			Sand Care
			Hydrophytic
		نستنسب	Vegetation   Present?   Yes
	0	= Total Cover	11000111
Bare Ground in Herb Stratum			

OIL Profile Description: (Describe to the	donth pooded to docume	nt the indicato	r or confirm	the absence of inc	dicators.)
Depth Matrix	Redox F		or commi	, and and only of the	
inches) Color (moist) %	Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
7-3 MR3/2-10	0	0 -		clanloan	1
S-& IME43 I	5 104R4/6	10 C	m	UV M	Shly mixedia
18+10/183/2 10	2 10 11 11 10 -	0 -		11	200
-10 107K 76 10	<u> </u>	<u> </u>		_	
			-		
			-		
Type: C=Concentration, D=Depletion,		Covered or Coa	ted Sand Gr	rains. <sup>2</sup> Location	: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to	all LRRs, unless otherwi	ise noted.)	300-2000		r Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redox (S5)			2 cm Muc	k (A10)
Histic Epipedon (A2)	Stripped Matrix (S			Red Pare	nt Material (TF2)
Black Histic (A3)	Loamy Mucky Min		pt MLRA 1)		llow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Ma	ıtrix (F2)		Other (Ex	plain in Remarks)
Depleted Below Dark Surface (A11				3	Contracting Contracting
_ Thick Dark Surface (A12)	Redox Dark Surface				hydrophytic vegetation and
_ Sandy Mucky Mineral (S1)	Depleted Dark Sur			A 2010 C 102 A	drology must be present, urbed or problematic.
_ Sandy Gleyed Matrix (S4)	Redox Depression	1S (F8)		unless dist	urbed or problematic.
estrictive Layer (if present):  Type:					1.
Depth (inches):	1			Hydric Soil Pres	ent? Yes No X
emarks:					
/DROLOGY		0	1		
letland Hydrology Indicators:	to the Tolland and A			Socondani	Indicators (2 or more required)
rimary Indicators (minimum of one rec		(00)			Stained Leaves (B9) (MLRA 1, 2,
_ Surface Water (A1)		ed Leaves (B9)			and 4B)
_ High Water Table (A2)		2, 4A, and 4B)			ge Patterns (B10)
_ Saturation (A3)	Salt Crust (B			The second secon	eason Water Table (C2)
_ Water Marks (B1)		rtebrates (B13)			tion Visible on Aerial Imagery (C9
_ Sediment Deposits (B2)		ulfide Odor (C1) izospheres alon			orphic Position (D2)
_ Drift Deposits (B3)		Reduced Iron (			w Aquitard (D3)
_ Algal Mat or Crust (B4)		Reduction in Til	9 60 L	$\overline{}$	leutral Test (D5)
_ Iron Deposits (B5)		tressed Plants			Ant Mounds (D6) (LRR A)
<ul> <li>Surface Soil Cracks (B6)</li> <li>Inundation Visible on Aerial Image</li> </ul>		in in Remarks)	- · · / - · · · ·		Heave Hummocks (D7)
Sparsely Vegetated Concave Surfa					A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
eld Observations:	/				
urface Water Present? Yes	No X Depth (inch	es):	_		
/ater Table Present? Yes	No Depth (inch				1
aturation Present? Yes	No Depth (inch	HC STORY	Wet	land Hydrology Pre	esent? Yes No
ncludes capillary fringe)					
Describe Recorded Data (stream gauge	e, monitoring well, aerial ph	otos, previous i	nspections),	, if available:	
Remarks: 1, 1	~ En. 1=		1		
near 11/2/11 M	2 2 Pr ( De	ec 13,2	0(1)		
Door van Lie hich	an 1 = 1 1	- 1	. 1.	spoils	
- Dubur W.R.	an Mallow	Car	casi	2 horr	)

roject/Sile: Connick Part	c	ity/County: Femo	dale/HUM Sampling Date: 10-31-1
pplicant/Owner: TWC			State: A Sampling Point: U6 TP
			nge:
andform (hillslope, terrace, etc.): highers spo, 5 form			The state of the s
ubregion (LRR):			
			NWI classification:
oil Map Unit Name:			
re climatic / hydrologic conditions on the site typical for this			
re Vegetation, Soil, or Hydrologys	significantly d	isturbed? Are "	Normal Circumstances" present? Yes No
re Vegetation, Soil, or Hydrology r	naturally prob	olematic? (If ne	eded, explain any answers in Remarks.)
UMMARY OF FINDINGS – Attach site map	showing	sampling point l	ocations, transects, important features, etc
Hydrophytic Vegetation Present? Yes X N		7 ( Art 5)	
Hydric Soil Present? Yes N		Is the Sampled within a Wetlar	V
Wetland Hydrology Present? Yes N	10 X	within a vvetiar	idr fesid
Remarks:  2 PAY AMD C  /EGETATION – Use scientific names of plan	plo	nd	2 parametes upiland
	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species 3
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant 2
3.			Species Across All Strata: (B)
4			Percent of Dominant Species That Are ORL FACW or FAC: 160% (A/B)
Sapling/Shrub Stratum (Plot size:)	_6_	= Total Cover	That Aic OBE, I AOV, OI I Ao (100)
			Prevalence Index worksheet:
1,			Total % Cover of: Multiply by:
2			OBL species  x1 = 0
3	-		FACW species $\frac{22.5}{27.5}$ x2= $\frac{45}{217.5}$
5			FAC species $72.5 \times 3 = 217.5$
9.	0	= Total Cover	FACU species x 4 = 2 O
Herb Stratum (Plot size:)	4		UPL species x5=
1. Festica pe.	20	Y FAC	Column Totals: 100 (A) 282.5 (B)
2. Plantago su.	1.5	FACW	Prevalence Index = B/A = 2-825
3. Cumex cr.	2.5	FAC	Hydrophytic Vegetation Indicators:
4. forder m ma.	15	FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Agrostis St.	25	Y FAC	2 - Dominance Test is >50%
6. Dystichlis ep.	10	- FACW	
7. Hypochaciis Ca.	2,5	FACU	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8. Cisim Vu.	15	FACU	
9. Lows co.	_10;	FAC	5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation¹ (Explain)
11.			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
and the first Secretary Management	100	= Total Cover	an bi region ginage and contrar at bi substitution
101			64.75
Woody Vine Stratum (Plot size:)			Hydrophytic
1			Vegetation
	- <del>-</del>	- Total Cover	Vegetation         Yes
1	8	= Total Cover	Vegetation         Yes

Depth		to the dep	th needed to docum			or com	rin the aps	ence c	muica	1,015.)		
inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type <sup>1</sup>	Loc²	Text	ıre .		Rem	arks	
)-18	2.543/2	70	2,544/4	10	C	M	silty	cla	yloo	imot	20%	nix
										mate Va	rigat	d
ype: C=Co	oncentration, D=De	pletion, RM=	=Reduced Matrix, CS LRRs, unless other	S=Covered	I or Coate	ed Sand	Grains.				ing, M=Mal Hydric So	
Histosol Histic Ep Black Hi Hydroge Depleted Thick Da	(A1) pipedon (A2) stic (A3) n Sulfide (A4) I Below Dark Surfac urk Surface (A12)		Sandy Redox (3 Stripped Matrix Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark	S5) (S6) Mineral (F1 Matrix (F2) ( (F3) rface (F6)	) (excep	ot MLRA	-	Red I Very Other	Shallow (Explains of hyd	faterial (TF Dark Surfa n in Remai	ace (TF12)	
Sandy G	lucky Mineral (S1) leyed Matrix (S4)		Redox Depress		11					ed or probl		
	_ayer (if present):											
												1
Type: Depth (included) temarks: Historia		Spoil	s topogra	phie Fran	his	his				? Yes_ Uppa		au
Depth (incepts) emarks: histori V Cw	c dredge	spoil spoil	ls topogra	phic from	his m &	Slow						ai
Depth (included in the control of th	c dredge hand E		s topogra	phic from	his m a	Soi						cu
Depth (included in the control of th	C dredge hand E GY drology Indicators		ls topogra Source d; check all that app		his m &	sh, store		red	OX (	арра		cur uired)
Depth (inceptable)  Permarks:  Pe	C dredge hand E GY drology Indicators		d; check all that appl Water-Sta	lγ) iined Leav 1, 2, 4A, a	es (B9) (	Slow		Secon	dary Ind ater-Sta 4A, and	icators (2 cined Leave	or more req s (B9) (ML	177 / 178
Depth (inceptable)  PROLO  PROLO  Petland Hydrimary India  Surface  High Wa  Saturation	GY  drology Indicators eators (minimum of Water (A1) ater Table (A2) on (A3)		d; check all that app Water-Sta MLRA Salt Crust	iy) iined Leav 1, 2, 4A, a (B11)	es (B9) (and 4B)	Slow		Secon	dary Ind ater-Sta 4A, and	icators (2 cined Leave d 4B)	r more reg s (B9) (ML	177 / 178
Depth (inceptable)  PROLO  PROLO  Petland Hyrrimary Indice  High Water Mater M	GY drology Indicators cators (minimum of Water (A1) ater Table (A2)		d; check all that app Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ly) ined Leave 1, 2, 4A, a (B11) ivertebrate Sulfide Od	es (B9) (and 4B) s (B13) dor (C1)	except	scil	Secon With the property of th	dary Ind ater-Sta 4A, and ainage I y-Seaso turation	icators (2 clined Leave d 4B) Patterns (B on Water Ti Visible on	r more req s (B9) ( <b>ML</b> 10) able (C2) Aerial Imag	RA 1, 2
Depth (included in the control of th	GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)		d; check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized	ly) ined Leave 1, 2, 4A, a (B11) ivertebrate Sulfide Oo Rhizosphe	es (B9) (cand 4B) s (B13) dor (C1) res along	except	scil	Second What Dr Dr Sa Ge	dary Indater-Sta 4A, and alinage Ity-Season turation ecomorph	icators (2 c ined Leave d 4B) Patterns (B in Water Ta Visible on ic Position	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2)	RA 1, 2
Popth (included in the content of th	GY  drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4)		d; check all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence	ly) ined Leave 1, 2, 4A, a (B11) ivertebrate Sulfide Oc Rhizosphe of Reduce	es (B9) (cand 4B) s (B13) dor (C1) res along ed Iron (C	except  g Living F	Roots (C3)	Second  Become  Dr  Dr  Sa  Ge	dary Indater-Sta 4A, and alinage Ity-Season turation ecomorphiallow A	icators (2 c ined Leave d 4B) Patterns (B visible on lic Position quitard (D3	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2)	RA 1, 2
Depth (incomercial contents)  // DROLO /etland Hydrimary India  Surface High Wa Saturation Water M Sediment Drift Depte Algal Ma Iron Dep	GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		d; check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Iro	ly) ined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Oc Rhizosphe of Reduce	es (B9) (cand 4B) s (B13) dor (C1) res along ed Iron (Coon in Tille	except  g Living F  (24) ed Soils	Roots (C3)	Secondary Second	dary Indiater-Sta 4A, and ainage Indiater-Sta turation elemorphiallow Aid-C-Neut	icators (2 c ined Leave d 4B) Patterns (B on Water Ti Visible on hic Position quitard (D3 ral Test (D5	or more required in the second	RA 1, 2
Depth (inception of the content of t	GY  drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial	: one require	d; check all that app  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized In  Presence  Recent Inc  Stunted o	ly) ined Leave 1, 2, 4A, a (B11) ivertebrate Sulfide Oc Rhizosphe of Reduce	es (B9) (and 4B) s (B13) dor (C1) res along ded Iron (Coon in Tille	except  g Living F  (24) ed Soils	Roots (C3)	Second  Dr. Dr. Sa. Ge. Sr. Ra	dary Indicater-Sta 4A, and aimage Ity-Season turation ecomorphicallow Arac-Neutraised Analised Analise	icators (2 c ined Leave d 4B) Patterns (B on Water Ti Visible on hic Position quitard (D3 ral Test (D5	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2) ) ) ) )	RA 1, 2
Depth (inceptable)  POROLO  Po	GY  drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concar	: one require	d; check all that app  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized In  Presence  Recent Inc  Stunted o	ined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Oo Rhizosphe of Reduce on Reducti r Stressed	es (B9) (and 4B) s (B13) dor (C1) res along ded Iron (Coon in Tille	except  g Living F  (24) ed Soils	Roots (C3)	Second  Dr. Dr. Sa. Ge. Sr. Ra	dary Indicater-Sta 4A, and aimage Ity-Season turation ecomorphicallow Arac-Neutraised Analised Analise	icators (2 clined Leaved 48) Patterns (Bon Water Tivisible on the Position quitard (D3 ral Test (D) to Mounds (d)	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2) ) ) ) )	RA 1, 2
Depth (inceptable)  POROLO  Portland Hyrimary India  Surface  High Wa  Saturatia  Water M  Sedimen  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatia  Sparsel	GY  drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concar vations:	: one required I Imagery (B we Surface (	d; check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Iro  Stunted o  (B8)	ly)  ined Leave  1, 2, 4A, a  (B11)  ivertebrate  Sulfide Oc  Rhizosphe  of Reduce  on Reducti  r Stressed  plain in Re	es (B9) (and 4B) s (B13) dor (C1) res along ded Iron (Coon in Tille	except  g Living F  (24) ed Soils	Roots (C3)	Second  Dr. Dr. Sa. Ge. Sr. Ra	dary Indicater-Sta 4A, and aimage Ity-Season turation ecomorphicallow Arac-Neutraised Analised Analise	icators (2 clined Leaved 48) Patterns (Bon Water Tivisible on the Position quitard (D3 ral Test (D) to Mounds (d)	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2) ) ) ) )	RA 1, 2
Depth (incepts)  PROLO  Petland Hydrimary India  Surface  High Water M  Sedimer  Drift Der  Algal Mater M  Iron Der  Surface  Inundati  Sparselt  Sparselt  Sparselt  Surface Water Water M  Surface  Inundati  Sparselt  Surface Water M  Surface W  Surface	GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concar vations: er Present?	one required I Imagery (B ve Surface (	d; check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent In  Stunted o  Other (Ex	iv) ined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti r Stressed plain in Re	es (B9) (and 4B) s (B13) dor (C1) res along ded Iron (Coon in Tille	except  g Living F  (24) ed Soils	Roots (C3)	Second  Dr. Dr. Sa. Ge. Sr. Ra	dary Indicater-Sta 4A, and aimage Ity-Season turation ecomorphicallow Arac-Neutraised Analised Analise	icators (2 clined Leaved 48) Patterns (Bon Water Tivisible on the Position quitard (D3 ral Test (D) to Mounds (d)	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2) ) ) ) )	RA 1, 2
Depth (inceptable)  Property (inceptable)  Pr	GY drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial y Vegetated Concavations: er Present? Present?	one required I Imagery (B ve Surface ( Yes	d; check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Iro  Stunted o  (B8)	ined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Oc Rhizosphe of Reduce on Reducti r Stressed plain in Re	es (B9) (and 4B) s (B13) dor (C1) res along ded Iron (Coon in Tille	except  Guiving F  Guiving F  Cultivation of the control of the co	Roots (C3)	Second  Dr  Dr  Sa  Ge  Sr  Ra  Fr	dary Indicater-Sta 4A, and ainage It y-Season turation ecomorphicallow Arc-Neutraised Anost-Hea	icators (2 clined Leaved 48) Patterns (Bon Water Tile Visible on the Position quitard (D3 ral Test (Dit Mounds (d)	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2) ) ) ) )	RA 1, 2
Depth (includes cal	GY  drology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria y Vegetated Concavations: er Present? Present? present?	one required Imagery (B we Surface ( Yes Yes	d; check all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Iro  Stunted o  Other (Ex	iv) ined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Or Rhizosphe of Reduce on Reducti r Stressed plain in Re aches): nches):	es (B9) (cand 4B) s (B13) dor (C1) res along del Iron (Con in Tille Plants (I	except  g Living F  (4) ed Soils (D1) (LRF	Roots (C3) (C6) RA)	Secondary  Secondary  Dr. Sa. Sa. Sa. Fr. Ra. Fr.	dary Indicater-Sta 4A, and ainage It y-Season turation ecomorphicallow Arc-Neutraised Anost-Hea	icators (2 clined Leaved 48) Patterns (Bon Water Tile Visible on puit Position quitard (D3 ral Test (Dit Mounds (Ver Hummo	r more req s (B9) (ML 10) able (C2) Aerial Imag (D2) ) ) ) )	RA 1, 2

Applicant/Owner: TWC		Section Township Rat	nge:
nvestigator(s):		Legal relief (concave, r	convex, none): CONVEX Slope (%): <
andform (hillslope, terrace, etc.):		Local relief (concave, c	Datum:
Subregion (LRR):	Lat:		Long: Datum:
Soil Map Unit Name:		- 1 That to T	NWI classification:
are climatic / hydrologic conditions on the site			(If no, explain in Remarks.)
are Vegetation, Soil $X$ , or Hydro			Normal Circumstances" present? Yes No
are Vegetation, Soil, or Hydro	ogy naturally pro	blematic? No (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? Ye	s NoX		
Hydric Soil Present? Ye	s No <del></del>	Is the Sampled within a Wetlan	
Wetland Hydrology Present? Ye	s No <u>S</u>	within a wetian	id? Tes No
Remarks:			
EGETATION - Use scientific nan	es of plants.		
The state of the s	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4,			Percent of Dominant Species / /a
	0	_ = Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2		,	OBL species O x1=
3			FACW species 15 x2 = 30
4			FAC species 45 x3=135
5			FACU species 5 x4 = 20
A CONTRACTOR OF THE CONTRACTOR	6	_ = Total Cover	UPL species 15 x 5 = 7.5
Herb Stratum (Plot size:)	20	V FAC	Column Totals: 50 (A) 260 (B)
1. Forma pe.	15	V NI	
2. Archothera (a	10	FACW	Prevalence Index = B/A = 3.25
3. Distriction Sp.	15	V EAC	Hydrophytic vegetation indicators.
4 Sperensana Ma	10	FAC	1 - Rapid Test for Hydrophytic Vegetation
5. CONSULY CV.	5	FAU	2 - Dominance Test is >50%
6. Cisium Vu		FACW	Mo 3 - Prevalence Index is ≤3.0¹
7. Plantago SU.		THEV	<ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</li> </ul>
8			5 - Wetland Non-Vascular Plants <sup>1</sup>
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10			Indicators of hydric soil and wetland hydrology must
11	782		be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:	80	_= Total Cover	
			Hydrophytic
1			Vegetation
2	2	= Total Cover	Present? Yes No
% Bare Ground in Herb Stratum 20	B	Tutal Guver	

Sampling Point: 47P2

epth <u>Matrix</u>		Redo	x Features	3						
nches) Color (moist)	% Co	olor (moist)	%	Type	_Loc2	Textu	re		Remarks	
74 2543/2	100	~	0	_	$\sim$	San	by loa	m		
1-8 544/2	70 10	404/6	10	C	M	siltela	Morans	w	20%	sand in
1 20 5V3/-	100	ICITO	10			1000	Visar	1	0.01	
9-20 017/2	100_	_				loan	y Sal	VO.		
						-				
						-				
					-		20 0	DI - D	aw I Inina	M-Motriy
ype: C=Concentration, D=Deple	tion, RM=Redu	uced Matrix, CS	S=Covered	or Coate	ed Sand (	Grains.	<sup>2</sup> Location: licators for			
dric Soil Indicators: (Applical				eu.)		inc	2 cm Muck		illiano i i y	
_ Histosol (A1)		Sandy Redox (S Stripped Matrix				-	Red Paren	21 - 21	rial (TF2)	
_ Histic Epipedon (A2)		oamy Mucky N		(excen	MIRA	1)	Very Shall			(TF12)
Black Histic (A3)		_oamy Gleyed			Liberon	.,	Other (Exp			
<ul> <li>Hydrogen Sulfide (A4)</li> <li>Depleted Below Dark Surface</li> </ul>	1	Depleted Matrix		,		_	1		W AND THE	
_ Thick Dark Surface (A12)		Redox Dark Su				3In	dicators of h	ydroph	ylic veget	ation and
Sandy Mucky Mineral (S1)		Depleted Dark		7)			wetland hyd			
Sandy Gleyed Matrix (S4)		Redox Depress					unless distu	irbed o	r problema	atic.
estrictive Layer (if present):										
Type:										( )
						Hydric	Soil Prese	nt?	Yes	No <u></u>
is mixed soil	natrix	To sanc	oo hi	m		Se 16	epos F3	in	4-8. + no	" laye des do + forn
emarks: ) des not meet (5 Mixed soi) neet \$6 b/c h	uf 20%	o sano	oo hi	m		Se 16	dox	in	1-8. thought	layed form
emarks: ) oes not meet (5 Mixed Soi) neet \$6 b/c h  (DROLOGY AISO) (etland Hydrology Indicators:	work hvorg	o sanc	too hi	m		Tex of situation	ed ox lepas F3.	in some	1-8. 1-8.	layed
emarks:  Dels not meet  Solvent Solvent Solvent  DROLOGY Also  Vetland Hydrology Indicators:  Virginiary Indicators (minimum of on	work hvorg	o sance value to of cont ock all that appli	too hi	m ( 8h)-	Treat M	Tex of situation	ed Dx Lepas F3 Lyed Ch Ch Secondary	in the		from
Pemarks:  Des not meet  Solvent Solven	work hvorg	o Sancy John t of Cont eck all that appl Water-Sta	too hi	es (B9) (e	Treat M	Tex of situation	PODE TO CANAL Secondary I	in the	Leaves (E	ore required)
emarks:  Des not met  Solvent	work hvorg	o Sance John to Lot Cont eck all that appl Water-Sta MLRA	toohi knyc t-8% ly) ained Leave 1, 2, 4A, a	es (B9) (e	Treat M	Tex of situation	F3 F3 F3 Ved Secondary Water-S	Stained and 4B	Leaves (	ore required) 39) (MLRA 1,
emarks:  Des not Met  Solve So	work hvorg	o Sance  John to Condense  eck all that appl  Water-Sta  MLRA  Salt Crust	+   +   +   +   +   +   +   +   +   +	es (B9) (eand 4B)	Treat M	Tex of situation	F3 F	ndicate Stained and 4B	Leaves (E	ore required) 39) (MLRA 1,
PROLOGY A SOIN A	work hvorg	eck all that appl Water-Sta MLRA Salt Crust Aquatic In	ly) ained Leave 1, 2, 4A, a (B11) avertebrate	es (B9) (cand 4B)	Treat M	Tex of situation	PO DX  PO DX  PO DX  Secondary I  Water-S  4A, a  Drainag  Dry-Sea	Indicate Stained and 4E ge Patte ason W	Leaves (E i) erns (B10) later Table	ore required) 39) (MLRA 1,
rimary Indicators (Maler Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	work hvorg	eck all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ly) ained Leave 1, 2, 4A, a (B11) avertebrate Sulfide Oc	es (B9) (cand 4B) ss (B13) dor (C1)	Tred M Tin Psycept	lets Situ	PO DX  PO DX  PO DX  Secondary I  Water-S  4A, a  Drainag  Dry-Sea	Indicate Stained and 4B ge Patte ason W ion Visi	Leaves (B erns (B10) ater Table ble on Ae	ore required) 39) (MLRA 1, c (C2) rial Imagery (C
rimary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	work hvorg	eck all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I	ly) sined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Oc Rhizosphe	es (B9) (e and 4B) es (B13) dor (C1) res along	except	lets Situ	Secondary I  Water-S  4A, a  Drainag  Dry-Sea  Salurati	ndicate Stained and 4B ge Patte ason W ion Visi rphic P	Leaves (B) erns (B10) ater Table ble on Ae osition (D	ore required) 39) (MLRA 1, c (C2) rial Imagery (C
rimary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	work hvorg	eck all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence	ly) ained Leave 1, 2, 4A, a (B11) avertebrate Sulfide Oc	es (B9) (cand 4B) es (B13) dor (C1) eres along	except  Living R  4)	oots (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati Geomo Shallow	Indicate Stained and 4E ge Patte ason W ion Visi rphic P	Leaves (B) erns (B10) ater Table ble on Ae osition (D	ore required) 39) (MLRA 1, c (C2) rial Imagery (C
rimary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	work hvorg	eck all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Iro	ly) sined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Oc Rhizosphe of Reduce	es (B9) (cand 4B) es (B13) dor (C1) eres along ed Iron (C on in Tille	except  Living R 4)	00ts (C3)	Secondary I  Water-S  4A, i  Drainag  Dry-Sea  Saturati  Geomo  Shallow  FAC-Ne	Indicate Stained and 4B ge Patte ason W ion Visi rphic P v Aquita eutral T	Leaves (B10)  Parens (B10)  Pater Table  ble on Ae  osition (D3)	ore required) 39) (MLRA 1, c (C2) rial Imagery (C2)
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emarks:  Des not Met  Des not M	e required; che	eck all that appl  Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized I  Presence  Recent Inc  Stunted o	ly) sined Leave 1, 2, 4A, a (B11) evertebrate Sulfide Oc Rhizosphe of Reduce on Reducti r Stressed	es (B9) (cand 4B) es (B13) dor (C1) eres along ed Iron (C on in Tille Plants (E	except  Living R 4)	00ts (C3)	Secondary I Water-S 4A, a Drainag Dry-Sea Saturati Geomo Shallow FAC-Ne Raised	Indicate Stained and 4B ge Patte ason Wisi rphic P Aquita eutral T Ant Mo	Leaves (B) erns (B10) ater Table ble on Ae osition (D3) est (D5) ounds (D6)	ore required) 39) (MLRA 1, c (C2) rial Imagery (C2)
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rimary Indicators (minimum of on Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave ield Observations: urface Water Present? Vater Table Present? Vater Table Present? Vegetated Concave includes capillary fringe)	e required; che s No s No s No s No	eck all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex  Depth (in	ly) sined Leave 1, 2, 4A, a 1 (B11) evertebrate Sulfide Or Reduce on Reducti or Stressed plain in Re mches):	es (B9) (cand 4B) es (B13) dor (C1) eres along ed Iron (C on in Tille Plants (I emarks)	except  Living R 4) ed Soils (i	oots (C3) C6) A)	Secondary I  Water-S  4A, i  Drainag  Dry-Sea  Salurati  Geomo  Shallow  FAC-Ne  Raised  Frost-H	Indicate Stained and 4B ge Patte ason Wisi rphic P Aquita eutral T Ant Mo leave H	Leaves (E) erns (B10) ater Table ble on Ae osition (D3) est (D5) ounds (D6)	ore required) 39) (MLRA 1, c (C2) rial Imagery (C2) (LRR A) (D7)
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rimary Indicators (minimum of one Surface Water (A1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave ield Observations:  Vater Table Present?  Yes  Vater Table Present?	e required; che s No s No s No s No	eck all that appl Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex  Depth (in	ly) sined Leave 1, 2, 4A, a 1 (B11) evertebrate Sulfide Or Reduce on Reducti or Stressed plain in Re mches):	es (B9) (cand 4B) es (B13) dor (C1) eres along ed Iron (C on in Tille Plants (I emarks)	except  Living R 4) ed Soils (i	oots (C3) C6) A)	Secondary I  Water-S  4A, i  Drainag  Dry-Sea  Salurati  Geomo  Shallow  FAC-Ne  Raised  Frost-H	Indicate Stained and 4B ge Patte ason Wisi rphic P Aquita eutral T Ant Mo leave H	Leaves (E) erns (B10) ater Table ble on Ae osition (D3) est (D5) ounds (D6)	ore required) 39) (MLRA 1, c (C2) rial Imagery (C2) (LRR A) (D7)
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pplicant/Owner: 1 W C		Section Township Pa	
nvestigator(s):/ / / / S		Section, Township, Ra	
andform (hillslope, terrace, etc.): 510031		Local relief (concave,	convex, none): None Slope (%): Deturn:
ubregion (LRR):	Lat:		Dalum:
oil Map Unit Name:			NWI classification:
re climatic / hydrologic conditions on the site t	ypical for this time of yea		
re Vegetation, Soil, or Hydrold	gy significantly	disturbed? Are '	'Normal Circumstances" present? Yes Ve No
re Vegetation, Soil, or Hydrold	gy naturally pro	blematic? (If ne	eeded, explain any answers in Remarks.)
UMMARY OF FINDINGS - Attach	site map showing	sampling point l	ocations, transects, important features, etc
Hydrophytic Vegetation Present? Yes	No_X	1.5.601.003	No.
Hydric Soil Present? Yes	No X_	Is the Sampled	
Wetland Hydrology Present? Yes	No_X_	within a Wetlan	ld? les
Remarks:			
/EGETATION – Use scientific name	es of plants.		
EGETATION COO GOLORILIO III.	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species 3
1			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4	- 0		Percent of Dominant Species 7.5 % (A/B
O I (Oh t Black - (District)		_ = Total Cover	That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2.			OBL species x1 =
J			FACW species x 2 =
5			FAC species 55 x3 = 165  FACU species 15 x4 = 60
	0	= Total Cover	UPL species x5 =
Herb Stratum (Plot size:)		N - K-	Column Totals: 90 (A) 290 (B)
1. for vape	25_	Y FAC	
2. Rumex cr.	15	Y FAC	Prevalence Index = B/A = 3,2
3. Hipochaens Ma		Y FACO	Hydrophytic Vegetation Indicators:
4. Lons Co.		Y FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Pohjanum ar		FACW	2 - Dominance Test is >50%
6. 0		OBL	3 - Prevalence Index is ≤3.0¹
7. prajoritina ar			4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8.			5 - Wetland Non-Vascular Plants <sup>1</sup>
9			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10			Indicators of hydric soil and wetland hydrology must
11	90	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:			
1.			Hydrophytic
			Vegetation
2.			
2	B	_= Total Cover	Present? Yes No

Sampling Point: USTP1

Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type Loc	Texture Remarks
7-1 INUR312 (	b - 0	siltlanm
12 2 50411 5	E INDESTA LIE C NO	11 -8/2: 101
1-12 -137 11 3	5 to 15-12 do - 1.	1 Maria Mikke
2-18 6,54912 10	0	- silt varicated
		0
		= =====================================
T. O. O	DM-Dadward Maleix, CS-Covered or Costed Son	d Crains 21 applies: PI = Para Liging M=Matrix
Type: C=Concentration, D=Depletion, Hydric Soil Indicators: (Applicable to	RM=Reduced Matrix, CS=Covered or Coated San	d Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
<ul> <li>Depleted Below Dark Surface (A11)</li> </ul>		3
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		No.
Depth (inches):		Hydric Soil Present? Yes NoX
Remarks:	digators because L	
YDROLOGY		(1
Notland Hydrology Indicators:		
10.4.0 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	uired: check all that apply)	Secondary Indicators (2 or more required)
Primary Indicators (minimum of one req		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one req Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Primary Indicators (minimum of one req Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2) Saturation (A3)	<ul><li>Water-Stained Leaves (B9) (except</li><li>MLRA 1, 2, 4A, and 4B)</li><li>Salt Crust (B11)</li></ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
Primary Indicators (minimum of one requestriance Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living</li> <li>Presence of Reduced Iron (C4)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)
Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)
Primary Indicators (minimum of one require Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surfa	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager  Sparsely Vegetated Concave Surfacield Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR y (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager,  Sparsely Vegetated Concave Surface Gurface Water Present?  Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR y (B7)  Other (Explain in Remarks)  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager,  Sparsely Vegetated Concave Surface Gurface Water Present?  Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Primary Indicators (minimum of one requestions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagenty  Sparsely Vegetated Concave Surfatile Observations:  Surface Water Present?  Ves  Water Table Present?  Yes  Saturation Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one req  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagen  Sparsely Vegetated Concave Surfa  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  Sincludes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No
Primary Indicators (minimum of one req  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagen  Sparsely Vegetated Concave Surfa  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  Sincludes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No
Primary Indicators (minimum of one req  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imager Sparsely Vegetated Concave Surfa  Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR  (B7)  Other (Explain in Remarks)  Ce (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5) R A) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No
Primary Indicators (minimum of one requestriance)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surfateld Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  Saturation Present?  Yes  Sociolary fringe  Describe Recorded Data (stream gauge		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No
Primary Indicators (minimum of one requirement Indicators (minimum of one requirement Indicators (Minimum of one requirement Indicators (Material Indicators		Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5) R A) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No
Primary Indicators (minimum of one req  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imager Sparsely Vegetated Concave Surfa  Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) (C6) FAC-Neutral Test (D5) R A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imager  Sparsely Vegetated Concave Surfa  Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge		Water-Stained Leaves (B9) (MLR.  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Image Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Vetland Hydrology Present? Yes No

Project/Site: Connich Range	City/0			_ Sampling Date: 16-18-1
Applicant/Owner:			State:	_ Sampling Point: <u>U9 TP</u>
nvestigator(s): AG/CS			nge;	
andform (hillslope, terrace, etc.): Live ed	SeLoca	al relief (concave,	convex, none): /in/a	Slope (%):
Subregion (LRR):				Datum:
oil Map Unit Name:			NWI classifi	cation:
are climatic / hydrologic conditions on the site typical	for this time of year? \	Yes _X_ No _	(If no, explain in I	Remarks.)
re Vegetation, Soil, or Hydrology				. /
re Vegetation, Soil, or Hydrology				
SUMMARY OF FINDINGS – Attach site r				
Hydrophytic Vegetation Present? Yes	_ No _			
Hydric Soil Present? Yes	_ No #	Is the Sampled	Area nd? Yes	No X
Wetland Hydrology Present? Yes		within a Wetlan	id? Yes	_ No /
Remarks: A Goil Feautures		tion	Som G	received
EGETATION - Use scientific frames of		ninant Indicator	Dominance Test wor	kehoot:
Tree Stratum (Plot size:)	% Cover Spe		Number of Dominant S	
1			That Are OBL, FACW,	
2			Total Number of Domi	nant 2
3			Species Across All Str	
4	21/		Percent of Dominant S	Species
Sapling/Shrub Stratum (Plot size:)		olal Cover	That Are OBL, FACW,	
1			Prevalence Index wo	rksheet:
2.			Total % Cover of:	Multiply by:
3			OBL species(	2 x1= 0
4			FACW species(	) x2= ()
5			FAC species	^
	Ø_= To	otal Cover	FACU species	0  x4 = 80 $x5 = 0$
Herb Stratum (Plot size:)	20 \	1 146	UPL species (Column Totals: 10	O (A) 320 (B)
Ansto Sto	77	FACU	Charles Committee Committe	
Tribolium ve	10 7	FACO	Prevalence Index	x = B/A = 3, 2
4. Farica De.	75	I FAC	Hydrophytic Vegetati	
Numer Ct.	-5	FAC	2 - Dominance Te	Hydrophytic Vegetation
5. ats co.	10	FAC	3 - Prevalence Ind	
				lex is ≤3.0 Adaptations¹ (Provide supportin
3.			data in Remark	s or on a separate sheet)
j			5 - Welland Non-V	/ascular Plants <sup>1</sup>
10			Problematic Hydro	phytic Vegetation <sup>1</sup> (Explain)
11				il and wetland hydrology must
Noody Vine Stratum (Plot size:)  I	<u> (00</u> = To	tal Cover	be present, unless dist	urbed or problematic.
2.			Vegetation	V
% Bare Ground in Herb Stratum	<u>Ø</u> = To	tal Cover	Present? Ye	es No A
Remarks:		17	1	
Formerly 711 do	es not p	1655 4	, L.	

Depth	Matrix		Redox	Feature	s				Carri
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture		Remarks
0-18	5/5/1	95	7.5 YR 4/6	5	6	M	SILT	LOAM	1
			- /						
	-						•		
		(			/			. /	
							-		
	1	·							
		-		_			-	-	
Type: C=C	ncentration D=Den	letion RM:		Covere	d or Coate	d Sand Gr	ains. <sup>2</sup> Le	cation: PL=	Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applic	able to all	LRRs, unless otherw	ise not	ed.)				olematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (S5				20	m Muck (A1	0)
	pipedon (A2)		Stripped Matrix (S				7	d Parent Ma	
Black Hi	Art and the second seco		Loamy Mucky Mir	neral (F	1) (except	MLRA 1)	Ve	ry Shallow D	ark Surface (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed M	atrix (F2	2)		Ot	her (Explain i	in Remarks)
_ Depleted	d Below Dark Surfac	e (A11)	X Depleted Matrix (	F3)					
	ark Surface (A12)		Redox Dark Surfa					The second secon	phytic vegetation and
	lucky Mineral (S1)		Depleted Dark Su		<del>-</del> 7)				y must be present,
	leyed Matrix (S4)		Redox Depressio	ns (F8)			unle	ess disturbed	or problematic.
	_ayer (if present):								
Type:			_					il Present?	V X
Depth (inc	ches):							II Present?	Yes No
	PRETZS MA LAARE TO KCE WYS	TRIX	VALUE OF ALL THE OF PIT	UNFE = F	Topole S	but	CHROM Will	A OF	mant for
Remarks:	EPHETED MA LAARE TO YCU MATO GY + 0	L'al	VAZVE OF ALL THE OF PIT SASED IN	UNFE On Con	Topo	but but hydr		A OF	mant for
Remarks:	PRETED MA LAME TO YCL WATS GY + a drology Indicators:	La Losen	rel of gir	on con	tope Sylv	but hydr	ontour ophydi	A of	mant for
Permarks:  SOU  YDROLO  Vetland Hydrimary Indice	PRETED MA  LAME TO  YOU WATE  GY + a  drology Indicators: eators (minimum of c	La Losen	t; check all that apply)	r= f	topo	but hydr	ortou ortou ophyti	A OF	mant for wator
Semarks:  SOU  YDROLO  Vetland Hyd  Primary Indic  Surface	FRETZ MA  LAME TO  YOU WAT!  GY + a  drology Indicators: eators (minimum of co  Water (A1)	La Losen	d; check all that apply)  Water-Stain	On On On ed Leav	topic Sy res (B9) (e	but hydr xcept	ortou ortou ophyti	ondary Indica	water (2 or more required) and Leaves (B9) (MLRA 1, 2)
YDROLO Vetland Hydrimary Indic Surface High Wa	GY + a drology Indicators: cators (minimum of co Water (A1) iter Table (A2)	La Losen	t; check all that apply)  Water-Stain MLRA 1,	ed Leav	topic Sy res (B9) (e	byt hydr xcept	ontou ophysic	ondary Indicative Water-Staine 4A, and 4	ed Leaves (B9) (MLRA 1, 28B)
YDROLO Vetland Hydrimary India  Surface High Wa Saturatio	GY + a drology Indicators: sators (minimum of c Water (A1) on (A3)	La Losen	t; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E	ed Leav. 2, 4A, 3311)	res (B9) (e and 4B)	byt hydr xcept	onton ophydia sec	ondary Indica Water-Staine 4A, and 4 Drainage Pa	estors (2 or more required) and Leaves (B9) (MLRA 1, 2) tterns (B10)
YDROLO Vetland Hyd Surface High Wa Saturatic Water M	GY + a  drology Indicators: eators (minimum of co  Water (A1) ther Table (A2) on (A3) arks (B1)	La Losen	t; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve	ed Leav 2, 4A, 3 311) ertebrate	res (B9) (e and 4B)	byt hydr xcept	onton ophydi	ondary Indica Water-Staine 4A, and 4 Drainage Pa Dry-Season	estors (2 or more required) and Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2)
YDROLO Vetland Hydromary Indic Surface High Wa Saturatio Water M Sedimer	GY + a drology Indicators: eators (minimum of c) Water (A1) eter Table (A2) on (A3) earks (B1) et Deposits (B2)	La Losen	t; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve	ed Leav , 2, 4A, 3 311) ertebrate ulfide O	res (B9) (e and 4B) es (B13) dor (C1)		ontou ontou ophyki	ondary Indica Water-Staine 4A, and 4 Drainage Pa Dry-Season V	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C
YDROLO Vetland Hydromary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep	GY + a  drology Indicators: eators (minimum of c  Water (A1) eter Table (A2) on (A3) arks (B1) al Deposits (B2) posits (B3)	La Losen	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh	ed Leav , 2, 4A, ; 311) ertebrate ulfide O	res (B9) (e and 4B) es (B13) dor (C1) eres along	Living Roo	ontou ontou ophytic Second	ondary Indica Water-Staine 4A, and 4 Drainage Pa Dry-Season Vi Saturation Vi Geomorphic	ators (2 or more required) at Leaves (B9) (MLRA 1, 2) B) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2)
YDROLO Vetland Hyd Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma	GY + a  drology Indicators: cators (minimum of co Water (A1) on (A3) oracks (B1) on Deposits (B2) oosits (B3) of or Crust (B4)	La Losen	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (B  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of	ed Leav 2, 4A, 311) ertebrate ulfide O aizosphe Reduce	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4	Living Roo 1)	ontou ontou ophytic Seconds (C3)	ondary Indica Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3)
YDROLO Vetland Hydrimary Indic Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep	GY + a  drology Indicators: cators (minimum of co Water (A1) inter Table (A2) on (A3) carks (B1) int Deposits (B2) cosits (B3) at or Crust (B4) insits (B5)	La Losen	d; check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leav 2, 4A, 311) ertebrate ulfide O lizosphe f Reduce Reduct	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tiller	Living Roo (1) d Soils (C6	Secondos (C3)	ondary Indicative AA, and A Drainage Patheration Vice Geomorphic Shallow AquifaC-Neutral	eters (2 or more required) ators (2 or more required) at Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itland (D3) Test (D5)
YDROLO Vetland Hyd Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	GY + a  drology Indicators: cators (minimum of company) water (A1) cater Table (A2) on (A3) carks (B1) cat Deposits (B2) cosits (B3) cat or Crust (B4) cosits (B5) Soil Cracks (B6)	Joseph Done required	d; check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leav 2, 4A, 3 311) ertebrate ulfide O nizosphe Reduce Stressed	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D	Living Roo (1) d Soils (C6	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season Valuration Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	ators (2 or more required) ators (2 or more required) at Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A)
YDROLO Vetland Hydrimary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation	GY + a  drology Indicators: sators (minimum of company) water (A1) ster Table (A2) on (A3) sarks (B1) nt Deposits (B2) sosits (B3) st or Crust (B4) sosits (B5) Soil Cracks (B6) on Visible on Aerial	one required	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain	ed Leav 2, 4A, 3 311) ertebrate ulfide O nizosphe Reduce Stressed	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D	Living Roo (1) d Soils (C6	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season Valuration Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	eters (2 or more required) ators (2 or more required) at Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itland (D3) Test (D5)
YDROLO Vetland Hyd Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	GY + a  drology Indicators: eators (minimum of co Water (A1) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial of the Vegetated Concaver	one required	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain	ed Leav 2, 4A, 3 311) ertebrate ulfide O nizosphe Reduce Stressed	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D	Living Roo (1) d Soils (C6	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season Valuration Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	ators (2 or more required) ators (2 or more required) at Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A)
YDROLO Vetland Hyd Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	GY + a  drology Indicators: cators (minimum of company) water (A1) cater Table (A2) on (A3) carks (B1) cater Table (B2) cosits (B3) cater Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concavery vations:	one required	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain	ed Leav (2, 4A, 1311) ertebrate ulfide O nizosphe Reducti Reducti Stressed ain in Re	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4 ion in Tilled I Plants (D emarks)	Living Roo (1) d Soils (C6	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season Valuration Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	ators (2 or more required) ators (2 or more required) at Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A)
YDROLO Vetland Hyd Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Observibusion	GY + a  drology Indicators: cators (minimum of a  Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial at Vegetated Concave  vations: er Present?	one required	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explains)	ed Leav 2, 4A, 3 311) ertebrate ulfide O aizosphe Reduct Reduct Stressed ain in Re	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (Demarks)	Living Roo (1) d Soils (C6	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season Valuration Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	ators (2 or more required) ators (2 or more required) at Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A)
YDROLO  Vetland Hyde  Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely  Field Obsert  Surface Water Table	GY - Grand MA  GY - Grand Male Male Male Male Male Male Male Male	Imagery (B'es	d; check all that apply)  Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explains)  No X Depth (inch	ed Leav 2, 4A, 1311) ertebrate ulfide O nizosphe Reduce Reduce Stressed ain in Re	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (Demarks)	Living Roo t) d Soils (C6 1) (LRR A)	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	ators (2 or more required) ators (2 or more required) ad Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A) Hummocks (D7)
YDROLO Vetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Gurface Water Table Saturation Pe	GY - Grand MA  Grand Manager M	Imagery (B'es	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explains)	ed Leav 2, 4A, 1311) ertebrate ulfide O nizosphe Reduce Reduce Stressed ain in Re	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (Demarks)	Living Roo t) d Soils (C6 1) (LRR A)	Secondos (C3)	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	ators (2 or more required) ators (2 or more required) ad Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A) Hummocks (D7)
YDROLO Vetland Hyden Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation Per includes cap	GY - Grades (MA)	Imagery (B'es	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain)  No Depth (inch	ed Leave 2, 4A, 311) ertebrate ulfide O nizosphe Reducti Stressed ain in Remes):	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	Second Se	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	ators (2 or more required) ators (2 or more required) ad Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A) Hummocks (D7)
YDROLO Vetland Hyden Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation Per includes cap	GY - Grades (MA)	Imagery (B'es	d; check all that apply)  Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explains)  No X Depth (inch	ed Leave 2, 4A, 311) ertebrate ulfide O nizosphe Reducti Stressed ain in Remes):	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	Second Se	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	ators (2 or more required) ators (2 or more required) ad Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A) Hummocks (D7)
YDROLO  Vetland Hyde  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  Field Observ  Surface Water Table  Saturation Perincludes cap  Describe Rec	GY - Grades (MA)	Imagery (B'es	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain)  No Depth (inch	ed Leave 2, 4A, 311) ertebrate ulfide O nizosphe Reducti Stressed ain in Remes):	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	Second Se	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	ators (2 or more required) ators (2 or more required) ad Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A) Hummocks (D7)
YDROLO Vetland Hydrimary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Observ Surface Water Table Saturation Periocludes cap Describe Rec	GY - Grades (MA)	Imagery (B) e Surface (f) es in gauge, mo	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain)  No Depth (inch	ed Leave 2, 4A, 311) ertebrate ulfide O nizosphe Reducti Stressed ain in Remes):	res (B9) (e and 4B) es (B13) dor (C1) eres along ed Iron (C4) ion in Tilled I Plants (D emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	Second Se	ondary Indicative Water-Staine 4A, and 4 Drainage Pa Dry-Season V Saturation Vi Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	ators (2 or more required) ators (2 or more required) ad Leaves (B9) (MLRA 1, 2) tterns (B10) Water Table (C2) isible on Aerial Imagery (C) Position (D2) itard (D3) Test (D5) Of Mounds (D6) (LRR A) Hummocks (D7)

Project/Site: EREP	City/	County: Ferm	doie Hento	Csampling Date: 11113
Applicant/Owner: TWC				Sampling Point: U13T
	Sec	E TESTER	ge:	
Landform (hillslope, terrace, etc.):				
Subregion (LRR):	Lat:	7	Long:	Datum:
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical 1		CT 6		
Are Vegetation, Soil, or Hydrology		£-		
Are Vegetation, Soil, or Hydrology	naturally problen	natic? UD (If nee	eded, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site n				
Hydrophytic Vegetation Present? Yes X	No			
그리아 아무슨 아이들이 얼마나 아이들이 아이들이 아이들이 아이들이 살아 있다면 하는데 그렇게 되었다.	No X	Is the Sampled		
Wetland Hydrology Present? Yes	NoX	within a Wetland	d? Yes	No No
Remarks: Velotation hot	growing	3 as h	ydrophy	As 2 covamos
/EGETATION – Use scientific names of	plants.			plana
Tree Stratum (Plot size:)	% Cover Sp	minant Indicator ecies? Status	Number of Dominant That Are OBL, FACW	Species 7
1			Total Number of Dom	inant 2
3		<del></del>	Species Across All St	rata: (B)
4	= T	otal Cover	Percent of Dominant S That Are OBL, FACW	
Sapling/Shrub Stratum (Plot size:)			Prevalence Index wo	
2			Total % Cover of:	
3.				x1=
4.				x2= 140
5				15 x3= 45
	= T	otal Cover	FACU species /	x4= 40 x5= 25
Herb Stratum (Plot size:)	115	1 700		(B)
2 Disticulis Spice ta	- 30 1	tach		7 -
1 10 6 1	10	Fac		x = B/A =
1. Penages (enceptate	10	Facr	Hydrophytic Vegetat	Hydrophytic Vegetation
5. Runex CVG2US	10	Forw	2 - Dominance Te	
6. Agrosts Stolurisers	5	Fac	3 - Prevalence Inc	
7. Cynosius	5	-	- Charles and the second second second	Adaptations <sup>1</sup> (Provide supporting
8. 3			data in Remark	ks or on a separate sheet)
9			5 - Welland Non-	
10				ophytic Vegetation <sup>1</sup> (Explain)
11	- Inn		Indicators of hydric so be present, unless dis	oil and wetland hydrology must
Woody Vino Stratum (Plot size:	<u>/ වර</u> = To	tal Cover	S process, arricos do	
Woody Vine Stratum (Plot size:)			Lindranborto	
2			Hydrophytic Vegetation	
	= To	tal Cover		es_V No
% Bare Ground in Herb Stratum				
Remarks:		•		

Depth Matri	X	Redo	x Features	5					
(inches) Color (moist	_ %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup> _	Texture		Remarks	Í
0-4 10412	12 100	, –	Ð			100 W	7		
V-11. 10483	12 100	-	0	-	_	Sandy	loan		
1 10 0 CUS	2 100	-	()		-	San K			
11-18 -7-21-1	- 100					Saka	1		
				_			-		
				_	_	-	_		
		dy il Figure day 22	-			. 2		6 - Balance	in time.
Type: C=Concentration, D=	Depletion, RM=	Reduced Matrix, CS	S=Covered	or Coate	d Sand Gi	ains. Lindical		PL=Pore Lining, roblematic Hy	
lydric Soil Indicators: (Ap	plicable to all			ea.)					aric dons .
Histosol (A1)		Sandy Redox (					m Muck (	Material (TF2)	
Histic Epipedon (A2)		Stripped Matrix Loamy Mucky M		\ /ovcont	MI DA 1			w Dark Surface	(TF12)
Black Histic (A3) Hydrogen Sulfide (A4)		Loamy Gleyed			WILIXA I)			ain in Remarks)	(11.12)
Depleted Below Dark Su	face (A11)	Depleted Matrix		,			noi (Expi	,,,	
Thick Dark Surface (A12		Redox Dark Su				3Indica	tors of hy	drophytic veget	ation and
Sandy Mucky Mineral (S		Depleted Dark		7)		wet	land hydro	ology must be p	resent,
Sandy Gleyed Matrix (S4		Redox Depress				unle	ess disturt	oed or problema	itic.
Restrictive Layer (if presen	t):								
Туре:									1/
Depth (inches):						Hydric So	il Presen	t? Yes	No
Remarks: YDROLOGY									
Remarks: YDROLOGY Wetland Hydrology Indicato	ors:								ore required)
Remarks: YDROLOGY Wetland Hydrology Indicato Primary Indicators (minimum	ors:			(00)		Sec	ondary Inc	dicators (2 or m	
YDROLOGY  Wetland Hydrology Indicato Primary Indicators (minimum Surface Water (A1)	ors:	Water-Sta	ined Leave		xcept	Sec	ondary Ind Water-Sta	dicators (2 or m ained Leaves (E	
YDROLOGY  Wetland Hydrology Indicato  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)	ors:	Waler-Sta	ined Leave 1, 2, 4A, a		xcept	<u>Sec</u>	ondary Ind Water-Sta <b>4A</b> , ar	dicators (2 or m ained Leaves (E nd 4B)	
YDROLOGY  Wetland Hydrology Indicator  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ors:	Water-Sta MLRA Salt Crust	ined Leave <b>1, 2, 4A,</b> a (B11)	ind 4B)	xcept	Sec.	ondary Ind Water-Sta <b>4A,</b> ar Drainage	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10)	9) (MLRA 1, 2
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	ors:	Water-Sta MLRA Salt Crust Aquatic In	ined Leave 1, 2, 4A, a (B11) vertebrate	and 4B)	xcept	Sec.	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table	9) ( <b>MLRA 1, 2</b> (C2)
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	ors:	Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc	s (B13)		Sec	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table n Visible on Aer	(C2) (Magery (C9)
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	ors:	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher	s (B13) for (C1) res along	Living Roo	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table n Visible on Aer hic Position (D2	(C2) (Magery (C9)
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	ors:	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizosphel of Reduce	s (B13) for (C1) res along d Iron (C4	Living Roo l)	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow <i>A</i>	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table n Visible on Aer hic Position (D2 Aquitard (D3)	(C2) (Magery (C9)
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	ors: of one required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) for (C1) res along d Iron (C4 on in Tille	Living Roo () d Soils (C6	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu	dicators (2 or m ained Leaves (6 nd 4B) Patterns (B10) on Water Table n Visible on Aer hic Position (D2 Aquitard (D3) tral Test (D5)	(C2) ial Imagery (C9
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	ors: of one required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo () d Soils (C6	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table in Visible on Aer hic Position (D2 Aquitard (D3) tral Test (D5) int Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
YDROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Ae	ors: of one required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo () d Soils (C6	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	dicators (2 or m ained Leaves (6 nd 4B) Patterns (B10) on Water Table n Visible on Aer hic Position (D2 Aquitard (D3) tral Test (D5)	(C2) ial Imagery (C9) (LRR A)
YDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aei	ors: of one required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo () d Soils (C6	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table in Visible on Aer hic Position (D2 Aquitard (D3) tral Test (D5) int Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
YDROLOGY  Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aei	ors: of one required	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizospher of Reduce on Reduction Stressed plain in Re	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo () d Soils (C6	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table in Visible on Aer hic Position (D2 Aquitard (D3) tral Test (D5) int Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con-	ors: of one required rial Imagery (Bi cave Surface (I	Water-Sta  MLRA  Salt Crust  Aquatic In  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp. 38)	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction stressed plain in Re	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo () d Soils (C6	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A	dicators (2 or m ained Leaves (E nd 4B) Patterns (B10) on Water Table in Visible on Aer hic Position (D2 Aquitard (D3) tral Test (D5) int Mounds (D6)	(C2) ial Imagery (C9) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ael Sparsely Vegetated Con	ors: of one required rial Imagery (B7 cave Surface (I	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction stressed plain in Re	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo i) d Soils (C6 1) (LRR A	<u>Sec</u>	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	dicators (2 or mained Leaves (6 nd 4B) Patterns (B10) on Water Table on Aer hic Position (D2 Aquitard (D3) tral Test (D5) ave Hummocks	(C2) ial Imagery (C9) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present?	ors: of one required rial Imagery (Bacave Surface (Bacave Surf	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp 38)  Depth (in Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Root  d Soils (C6  1) (LRR A	Sec	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	dicators (2 or mained Leaves (6 nd 4B) Patterns (B10) on Water Table on Aer hic Position (D2 Aquitard (D3) tral Test (D5) ave Hummocks	(C2) ial Imagery (C9) (LRR A)
POROLOGY  Wetland Hydrology Indicate  Primary Indicators (minimum  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Ae	ors: of one required rial Imagery (Bacave Surface (Bacave Surf	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp 38)  Depth (in Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Root  d Soils (C6  1) (LRR A	Sec	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	dicators (2 or mained Leaves (6 nd 4B) Patterns (B10) on Water Table on Aer hic Position (D2 Aquitard (D3) tral Test (D5) ave Hummocks	(C2) ial Imagery (C9) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aetory Sparsely Vegetated Confield Observations: Surface Water Present? Water Table Present? Saturation Present? Signification of Staturation Present.	ors: of one required rial Imagery (Bacave Surface (Bacave Surf	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp 38)  Depth (in Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Root  d Soils (C6  1) (LRR A	ots (C3)  ots (C3)  and Hydrolo	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	dicators (2 or mained Leaves (6 nd 4B) Patterns (B10) on Water Table on Aer hic Position (D2 Aquitard (D3) tral Test (D5) ave Hummocks	(C2) ial Imagery (C9) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations: Surface Water Present? Vater Table Present? Saturation Present?	ors: of one required rial Imagery (Bacave Surface (Bacave Surf	Water-Sta MLRA  Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp 38)  Depth (in Depth (in	ined Leave 1, 2, 4A, a (B11) vertebrate Sulfide Oc Rhizospher of Reduce on Reduction Stressed plain in Re ches): ches): ches):	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Root  d Soils (C6  1) (LRR A	ots (C3)  ots (C3)  and Hydrolo	ondary Ind Water-Sta <b>4A, ar</b> Drainage Dry-Seas Saturation Geomorp Shallow A FAC-Neu Raised A Frost-Hea	dicators (2 or mained Leaves (6 nd 4B) Patterns (B10) on Water Table on Aer hic Position (D2 Aquitard (D3) tral Test (D5) ave Hummocks	(C2) ial Imagery (C9) (LRR A)

			intains, Valleys, and Coast Region
Project/Site: ELEP		City/County: Ferno	olf, Humbold Sampling Dale: 11/1/1
Applicant/Owner:			Stale: CA Sampling Point U14TP
Investigator(s): PLW			
			convex, none): COVLX Slope (%): 10
			Long: Datum:
			NWI classification:
Are climatic / hydrologic conditions on the site			
Are Vegetation, Soil, or Hydro			"Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydro			eeded, explain any answers in Remarks.)
		sampling point i	ocations, transects, important features, etc
Hydrophytic Vegetation Present?		Is the Sampled	Area
Hydric Soil Present? Ye Wetland Hydrology Present? Ye	es No	within a Wetlar	
Remarks:	140_3_		
VEGETATION – Use scientific nan	nes of plants		
VEGETATION GGG GGIGHENIG HEI	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1			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:	7	= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2.			
3.			OBL species
4			FACW species $\bigcirc$ $\times 2 = \bigcirc$ FAC species $\bigcirc$ $\times 3 = \bigcirc$
5			FACU species $\frac{35}{35}$ $x = \frac{140}{140}$
Horb Stratum (Diataire)		= Total Cover	UPL species $5 \times 5 = 25$
Herb Stratum (Plot size:)  1. Hesty Ca Revenue	1542	1) Foc	Column Totals: 100 (A) 345 (B)
2 1/10/11/11/11/12/19	70	N FOC	
3 Agrosts Stollense	VO 255	N FC	Prevalence Index = B/A = 3 45  Hydrophytic Vegetation Indicators:
4. Jasium Vulgare	20	V Facu	1 - Rapid Test for Hydrophylic Vegetation
5. Holcos lengtos	30	y foc	✓ 2 - Dominance Test is >50%
6. Tenlago Conceolo	a 15.20	YN JOEU	3 - Prevalence Index is ≤3.01
7. HAPTENE VOCACHA	5_	_N	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8.			data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants¹
10			Problematic Hydrophytic Vegetation (Explain)
11	100	<del></del>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:		= Total Cover	200 100 100 100 100 100 100 100 100 100
1			Hydrophytic
2			Vegetation
		= Total Cover	Present? Yes No X
% Bare Ground in Herb Stratum			
Remarks:  FAC Speacs not hydrophylo acting as hydrophylo	DI 7	30	topagraphically higher
ALC Shi as What	VI.	10 C 2	45
UCLIVE		2	

Profile Description: (Describe to the	depth needed to docume	ent the indicator	or confir	m the absence	of indicators.)
DepthMatrix		Features	. 3		(Budiaut)
(inches) Color (moist) %	The state of the s	% Type <sup>1</sup>	Loc2	Texture	Remarks
0-6 2.543/2 99	104R3/4	1 0	M	Siltyclay	bam
-14 7 544/1 50	C 154R3/2	45 C	M	311	does not meet
) + + + + -			-,		200th Islandeness
				-	Copyright
					-
					(Caracana Caracana Ca
		ál.			4
		an .			2
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=	Covered or Coate	d Sand (	Grains. <sup>2</sup> Lo	cation: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherv	vise noted.)		Indicate	ors for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S			2 cı	m Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (	S6)			d Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mi	ineral (F1) (except	MLRA 1		y Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed M			Oth	ner (Explain in Remarks)
Depleted Below Dark Surface (A11)				3,	
Thick Dark Surface (A12)	Redox Dark Surf				ors of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark S				and hydrology must be present, ss disturbed or problematic.
Sandy Gleyed Matrix (S4)	Redox Depression	ins (Fb)		unic	as distarbed of problematic.
Restrictive Layer (if present):					
Transit				1	1
Type:		V 11		Hydric Soi	I Present? Yes No
Type: Depth (inches): Remarks:	F3 66	Johnson &	ne	Hydric Soi	OCHES depth of
Depth (inches):	F3 surface	Shoong	, ne	Hydric Soi	OCHES depth of
Depth (inches):Remarks:	F3 surface	gov Swowd	, ne	Hydric Soi	OCHES depth of
Depth (inches):	F3 ble	Johnsong 2	ne	ed thi	cliness/depth of
Depth (inches):			, ne	seco	ondary Indicators (2 or more required)
Depth (inches):	Water-Stair	ned Leaves (B9) (e	except	seco	andary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2)
Depth (inches):	Water-Stair MLRA 1	ned Leaves (B9) (e , 2, 4A, and 4B)	except	second - N	andary Indicators (2 or more required)  Nater-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)
Depth (inches):	Water-Stain MLRA 1 Salt Crust (	ned Leaves (B9) (e , <b>2, 4A, and 4B)</b> B11)	except	seco	ondary Indicators (2 or more required)  Nater-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)
Primary Indicators (minimum of one req  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stain MLRA 1 Salt Crust ( Aquatic Inve	ned Leaves (B9) (e , <b>2, 4A, and 4B)</b> B11) ertebrates (B13)	except	seco	ondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Orainage Patterns (B10)  Dry-Season Water Table (C2)
Primary Indicators (minimum of one required Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stain MLRA 1 Salt Crust ( Aquatic Invo	ned Leaves (B9) (6 , <b>2, 4A, and 4B)</b> B11) ertebrates (B13) Sulfide Odor (C1)		seco	ondary Indicators (2 or more required)  Nater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Orainage Patterns (B10)  Ory-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C
Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Waler-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R	ned Leaves (B9) (e , 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along	Living R	Seco \ [ 	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2)
Primary Indicators (minimum of one required Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Waler-Stair MLRA 1 Salt Crust ( Aquatic Invo Hydrogen S Oxidized RI Presence o	ned Leaves (B9) (e., 2, 4A, and 4B) B11) ertebrales (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C-	Living R	Seco - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inches):	Water-Stair MLRA 1 Salt Crust ( Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron	ned Leaves (B9) (e , 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C n Reduction in Tille	Living R 4) d Soils (	Second Se	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Depth (inches):	Water-Stain MLRA 1 Salt Crust ( Aquatic Invo Hydrogen S Oxidized RI Presence o Recent Iron Stunted or serial	ned Leaves (B9) (e , 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (Ca n Reduction in Tille Stressed Plants (E	Living R 4) d Soils (	Second Se	andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one required Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B6) Inundation Visible on Aerial Imager	Water-Stain MLRA 1 Salt Crust ( Aquatic Invi Hydrogen S Oxidized RI Presence o Recent Iron Stunted or s y (B7)  MLRA 1 Aquatic Invi	ned Leaves (B9) (e , 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C n Reduction in Tille	Living R 4) d Soils (	Second Se	ondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary Indicators (minimum of one required Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imager Sparsely Vegetaled Concave Surface	Water-Stain MLRA 1 Salt Crust ( Aquatic Invi Hydrogen S Oxidized RI Presence o Recent Iron Stunted or s y (B7)  MLRA 1 Aquatic Invi	ned Leaves (B9) (e , 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (Ca n Reduction in Tille Stressed Plants (E	Living R 4) d Soils (	Second Se	andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indicators (Male Marks (Male Male Male Male Male Male Male Male	Water-Stain  MLRA 1  Salt Crust (  Aquatic Invi  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  y (B7)  Other (Explance (B8)	ned Leaves (B9) (e., 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (Contemporary Reduction in Tille Stressed Plants (Contemporary)	Living R 4) d Soils (	Second Se	andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches):	Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  y (B7)  Depth (inc.	ned Leaves (B9) (e., 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C- n Reduction in Tille Stressed Plants (Clain in Remarks)	Living R 4) d Soils (	Second Se	andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inches):	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  y (B7)  Other (Expl  ace (B8)  Depth (inc.	ned Leaves (B9) (e, 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C- n Reduction in Tille Stressed Plants (C ain in Remarks)  hes):	Living R 4) d Soils (0 01) (LRR	Second Se	andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Depth (inches):	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  y (B7)  Other (Expl  ace (B8)  Depth (inc.	ned Leaves (B9) (e., 2, 4A, and 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C- n Reduction in Tille Stressed Plants (Clain in Remarks)	Living R 4) d Soils (0 01) (LRR	Second Se	andary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)

roject/Site: Connick (L	anch				
oplicant/Owner:					Sampling Point: // Z
vestigator(s): <u>AG/CS</u>					
andform (hillslope, terrace, etc.):					
ubregion (LRR):					
oil Map Unit Name:			4.4		
e climatic / hydrologic conditions on e Vegetation, Soil, or e Vegetation, Soil, or UMMARY OF FINDINGS - A	r Hydrology r Hydrology	significantly naturally pro	disturbed? NO Are	"Normal Circumstances" eeded, explain any answ	present? Yes No ers in Remarks.)
Hydrophytic Vegetation Present?	Yes X	No	The Sulf Contract	L.A.	
Hydric Soil Present?	Yes	No	Is the Sampled		N.
Netland Hydrology Present?	Yes	No	within a Wetla	na? Yes	No
EGETATION – Use scientific		Absolute		Dominance Test wor	ksheet:
Free Stratum (Plot size:			Species? Status	Number of Dominant S That Are OBL, FACW,	
<u></u>				Total Number of Domi	
				Species Across All Str	ata:(B)
•		B	= Total Cover	Percent of Dominant S	
Sapling/Shrub Stratum (Plot size:	)	-	Total Gover	That Are OBL, FACW, Prevalence Index wo	
·			-	Total % Cover of:	Multiply by:
				OBL species 20	- 73
·				FACW species	x2= 0
				FAC species	5_ x3= <u>195</u>
		- A	= Total Cover	FACU species	$x_4 = 60$
lerb Stratum (Plot size:	)		- Total Cover	UPL species(	) x5= 0
Cirsium Vu.		10	FACO	Column Totals: 10	$\frac{50}{100}$ (A) $\frac{275}{100}$ (B)
Feshica De		15_	- + TAC	Prevalence Index	(=B/A= 2.75
Agroshs st.		20	Y FAC	Hydrophytic Vegetati	on Indicators:
Dotohlla an		- 10	A ORT		Hydrophytic Vegetation
Diotos.		10	Y FAC	2 - Dominance Te	
Nochans ra.		- 25	FACU	✓ 3 - Prevalence Ind	입하네 하느님, 나는 이번 보기 때문 모르다
William A Is		25	FAC		Adaptations <sup>1</sup> (Provide supportii is or on a separate sheet)
Triblium re		25	FAC	5 - Wetland Non-V	장면에 가는 가는 것이 없는 것이 하는 것이 하는데 없다.
0					phytic Vegetation¹ (Explain)
1				<sup>1</sup> Indicators of hydric so	il and wetland hydrology must
Voody Vine Stratum (Plot size:	)		= Total Cover	be present, unless dist	urbed or problematic.
				Hydrophytic	3.
				Vegetation Present? Yes	es No 💥
6 Bare Ground in Herb Stratum	44	1	= Total Cover	, result.	——————————————————————————————————————

	TT-7
SOIL	Sampling Point:

Depth	Matrix			Feature	s		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
0-18	2.54411	90	7.5 YR416	10	-CM	SILT LUAM	FRM SIT
		=		=			
	oncentration, D=Dep					ains. <sup>2</sup> Location: F	L=Pore Lining, M=Matrix.
	Indicators: (Applica	able to all I			ed.)		roblematic Hydric Soils <sup>3</sup> :
Histosol		- 4	Sandy Redox (S			2 cm Muck (	
	oipedon (A2)	-	Stripped Matrix		() ( MI DA 4)		Material (TF2)
Black Hi		T.			1) (except MLRA 1)		Dark Surface (TF12)
	n Sulfide (A4)	. /////	Loamy Gleyed N Depleted Matrix		)	Other (Expla	in in Remarks)
	d Below Dark Surface ark Surface (A12)	(A11)	Redox Dark Sur	4.00		3Indicators of hyd	rophytic vegetation and
	lucky Mineral (S1)		Depleted Dark S				logy must be present,
	Gleyed Matrix (S4)	- 4	Redox Depressi				ed or problematic.
	_ayer (if present):						and the section state.
Type:							1.7
Depth (inc	ches):					Hydric Soil Present	? Yes X No
A		HOLIX -	> SOIL VAS	of f	MUNGERL PIT = F3	4 m/ A c	HRUMA OF 1
YDROLO	GY		> SOIL VAS	of t	MUNFELL PIT = F3	4 ~/ 4 <	HRUMA OF 1
YDROLO Wetland Hyd					MUNEUL PIT = F3		icators (2 or more required)
YDROLO Wetland Hyd	GY drology Indicators: ators (minimum of o		; check all that apply	)		Secondary Inc	icators (2 or more required)
YDROLO  Wetland Hyd  Primary Indic  Surface	GY drology Indicators: cators (minimum of o Water (A1)		; check all that apply Water-Stair	r) ned Leav	es (B9) (except	Secondary Inc	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2
YDROLO Wetland Hyd Primary Indic Surface High Wa	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2)		; check all that apply Water-Stain MLRA 1	r) ned Leav	es (B9) (except	Secondary Inc.  Water-Sta  4A, an	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2
YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatio	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3)		; check all that apply Water-Stain MLRA 1 Salt Crust (	r) ned Leav I, <b>2, 4A,</b> a (B11)	es (B9) (except and 4B)	Secondary Inc.  Water-Sta  4A, an  Drainage	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B)
YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M	GY drology Indicators: cators (minimum of o Water (A1) oter Table (A2) on (A3) larks (B1)		; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv	ned Leav I, <b>2, 4A,</b> a (B11) rertebrate	es (B9) (except and 4B)	Secondary Inc Water-Sta 4A, an Drainage Dry-Seaso	icators (2 or more required) ined Leaves (B9) ( <b>MLRA 1, 2</b> <b>d 4B)</b> Patterns (B10) on Water Table (C2)
YDROLO  Wetland Hyde  Primary Indice  Surface  High Wa  Saturatio  Water M  Sedimer	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)		; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv	ned Leav I, <b>2, 4A</b> , a (B11) rertebrate Sulfide Or	es (B9) ( <b>except</b> <b>and 4B)</b> es (B13) dor (C1)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation	icators (2 or more required) ined Leaves (B9) ( <b>MLRA 1, 2</b> <b>d 4B)</b> Patterns (B10) on Water Table (C2)
YDROLO  Wetland Hyd  Primary Indic  Surface  High Wa  Saturatic  Water M  Sedimer  Drift Dep	GY drology Indicators: cators (minimum of o Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3)		; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 8	ned Leav I, <b>2, 4A,</b> a (B11) rertebrate Sulfide Or hizosphe	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo	Secondary Inc  Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (C
YDROLO  Wetland Hyd  Primary Indic  Surface  High Wa  Saturatic  Water M  Sedimer  Drift Dep  Algal Ma	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) darks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)		; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 8  Oxidized R  Presence c	ned Leav I, <b>2, 4A,</b> a (B11) rertebrate Sulfide Or hizosphe of Reduce	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4)	Secondary Inc.  Water-Sta 4A, an Drainage Dry-Sease Saturation ts (C3)  Shallow A	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) Visible on Aerial Imagery (Ca) quitard (D3)
YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep	GY drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror	ned Leav I, 2, 4A, a (B11) rertebrate Sulfide Or hizosphe of Reduce n Reducti	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4) ion in Tilled Soils (C6	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  (S (C3) K Geomorpi  Shallow A  FAC-Neur	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (C
YDROLO  Wetland Hyde  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface	drology Indicators: cators (minimum of o Water (A1) on (A3) carks (B1) on Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	ne required	; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or	ned Leav 1, 2, 4A, a (B11) rertebrate Sulfide Or hizosphe of Reduce n Reducti Stressed	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4) ion in Tilled Soils (C6 Plants (D1) (LRR A)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)  Geomorpi  Shallow A  FAC-Neul  Raised Ar	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Canic Position (D2) quitard (D3) ral Test (D5)
YDROLO  Vetland Hyde  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface  Inundation	drology Indicators: cators (minimum of o Water (A1) of (A2) on (A3) larks (B1) of Deposits (B2) losits (B3) at or Crust (B4) losits (B5) Soil Cracks (B6) on Visible on Aerial I	ne required	; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or	ned Leav 1, 2, 4A, a (B11) rertebrate Sulfide Or hizosphe of Reduce n Reducti Stressed	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4) ion in Tilled Soils (C6 Plants (D1) (LRR A)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)  Geomorpi  Shallow A  FAC-Neul  Raised Ar	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A)
YDROLO  Wetland Hyd Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators: cators (minimum of o Water (A1) of (A3) or (A3) or (B1) or Deposits (B2) or (B3) or Crust (B4) or Crust (B4) or Visible on Aerial I or Vegetaled Concave	ne required magery (B7 e Surface (E	; check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 8  Oxidized R  Presence co  Recent Iror  Stunted or  Other (Exp	ned Leav I, 2, 4A, a (B11) rertebrate Sulfide On hizosphe of Reducti Stressed Jain in Re	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4) ion in Tilled Soils (C6 Plants (D1) (LRR A)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)  Geomorpi  Shallow A  FAC-Neul  Raised Ar	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A)
YDROLO  Wetland Hyd  Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely  Field Observiolation	drology Indicators: cators (minimum of o Water (A1) oter Table (A2) on (A3) larks (B1) ot Deposits (B2) losits (B3) at or Crust (B4) losits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetaled Concave vations:	ne required magery (B7 e Surface (B	Check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp	ned Leav 1, 2, 4A, a (B11) rertebrate Sulfide On hizosphe of Reduce n Reducti Stressed lain in Re	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4) on in Tilled Soils (C6 Plants (D1) (LRR A) emarks)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)  Geomorpi  Shallow A  FAC-Neul  Raised Ar	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A)
YDROLO  Wetland Hyde Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely  Field Observation	drology Indicators: cators (minimum of o Water (A1) oter Table (A2) on (A3) larks (B1) ot Deposits (B2) losits (B3) at or Crust (B4) losits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetaled Concave vations:	ne required magery (B7 e Surface (B	Check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp	ned Leav 1, 2, 4A, a (B11) rertebrate Sulfide On hizosphe of Reduce n Reducti Stressed lain in Re	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Roo ed Iron (C4) on in Tilled Soils (C6 Plants (D1) (LRR A) emarks)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)  Geomorpi  Shallow A  FAC-Neul  Raised Ar	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A)
YDROLO  Wetland Hyde  Primary Indic  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  Field Obser  Surface Water  Water Table  Saturation Price  Saturation Price  Saturation Price  Saturation Price  Saturation Price  Saturation Price  Algal Ma  Iron Dep  Surface  Inundation  Sparsely  Field Obser  Surface Water  Saturation Price  Saturation Price	drology Indicators: cators (minimum of o Water (A1) other Table (A2) on (A3) larks (B1) oth Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetated Concave vations: er Present? Present? Y	ne required magery (B7 e Surface (B	Check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized R Presence of Recent Iror Stunted or Other (Exp	ned Leav 1, 2, 4A, a (B11) rertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Root ed Iron (C4) fon in Tilled Soils (C6 Plants (D1) (LRR A) emarks)	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  ts (C3)  Geomorpi  Shallow A  FAC-Neul  Raised Ar	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A) ve Hummocks (D7)
YDROLO Wetland Hyde Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation Pe (includes car	drology Indicators: cators (minimum of o Water (A1) other Table (A2) on (A3) larks (B1) oth Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetated Concave vations: er Present? Present? Y	magery (B7 e Surface (B	Check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or  Other (Exp	ned Leav  1, 2, 4A, a  (B11)  ertebrate Sulfide Or  hizosphe of Reducti Stressed lain in Re  ches):	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Rooted Iron (C4) fon in Tilled Soils (C6 Plants (D1) (LRR A) emarks)  Weth	Secondary Inc.  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  Shallow A  FAC-Neul  Raised Ar  Frost-Hea	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A) ve Hummocks (D7)
YDROLO Wetland Hyd Primary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obsert Surface Water Table Saturation Pr (includes cap	drology Indicators: cators (minimum of o Water (A1) ter Table (A2) on (A3) tarks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial I v Vegetaled Concave vations: er Present? Present? Y resent? Y resent? Y resent? Y	magery (B7 e Surface (B	Check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or  Other (Exp	ned Leav  1, 2, 4A, a  (B11)  ertebrate Sulfide Or  hizosphe of Reducti Stressed lain in Re  ches):	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Rooted Iron (C4) fon in Tilled Soils (C6 Plants (D1) (LRR A) emarks)  Weth	Secondary Inc.  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  Shallow A  FAC-Neul  Raised Ar  Frost-Hea	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A) ve Hummocks (D7)
YDROLO  Wetland Hyde  Primary Indic  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  Field Obser  Surface Water  Water Table  Saturation Princludes cap  Describe Rec	drology Indicators: cators (minimum of o Water (A1) of (A3) carks (B1) of Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetated Concave vations: er Present? Present? Y resent? Y	magery (B7 e Surface (E es   1 es   1 gauge, mo	Check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 8 Oxidized R Presence co Recent Iror Stunted or Other (Exp	ned Leav 1, 2, 4A, a (B11) retebrate Sulfide On hizosphe of Reducti Stressed lain in Res ches):	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Rooted Iron (C4) ion in Tilled Soils (C6 Plants (D1) (LRR A) emarks)  Wetli revious inspections),	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  Shallow A  FAC-Neur  Raised Ar  Frost-Hea	icators (2 or more required) ined Leaves (B9) (MLRA 1, 3 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Colic Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A) Ive Hummocks (D7)  ht? Yes No
YDROLO  Wetland Hyde  Primary Indic  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  Field Obser  Surface Water  Water Table  Saturation Princludes cap  Describe Res	drology Indicators: cators (minimum of o Water (A1) of (A3) carks (B1) of Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetated Concave vations: er Present? Present? Y resent? Y	magery (B7 e Surface (E es   1 es   1 gauge, mo	Check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 8 Oxidized R Presence co Recent Iror Stunted or Other (Exp	ned Leav 1, 2, 4A, a (B11) retebrate Sulfide On hizosphe of Reducti Stressed lain in Res ches):	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Rooted Iron (C4) ion in Tilled Soils (C6 Plants (D1) (LRR A) emarks)  Wetli revious inspections),	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  Shallow A  FAC-Neur  Raised Ar  Frost-Hea	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A) Ive Hummocks (D7)  ht? Yes No
YDROLO  Wetland Hyde  Primary Indic  Surface  High Wa  Saturatio  Water M  Sedimer  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  Field Obser  Surface Water  Water Table  Saturation Princludes cap  Describe Rec	drology Indicators: cators (minimum of o Water (A1) of (A3) carks (B1) of Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial I of Vegetated Concave vations: er Present? Present? Y resent? Y	magery (B7 e Surface (E es   1 es   1 gauge, mo	Check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Inv Hydrogen 8 Oxidized R Presence co Recent Iror Stunted or Other (Exp	ned Leav 1, 2, 4A, a (B11) retebrate Sulfide On hizosphe of Reducti Stressed lain in Res ches):	es (B9) (except and 4B) es (B13) dor (C1) eres along Living Rooted Iron (C4) ion in Tilled Soils (C6 Plants (D1) (LRR A) emarks)  Wetli revious inspections),	Secondary Inc  Water-Sta  4A, an  Drainage  Dry-Sease  Saturation  Shallow A  FAC-Neur  Raised Ar  Frost-Hea	icators (2 or more required) ined Leaves (B9) (MLRA 1, 2 d 4B) Patterns (B10) on Water Table (C2) I Visible on Aerial Imagery (Calc Position (D2) quitard (D3) ral Test (D5) It Mounds (D6) (LRR A) ve Hummocks (D7)

			Sampling Date: 10-18 State: A Sampling Point: 77.3
nvestigator(s): AG / CS	Sec	ction, Township, Range	e:
			nvex, none): (a)(a)()   Slope (%): 5
			_ong: Datum:
Soil Map Unit Name:			NWI classification:
are climatic / hydrologic conditions on the site t		2	
			ormal Circumstances" present? Yes No
	the state of the s		
re Vegetation, Soil, or Hydrolo	gy naturally proble	matic? // (if need	ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing sa	ampling point loc	ations, transects, important features, etc
Hydrophytic Vegetation Present? Yes		3.002.000	
	X No	Is the Sampled A within a Wetland?	
	No	Within a Wetland	r res No
Remarks:			
BOLDWICK HARRY AND A			
EGETATION – Use scientific name			
Tree Stratum (Plot size:)	Absolute D	pooion? Ciplus	Dominance Test worksheet:
1		1	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.			
3.			Total Number of Dominant Species Across All Strata:  (B)
4.			
	0 .		Percent of Dominant Species That Are OBL, FACW, or FAC: 160 (A/B)
Sapling/Shrub Stratum (Plot size:			Prevalence Index worksheet:
1			Total % Cover of: Multiply by:
2			OBL species $2.5$ $\times 1 = 2.5$
3		F	FACW species 20 x 2 = 40
4			FAC species $\frac{75}{x^3} \times 3 = \frac{225}{x^3}$
5	- A		FACU species 2.5 x4= 10
Herb Stratum (Plot size:)	=	Total Cover	JPL species x 5 =
1:		C	Column Totals: 100 (A) 277.5 (B)
2. Numex Cr.	10	FAC	Prevalence Index = B/A = 2.775
3. Circum vu.	2.5	FACU.	Hydrophytic Vegetation Indicators:
4. Lotus co.	10	- 4	1 - Rapid Test for Hydrophytic Vegetation
5. Tribolium re.	15.	T 4 -	2 - Dominance Test is >50%
6. Frstura pe.	10:	FAC	3 - Prevalence Index is ≤3.0 <sup>t</sup>
7. Agrostis st.	30.	Y FAC	4 - Morphological Adaptations¹ (Provide supporting
8. Argentina an	2.5	OBL	data in Remarks or on a separate sheet)
9. Armathromes	ے ناب بیت است		5 - Wetland Non-Vascular Plants1
10. Distichlis Sp	20	Y FACW -	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11			Indicators of hydric soil and welland hydrology must be present, unless disturbed or problematic.
Mandy Vino Chat /Dist size		otal Cover	process, unless disturbed of problematic.
Woody Vine Stratum (Plot size:			and the second s
1. 2.			Hydrophytic /egetation
			Present? Yes No No
	6/ - T	otal Cover	
% Bare Ground in Herb Stratum	_ <i></i> =⊤	otal Cover	

0	OI

Sampling Point: 11-3

Depth Matrix (inches) Color (moist)		eatures			Chillian V
	% Color (moist)	<u>% Type¹ l</u>	Loc <sup>2</sup> Text		Remarks
0.18 2.5 Y 4/1	92 7.5/K416	8 2 1	N 51L	LISAM	prominent 1800
ype: C=Concentration, D=Depleti					_=Pore Lining, M=Matrix. oblematic Hydric Soils <sup>3</sup> :
ydric Soil Indicators: (Applicabl					
_ Histosol (A1)	Sandy Redox (S5) Stripped Matrix (S		-	_ 2 cm Muck (A _ Red Parent N	
Histic Epipedon (A2)     Black Histic (A3)		eral (F1) (except Mi	IRA 1)		Dark Surface (TF12)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Gleyed Ma			그를 하다 하다 하다 하는 사람이 있다.	n in Remarks)
Hydrogen Suilide (A4) Depleted Below Dark Surface (/			_	_ Out (Explain	1
Depleted Below Bark Surface (A12)	Redox Dark Surfa		3lr	dicators of hyd	rophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Sur				ogy must be present,
Sandy Gleyed Matrix (S4)	Redox Depression	is (F8)		unless disturbe	ed or problematic.
estrictive Layer (if present):					
Type:			- 1		41
Depth (inches):			Hvdri	c Soil Present	? Yes <u>**</u> No
/DROLOGY /etland Hydrology Indicators:				Anna II i	
rimary Indicators (minimum of one	required; check all that apply)			Secondary Ind	cators (2 or more required)
0 1 1111 1111	Mates Chains	d Leaves (B9) (exce	ept	Water-Sta	ned Leaves (B9) (MLRA 1, 2,
_ Surface Water (A1)	vvaler-Staine			4 4 200	
_ Surface Water (A1) _ High Water Table (A2)		2, 4A, and 4B)			i 4B)
				Drainage F	Patterns (B10)
High Water Table (A2)	MLRA 1, Salt Crust (B			Drainage F	Patterns (B10) n Water Table (C2)
High Water Table (A2) Saturation (A3)	MLRA 1, Salt Crust (B Aquatic Inver	11)		Drainage F	Patterns (B10) n Water Table (C2)
High Water Table (A2) Saturation (A3) Water Marks (B1)	MLRA 1, Salt Crusl (B Aquatic Inver Hydrogen Su Oxidized Rhi	11) tebrates (B13) Ifide Odor (C1) zospheres along Liv	ing Roots (C3)	Drainage F Dry-Seaso Saturation	Patterns (B10) n Water Table (C2)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	MLRA 1, Salt Crusl (B Aquatic Inver Hydrogen Su Oxidized Rhi	11) tebrates (B13) Ifide Odor (C1)	ing Roots (C3)	Drainage R Dry-Seaso Saturation Geomorph Shallow A	Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	MLRA 1,  Salt Crust (B  Aquatic Inverting Hydrogen Su  Oxidized Rhi  Presence of Recent Iron I	11) tebrates (B13) Ifide Odor (C1) zospheres along Liv Reduced Iron (C4) Reduction in Tilled S	oils (C6)	Drainage F Dry-Seaso Saturation Geomorph Shallow Ac FAC-Neut	Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	MLRA 1,  Salt Crust (B  Aquatic Inverting Hydrogen Su  Oxidized Rhit  Presence of Recent Iron I  Stunted or Si	11) tebrates (B13) lfide Odor (C1) zospheres along Liv Reduced Iron (C4) Reduction in Tilled S tressed Plants (D1) (	oils (C6)	Drainage F Dry-Seaso Saturation Geomorph Shallow Ar FAC-Neuti Raised An	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5)  t Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image	MLRA 1,  Salt Crust (B  Aquatic Inverting the control of the contr	11) tebrates (B13) Ifide Odor (C1) zospheres along Liv Reduced Iron (C4) Reduction in Tilled S	oils (C6)	Drainage F Dry-Seaso Saturation Geomorph Shallow Ar FAC-Neuti Raised An	Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima	MLRA 1,  Salt Crust (B  Aquatic Inverting the control of the contr	11) tebrates (B13) lfide Odor (C1) zospheres along Liv Reduced Iron (C4) Reduction in Tilled S tressed Plants (D1) (	oils (C6)	Drainage F Dry-Seaso Saturation Geomorph Shallow Ar FAC-Neuti Raised An	Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S ield Observations:	MLRA 1,  Salt Crust (B  Aquatic Inverting Hydrogen Su  Oxidized Rhit  Presence of  Recent Iron It  Stunted or	ntebrates (B13) Iffide Odor (C1) Iffide Odor (C1) Itospheres along Liv Reduced Iron (C4) Reduction in Tilled S Iressed Plants (D1) (In in Remarks)	oils (C6)	Drainage F Dry-Seaso Saturation Geomorph Shallow Ar FAC-Neuti Raised An	Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S ield Observations:	MLRA 1,  Salt Crust (B  Aquatic Invertion Presence of Recent Iron Fresence of Stunted or Stunted or Sturface (B8)  No Depth (inchese	ntebrates (B13) Iffide Odor (C1) Iffide Odor (C1) Itospheres along Liv Reduced Iron (C4) Reduction in Tilled S Iressed Plants (D1) (In in Remarks) Iresses:	oils (C6)	Drainage F Dry-Seaso Saturation Geomorph Shallow Ar FAC-Neuti Raised An	Patterns (B10) n Water Table (C2) Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S ield Observations: urface Water Present? Yes	MLRA 1,  Salt Crust (B  Aquatic Inverting the presence of the	11) tebrates (B13) lifide Odor (C1) zospheres along Liv Reduced Iron (C4) Reduction in Tilled S tressed Plants (D1) (in in Remarks)	coils (C6) (LRR A)	Drainage FAC-Neuti Raised An Frost-Hear	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A) Ve Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S Geld Observations: Surface Water Present? Ves Saturation Present? Yes	MLRA 1,  Salt Crust (B  Aquatic Invertion Inve	ntebrates (B13) Iffide Odor (C1) Iffide Odor (C1) Itospheres along Liv Reduced Iron (C4) Reduction in Tilled S Iressed Plants (D1) (In in Remarks) Ires): 0 - 18	coils (C6) (LRR A)  Wetland Hyc	Drainage I Dry-Seaso Saturation Shallow Ai FAC-Neuti Raised An Frost-Hear	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A) Ve Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S Field Observations: Surface Water Present? Ves Saturation Present? Yes	MLRA 1,  Salt Crust (B  Aquatic Invertion Inve	ntebrates (B13) Iffide Odor (C1) Iffide Odor (C1) Itospheres along Liv Reduced Iron (C4) Reduction in Tilled S Iressed Plants (D1) (In in Remarks) Ires): 0 - 18	coils (C6) (LRR A)  Wetland Hyc	Drainage I Dry-Seaso Saturation Shallow Ai FAC-Neuti Raised An Frost-Hear	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A) Ve Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S Field Observations: Surface Water Present? Ves Vater Table Present? Ves Saturation Present? Ves Saturation Present? Ves Sincludes capillary fringe) Describe Recorded Data (stream ga	MLRA 1,  Salt Crust (B  Aquatic Inverting the street of th	ntebrates (B13) Iffide Odor (C1) Iffide	Wetland Hyd	Drainage F Dry-Seasc Saturation Geomorph Shallow An FAC-Neut Raised An Frost-Hear	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A) ve Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S Geld Observations: Surface Water Present? Ves Saturation Present? Yes Saturation Present? Yes Saturation Present? Yes Saturation Present? Second Stream gas	MLRA 1,  Salt Crust (B  Aquatic Inverting the street of th	ntebrates (B13) Iffide Odor (C1) Iffide	Wetland Hyd	Drainage F Dry-Seasc Saturation Geomorph Shallow An FAC-Neut Raised An Frost-Hear	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A) ve Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Ima Sparsely Vegetated Concave S Geld Observations: Surface Water Present? Ves Vater Table Present? Yes Saturation Present? Yes Includes capillary fringe) Describe Recorded Data (stream gater	MLRA 1,  Salt Crust (B  Aquatic Invertion Inve	ntebrates (B13) Iffide Odor (C1) Iffide	Wetland Hyd	Drainage F Dry-Seasc Saturation Geomorph Shallow An FAC-Neut Raised An Frost-Hear	Patterns (B10)  n Water Table (C2)  Visible on Aerial Imagery (C9) ic Position (D2) quitard (D3) ral Test (D5) t Mounds (D6) (LRR A) ve Hummocks (D7)

vestigator(s): AG/CS			State: A Sampling Point: TT-6
			_
	0		convex, none): Slope (%):
			_ Long: Datum:
il Map Unit Name:	- 13-		NWI classification:
e climatic / hydrologic conditions on the site typical for			
e Vegetation, Soil, or Hydrology	significantly dis	turbed? No Are	"Normal Circumstances" present? Yes X No
e Vegetation, Soil, or Hydrology	naturally proble	ematic? No (If ne	eeded, explain any answers in Remarks.)
JMMARY OF FINDINGS – Attach site ma	ap showing s	ampling point l	ocations, transects, important features, etc
lydrophytic Vegetation Present? Yes	No		Vis Alver
lydric Soil Present? Yes	No	Is the Sampled	d Area
Vetland Hydrology Present? Yes	No	within a Wetlan	nd? Yes No
emarks:			
GETATION – Use scientific names of p	ants		
SALESTON STATE STATE STATE OF THE STATE OF T	S. Y. S.	ominant Indicator	Dominance Test worksheet:
ree Stratum (Plot size:)		pecies? Status	Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
La company of the com			Species Across All Strata: (B)
			Percent of Dominant Species
The Mote to District Annual Property of the Control	0=	Total Cover	That Are OBL, FACW, or FAC: 100 (A/B)
apling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
			Total % Cover of:Multiply by:
			OBL species
			FACW species x 2 =
			FAC species $82.5$ x3 = $247.5$
	R =	Total Cover	FACU species 2.5 x4 =
erb Stratum (Plot size:)		. 1	UPL species x5=
Feshira pe	35_	Y FAC	Column Totals: $100$ (A) $272.5$ (B)
Argentina an	_ 15	<u> </u>	Prevalence Index = B/A = 2.725
Inholum eno	2.5	FAC	Hydrophytic Vegetation Indicators:
Agnoshs St.	_ 20 _	Y FAC	1 - Rapid Test for Hydrophytic Vegetation
Lows con-	15	FAC	2 - Dominance Test is >50%
Raninculus VT.	- <del></del>	FAC	3 - Prevalence Index is ≤3.0¹
	- 45	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
arsium vu		FAC	5 - Wetland Non-Vascular Plants <sup>1</sup>
Holas 19.			
Itolais 14.			
Holas la.			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Holas la.			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Holas la.		otal Cover	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
D		otal Cover	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Holas Ia.		otal Cover	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation
Occus Ig.  Occus Ig.  Occus Ig.  Occus Ig.  Occus Ig.	100 = 1	otal Cover	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

		-	15
Sampling Point:	- [	1-	0

Profile Description: (Description: (Description: N	natrix			x Features					
(inches) Color (m		%	Color (moist)	%	Type <sup>1</sup>	Loc2	Texture	Remarks	
2-18 5451	. 4	90	7.54R416	10	1	M	SITLORM	<i>*</i>	
		_							
	_			_					
						-			
									_
			-	_					
Type: C=Concentration,	D . D (-1)		Paduand Malsiv CS		Lor Coato		ins <sup>2</sup> l ocation:	PL=Pore Lining, M=Matri	iv
ydric Soil Indicators:	D=Depleti (Annlicah)	on, RM=F	RRs, unless other	wise note	ed.)	J Saliu Gla	Indicators for	Problematic Hydric Soil	
	Applicabl	e to an L	_ Sandy Redox (S		/		2 cm Muck		
_ Histosol (A1) _ Histic Epipedon (A2)		-	Stripped Matrix				A. C.	Material (TF2)	
Black Histic (A3)		-	_ Loamy Mucky N		) (except	MLRA 1)		ow Dark Surface (TF12)	
_ Hydrogen Sulfide (A4	)		Loamy Gleyed I			234,184,19		lain in Remarks)	
_ Depleted Below Dark		A11)	Depleted Matrix						
Thick Dark Surface (			_ Redox Dark Sur					drophytic vegetation and	t
_ Sandy Mucky Minera		_	Depleted Dark S		7)			rology must be present,	
Sandy Gleyed Matrix		_	_ Redox Depress	ions (F8)			unless distu	rbed or problematic.	
estrictive Layer (if pre	sent):								
Type:			-				Hydric Soil Prese	nt? Yes No	
Depth (inches):			_				nyunc son Frese	it: les_/\ No	
Remarks: REPLETED SURPLACE TO			AARIX VHOOL	PVAL	-VE= ,	MUNSa	al5) c	HROMA = 1 A	ient
SURFACE TO			MATRIX VALLE	PVAL	-VE= .	MUNFE	al 5) c	HROMA = 1 A	lan
SULFACE TO YDROLOGY Vetland Hydrology Indi	cators:	7/.			-VE= ,	MUNSE			
SUR HARE TO  OROLOGY Vetland Hydrology Indi	cators:	7/.	check all that apply	y)			Secondary I	ndicators (2 or more requ	ired)
SVR HARE TO  OROLOGY Vetland Hydrology Indi	cators:	7/.	check all that apply	y) ined Leave	es (B9) (e)		Secondary II  Water-S	ndicators (2 or more requ tained Leaves (B9) (MLR	ired)
SULHAE TO  /DROLOGY /etland Hydrology Indi rimary Indicators (minim	cators:	7/.	check all that apply Water-State MLRA	y) ined Leave 1, 2, 4A, a	es (B9) (e)		Secondary II Water-S 4A, a	ndicators (2 or more requ tained Leaves (B9) (MLR ind 4B)	ired)
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/DROLOGY /etland Hydrology Indicators (minimary Indicators (minimary Indicators (A1)  High Water Table (A3)  Saturation (A3)  Water Marks (B1)	cators:	7/.	check all that apply  Water-Stai  MLRA  Salt Crust  Aquatic Inv	y) ined Leave 1, 2, 4A, a (B11) vertebrate:	es (B9) (e) und <b>4B)</b> s (B13)		Secondary II  Water-S  4A, a  Drainage  Dry-Sea	ndicators (2 or more requivalend Leaves (B9) (MLR and 4B) e Patterns (B10) son Water Table (C2)	ired <u>)</u> RA 1, 2,
/DROLOGY /etland Hydrology Indirimary Indicators (minimary Indicators (A1)  Surface Water (A1)  High Water Table (A3)	cators:	7/.	check all that apple  Water-Stain  MLRA  Salt Crust  Aquatic Inv  Hydrogen	y) ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Od	es (B9) (e) and <b>4B)</b> s (B13) dor (C1)	cept	Secondary In  Water-S  4A, a  Drainage  Dry-Sea  Saturatie	ndicators (2 or more requ tained Leaves (B9) ( <b>MLR</b> Ind <b>4B)</b> e Patterns (B10) son Water Table (C2) on Visible on Aerial Image	ired) RA 1, 2,
/DROLOGY /etland Hydrology Indicators (minimary Indicators (minimary Indicators (A1)  High Water Table (A3)  Saturation (A3)  Water Marks (B1)	cators:	7/.	check all that apply Water-Stain MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F	y) ined Leave 1, 2, 4A, a (B11) vertebrate: Sulfide Oc Rhizosphei	es (B9) (e) and 4B) s (B13) dor (C1) res along l	ccept Living Rool	Secondary II  Water-S  4A, a  Drainage  Dry-Sea  Saturaties  S (C3)	ndicators (2 or more requitained Leaves (B9) (MLR and 4B) e Patterns (B10) son Water Table (C2) on Visible on Aerial Image	ired) RA 1, 2,
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#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: # ENEP City/County: Fam da Co, Ham Sampling Date: 6-2 Applicant/Owner: [WS Ranch + 7mb=1 Investigator(s): CS \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_ Landform (hillslope, terrace, etc.): Acadola Local relief (concave, convex, none): None Slope (%): \_\_\_\_\_\_ Lat: \_\_\_\_\_\_ Long: \_\_\_\_\_ Subregion (LRR): Soil Map Unit Name: \_\_\_ NWI classification: \_\_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? MO Are "Normal Circumstances" present? Yes X No \_\_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes No 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 = Total Cover That Are OBL, FACW, or FAC: (A/B) Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species FACW species FAC species FACU species = Total Cover UPL species Herb Stratum (Plot size: MMIR alon Column Totals: 2. Muninillas repens Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation FCINIA DENTA \_\_\_ 2 - Dominance Test is >50% \_\_\_ 3 - Prevalence Index is ≤3.01 10 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 100 = Total Cover Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? \_= Total Cover % Bare Ground in Herb Stratum Remarks:

Profile Desc	cription: (Describe	to the dept	h needed to docum	ent the I	ndicator	or confirm	n the absenc	e of Indicators.)	
Depth	Matrix			: Feature:				·	
(inches)	Color (moist)	%	Color (maist)	%	Type	Loc	Texture	Remarks	<del></del>
0-2	104R3/2	100		0			SiH 100	<u>m</u>	
2-4	2,544/2	95	104R3/3	5		m	1.1	faint redox	
21-9	104R3/2	98	104R3/3	2	$\overline{C}$	M	)]	faint rode	7Y
a-1/2	1121	95	1048314	$\overline{}$	-			distinct redo	11.
19-16	10-116-12	- <del>12</del> -	1071274					CHSIMICI LOGIC	<u> </u>
	<del></del>				<del></del>				
	<del></del>								
					100				
				,100	Pro-				
¹Type: C=C	oncentration, D=Dep	oletian, RM=	Reduced Matrix, CS	=Covered	or Coate	d Sand Gr		ocation: PL=Pore Lining, M=N	
Hydric Soll	Indicators: (Applic	able to all L	.RRs, unless other	vise note	∍d.)		Indicat	ors for Problematic Hydric	Soils³:
Histosol	(A1)		Sandy Redox (S	-			_	m Muck (A10)	
1 —	pipedon (A2)	0	Stripped Matrix (				10 2 22	d Parent Material (TF2)	
	istic (A3)		Loamy Mucky M			MLRA 1)	200	ry Shallow Dark Surface (TF1 her (Explain in Remarks)	2)
	en Sulfide (A4) d Below Dark Surfac	- 'e (Δ11)	Loarny Gleyed M Depleted Matrix		,		_ 0	ilei (Expidii) iii Remarks)	
	ark Surface (A12)		Redox Dark Surl				3Indical	ors of hydrophytic vegetation	and
1 —	Jucky Mineral (S1)		Depleted Dark S		7)			and hydrology must be prese	
Sandy C	Gleyed Matrix (S4)		Redox Depression	ons (F8)			unie	ss disturbed or problematic.	
Restrictive	Layer (if present):								
Туре:									$\vee$
Depth (in	ches):						Hydric So	il Present? Yes	No <u>X</u>
Remarks:	1-00 not	mest	F666 h	mt 41	hicko	h Qua	h w/ 12	of surface	
9-16"	1 ps not r	neit	F6 hIC +	aint		0,	,,,		
4-9"	das not 1	neet i	F6 blc hig	h va	lue, +	- not	F3 4	o/c taunt	
2-9	1000 1101								
HYDROLO	IGY								
	drology Indicators	•							
1			; check all that apply	)			Seco	ondary Indicators (2 or more re	equired)
1	Water (A1)	3110 10 9011 90	Water-Stair		es (B9) (e:	xcent		Water-Stained Leaves (B9) (N	
	ater Table (A2)			, 2, 4A, a		voob.		4A, and 4B)	
Saturati			Salt Crust (		,			Drainage Patterns (B10)	
1 —	farks (B1)		Aquatic Inv	•	s (B13)		_	Dry-Season Water Table (C2)	
	nt Deposits (B2)		Hydrogen S		. ,			Saturation Visible on Aerial Im	
1 —	posits (B3)		Oxidized RI			Living Roo		Geomorphic Position (D2)	
Algal Ma	at or Crust (84)		Presence o	f Reduce	d iron (C4	<b>)</b> )		Shallow Aquitard (D3)	
Iron De	posits (B5)		Recent from	Reduction	on in Tilled	d Soils (C6	S)	FAC-Neutral Test (D5)	
Surface	Soil Cracks (B6)		Stunted or	Stressed	Plants (D	1) (LRR A	(	Raised Ant Mounds (D6) (LRF	RA)
_	ion Visible on Aerial			lain in Re	marks)			Frost-Heave Hummocks (D7)	
Sparsel	y Vegetated Concav	re Surface (B	18)				•		
Field Obser	rvations:		V						
Surface Wat	ter Present?	r'es N	lo Depth (inc	hes):		_			
Water Table	Present?	Yes N	lo Depth (inc	hes):					$\searrow$
Saturation P		res N	lo 🖳 Depth (inc	hes):		_   Wetl	and Hydrolog	gy Present? Yes	No
	pillary fringe) corded Data (stream	n nauge moi	nitoring well, aerial p	hotos pr	evious las	pections)	if available		
Describe Ne	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	30080, 1110		riuswa, pri		P-201,0110/1			
Remarks:			-t-	7			1 -	1	
Remarks:	cason, l	Jsh Ve	gelation a	ind	no s	ighs	of po1	nding or	
Remarks:	cason Li	1 11.	geletion a				of bo	nding or	
Remarks: dry S Near	cason, Li	1 11.	seletion a	45		501	of po	nding or pe surface	

Project/Site: RUEP	City	/County: Fema	106 HUM Sampling Date: 6-2-15
Applicant/Owner: Puss Rance & Tim	162		State: A Sampling Point: UTI-U
Investigator(s):	Sec	tion Township Ra	inge:
Landform (hillslope, terrace, etc.): Flood plair	) Loc	cal relief (concave	convex, none): <u>(MXX</u> Slope (%): <u>&lt; 5</u>
Subregion (LRR):	Lat:	,	Long: Datum:
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical for the			
			"Normal Circumstances" present? YesX_ No
Are Vegetation, Soil or Hydrology			
			ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes			
Hydric Soil Present? Yes	No <u>⊀</u>	Is the Sampled	,
Wetland Hydrology Present? Yes	No K	within a Wetlan	nd? Yes No
Remarks:			
VEGETATION – Use scientific names of pla	nts.		
Trop Stephen (Diet sing)		ominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)  1		ecies? Status	Number of Dominant Species
2.			That Are OBL, FACW, or FAC: (A)
3			Total Number of Dominant Species Across All Strata:  (B)
4			(b)
	<u> 8</u> =1	otal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3.			OBL species  x1 = O
4.			FACW species $\frac{15}{2}$ x 2 = $\frac{30}{2}$
5			FAC species $30 \times 3 = 90$
Literate Standard (Distriction	<u> </u>	otal Cover	FACU species $\frac{\partial}{\partial x} = \frac{\partial}{\partial x} = \partial$
Herb Stratum (Plot size:)  1. Achothera (alendula)	20	D 4/1.	20
2. Fernea moune		D FAC	0 00
3. Nime x transitories	15	FARW	Prevalence Index = B/A =
4. Feshera anndinas	20 D		Hydrophytic Vegetation Indicators:
5. Tat repens	10	FAC	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
6. Malva nichenso	_5	NL	3 - Prevalence Index is ≤3.0'
7			4 - Morphological Adaptations (Provide supporting
8			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants¹
10			Problematic Hydrophytic Vegetation¹ (Explain)
11	90 = TO	-1-1-0	Indicators of hydric soil and wetland hydrotogy must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	<u> 40 = 10</u>	otal Cover	
1			Hydrophytic
2			Vegetation
% Bare Ground in Herb Stratum _/O	= To	otal Cover	Present? Yes No
Remarks:	<u> </u>		
			11
L			1

Described and the second secon		Sampling Funit, OF 12
	epth needed to document the indicator or	confirm the absence of indicators.)
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type 1	.oc² Texture Remarks
0-A 10183/2 100		- 5/4/oam -
101010	1240361-5	N 11 1
5-8 2.543/2 95		Sitt louis fount rodox
8-16 ZSY4/2 98	104R3/3 2 C 1	n 11 taint redoc
<sup>1</sup> Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Covered or Coated S	and Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to a		Indicators for Problematic Hydric Solis <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MI	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	3e-attackers of feedbackers to the consistency of
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Depleted Dark Surface (F7) Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):	Nedox Depressions (Fo)	diless distarbed of problematic.
Type:		
		Hydric Soll Present? Yes No
Depth (inches):	<del></del>	
not meet F not meet #3 1 redox are fair	6 0 / 8-10 hayer 0/c 5-8" layer is no H,	thick enough +
HYDROLOGY		
Wetland Hydrology Indicators:	<del></del>	
Primary Indicators (minimum of one requi-	ed, check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (exce	pt Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Livi	ng Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Se	oils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (	
Inundation Visible on Aerial Imagery	B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface	: (B8)	*
Field Observations:	\	
	No Depth (inches):	
Water Table Present? Yes	No Depth (inches):	$\vee$
	No _c Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	monitoring well, aerial photos, previous inspec	
besume neconen bala (stream gauge, )	normaning wen, aeriai priotos, previous itispec	outal it available.
Remarks:		
min tropo on he	rm along bluss	Cr.
		7/
	_	
1		

Project/Site: Russ Rance + Timbe	····	Citv/C	ounty: Ferm	dalo HVM Sampling Date: 6-2-1
Applicant/Owner: Jay Russ ENE	P	,	1001	State: CA Sampling Point: V1.T1 -
				ange:
		Local	relief (concave	convex, none): Carve K Slope (%): <5
				Long: Datum;
				NWI classification
Are climatic / hydrologic conditions on the site typical for the				
Are Vegetation Soil or Hydrotopy	significantly	distruct	ES 110 _	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology				
				ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes		Jaili	Piling Politici	ocations, transects, important features, etc.
Hydric Soil Present? Yes			Is the Sampled	d Area
Wetland Hydrology Present? Yes	No		within a Wetla	
Remarks:			<del></del>	
VEGETATION – Use scientific names of plan	nts.			
Tree Stratum (Plot size)	Absolute	Dom	inant Indicator	Dominance Test worksheet:
1			ies? Status	Number of Dominant Species
2				That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata (B)
4				
Sapling/Shrub Stratum (Plot size:)	2	= Tot	al 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
4				FACW species $\frac{10}{200}$ x 2 = $\frac{20}{1000}$
5				FAC species 65 x3 = 195
Hosh Starters (Blate See	8	= Tota	al Cover	1700 species X4=
Herb Stratum (Plot size: )	10		FACW	UPL species $O$ x 5 = $O$ Column Totals: $O$ (A) $O$ (B)
2. Dach is alon	20	D		
3. Ranceles senere	10		FAC	Prevalence Index = B/A = 3.15
4. Infolium moline	10		FAC	Hydrophytic Vegetation Indicators:
5. Frshia perine	25	D	FAC	1 - Rapid Test for Hydrophytic Vegetation     2 - Dominance Test is >50%
6. POA compressa	5		FACU	3 - Prevalence Index is ≤3 0¹
7. Holius lanahis	20	D	FAC	4 - Morphological Adaptations¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wettand Non-Vascular Plants¹
10				Problematic Hydrophytic Vegetation¹ (Explain)
11	100			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	100	= Tota	l Cover	To probatit, anicos distance of problematic
1,				Elizabanakouta
2				Hydrophytic Vegetation
	B	= Tota	l Cover	Present? Yes No _X
% Bare Ground in Herb Stratum				
not growing as hydrop	dyto			

SOIL	easibo to the d	th mandad to day				Sampling	Point UTT-
Profile Description: (De				or or confir	m the absence o	r indicators.)	
	latrix pist) %	Color (moist)	x Features	1004		D	
(inches) Color (mo		1/11/02/-	% Type	Loc*	Texture	Rem	1
C)-18 7-24-11	2 98	1046212			loamy san	a tan	t, redox
						/<00th	1/115027774
-						C) ,	7
							<del></del>
<del></del>	<del></del>		· — —				
Type: C=Concentration,	D=Depletion, RM	=Reduced Matrix, CS	S=Covered or Co	ated Sand G	Grains <sup>2</sup> Locat	ion: PL=Pore Lin	ing M=Matrix
ydric Soil Indicators: (				2100 00110 0		for Problematic	
Histosol (A1)		Sandy Redox (S	•			Muck (A10)	,,
_ Histic Epipedon (A2)		Stripped Matrix				arent Material (TF	2)
_ Black Histic (A3)			(30) Nineral (F1) (exce	ont MI PA 1	_	Shallow Dark Surfa	*
_ Hydrogen Sulfide (A4)	١	Loamy Gleyed		princisa i		(Explain in Remar	
_ Depleted Below Dark		Depleted Matrix			_ 011101	(Explain in items	113)
_ Thick Dark Surface (A		Redox Dark Su			3Indicators	of hydrophytic ve	getation and
Sandy Mucky Mineral		Depleted Dark :				hydrology must b	
_ Sandy Gleyed Matrix		Redox Depress	•			disturbed or proble	•
estrictive Layer (if pres					1		
Type:	•						
Depth (inches):					Hydric Soll Pi	resent? Yes	No X
emarks:	1 - 1 0	- 1dr f	FLOT CO	a DX	not our	sibly fro	1. 1
ises hot	neet Si	> 017		(	LIGHT CATE	SOV CO	Must)
150 red o)	care	Sp0114 1	dison7	nuor	15 0058	57 h fr	m
SUIFACI	compac	Han '			71	1000	-/ ' '
/DROLOGY		-/ <u>VI</u>					···· <u>-</u> ·
etland Hydrology Indic	ators:						<u> </u>
		di abaak all that apple	.A		Sacard	an Indicators /2 a	r mara raquirad\
rimary Indicators (minimu	uiti oi one reduire		•	AT 77 .		ary Indicators (2 o	
Surface Water (A1)		<del></del>	ned Leaves (89)				(B9) (MLRA 1, 2,
_ High Water Table (A2	)		1, 2, 4A, and 4B)			A, and 4B)	
_ Saturation (A3)		Salt Crust	(B11)		Drai	nage Patterns (B	10)
_ Water Marks (B1)		Aquatic Inv	vertebrates (B13)		Dry-	Season Water Ta	ble (C2)
_ Sediment Deposits (B	2)	Hydrogen	Sulfide Odor (C1)	1	Sati	iration Visible on a	Aerial Imagery (C9)
_ Drift Deposits (B3)		Oxidized F	Nizospheres alor	ng Living Ro	ots (C3) Geo	morphic Position	(D2)
Algal Mat or Crust (B4	<b>I</b> )	Presence	of Reduced Iron (	C4)	Sha	flow Aquitard (D3)	
Iron Deposits (B5)		Recent Iro	n Reduction in Ti	led Solls (C		-Neutral Test (D5	
_ Surface Soil Cracks (I	36)	_	Stressed Plants		_	ed Ant Mounds ((	•
Inundation Visible on			lain in Remarks)	(= :, (=::::	-	st-Heave Hummod	
_ Sparsely Vegetated C		. —	naii iii remarka,		9.	it ticate tianimo	
eld Observations:	oncare suitace (	<i></i>					
				10			
urface Water Present?		12	ches)::				
Vater Table Present?	Yes	No Depth (inc	ches);				( /
aturation Present?	Yes	No X Depth (in:	ches):	Wet	land Hydrology F	resent? Yes _	No <u>X</u>
ncludes capillary fringe)		16			11 12-1-1		
escribe Recorded Data (	stream gauge, me	onitoring well, aerial p	onotos, previous l	nspections)	ii available:		
temarks:	9				<del></del>		

1

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Fandale hum Sampling Date 6-2-LS Investigator(s): Section, Township, Range: \_\_\_\_ Landform (hillslope, terrace, etc.): Flood plan Local relief (concave, convex, none): None Slope (%): Subregion (LRR):\_\_ Long: Lat: Soil Map Unit Name \_\_\_\_ \_\_\_\_ NWI classification Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (if no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \_\_\_\_ No \_\_ Is the Sampled Area Hydric Soil Present? Yes \_\_\_\_\_ No \_\_\_\_\_ within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_ 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 = Total Cover That Are OBL, FACW, or FAC (A/B) Sapling/Shrub Stratum (Plot size: ) Prevalence Index worksheet: Total % Cover of: 2.\_\_\_\_\_ OBL species FACW species FAC species FACU species = Total Cover UPL species Herb Stratum (Plot size: Intolum reans Column Totals: \_\_ 305 Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 5. Poa comparish 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 100 = Total Cover Woody Vine Stratum (Plot size)

= Total Cover

% Bare Ground in Herb Stratum

US Army Corps of Engineers

Remarks:

Hydrophytic Vegetation Present?

Profile Description: (Describe to the depth needed to document the indicator	or confirm	n the absence	of Indicators.)	
Depth Matrix Redox Features				
(inches) Color (moist) % Color (moist) % Type	Loc	Texture	Remarks	
0-7 104R2/2100 - 0 -		514 log	un —	
7-162.543/2 957.54R3/3 5 C	M	silt	root lining 104R3/2	
		31.1	12%	
			<u> </u>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coat	ed Sand Gr	ains Loc	ation: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			rs for Problematic Hydric Soils <sup>3</sup> :	
Histosol (A1) Sandy Redox (S5)			Muck (A10)	
Histic Epipedon (A2)  Stripped Matrix (S6)	A BELL 20 A 41		Parent Material (TF2)  Shallow Dark Surface (TF12)	
Black Histic (A3) Loamy Mucky Mineral (F1) (excep Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	CWLKA 1)		er (Explain in Remarks)	
Depleted Below Dark Surface (A11)  Depleted Matrix (F2)		0	a (Explain in Nemarks)	
Thick Dark Surface (A12)  Redox Dark Surface (F6)		3Indicator	rs of hydrophytic vegetation and	
Sandy Mucky Mineral (S1)  Depleted Dark Surface (F7)			nd hydrology must be present,	
Sandy Gleyed Matrix (S4) Redox Depressions (F8)			s disturbed or problematic.	
Restrictive Layer (if present):				
Type:				
Depth (inches):		Hydric Soll	Present? Yes No No	
Remarks:				
₩.1				
HYDROLOGY				
Wetland Hydrology Indicators:		100		
		Secon	dary Indicators (2 or more required)	
Wetland Hydrology Indicators:	except		dary Indicators (2 or more required) /ater-Stained Leaves (B9) (MLRA 1, 2,	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	except			
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (e	except	W	fater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Water-Stained Leaves (B9) (6)  MLRA 1, 2, 4A, and 4B)	except	W	/ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water-Stained Leaves (B9) (6)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)	except	W Id Id	fater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage 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)  MLRA 1, 2, 4A, and 4B) Aquatic Invertebrates (B13)		W Di Si	Valer-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2)  Hydrogen Sulfide Odor (C1)	Living Roo	W Di Sa ols (C3) Gi	fater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation 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)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Wetland Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along	Living Roo 4)	W Di Si Si sis (C3) Si	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Water Marks (B4)  Water Marks (B4)  Water Marks (B1)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along  Presence of Reduced Iron (C	Living Roo 4) d Soils (C6	W Di Si Si Si Si Si Si	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Water Marks (B5)  Presence of Reduced Iron (C1)  Recent Iron Reduction in Tilled	Living Roo 4) d Soils (C6	W Di Si sis (C3) Si Si Si Si Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (empty of the minimum of the end of th	Living Roo 4) d Soils (C6	W Di Si sis (C3) Si Si Si Si Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ratinage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)  Water Alagal that apply MLRA 1, 2, 4A, and 4B) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Coxidized Rhizospheres along Recent Iron Reduction in Title	Living Roo 4) d Soils (C6	W Di Si sis (C3) Si Si Si Si Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ratinage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6	W Di Si sis (C3) Si Si Si Si Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ratinage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6	W Di Si sis (C3) Si Si Si Si Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ratinage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 01) (LRR A	W Di Si sis (C3) Si Si Si Si Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algai Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water A1)  Water Stained Leaves (B9) (6  MLRA 1, 2, 4A, and 4B)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along  Presence of Reduced fron (C  Recent Iron Reduction in Title  Stunted or Stressed Plants (C  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Ves  No  Depth (inches)  Saturation Present?  Yes  No  Depth (inches):	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)	Living Roo 4) d Soils (C6 1) (LRR A)		rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rhallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)	

Project/Site: RENEP		City/County: Ferr	Walt HUM Sampling Date: 6-2-15
Applicant/Owner: NUSS Narrh + Ti	mbe	. , -,	State: A Sampling Point: 0172-0
Investigator(s):	5	Section Township Pa	inde,
Landform (hillstope, terrace, etc.): Flood plane	7	Local relief (concave.	сопуех, none): Slope (%): S
Subregion (LRR):	Lat	(======================================	Long: Datum:
Soil Map Unit Name:			
Are climatic / hydrologic conditions on the site typical for the			
			"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally prob	nlematic?	ended explain any popular in Remarks )
			ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No 48		
Hydric Soil Present? Yes I	NoX	Is the Sampled	l Area
Welland Hydrology Present? Yes	No	within a Wetlar	nd? Yes No
Remarks:			
4- 0			
VEGETATION – Use scientific names of plan	nte		
The state of the s		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2,			Total Number of Dominant 2
3			Species Across All Strata: (B)
4	12	= Total Cover	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		= Total Cover	That Are OBL, FACW, or FAC: (A/B)
1			Prevalence Index worksheet:
2			
3.			OBL species
4			FAC species
5			FACU species /0 ×4= 40
Herb Stratum (Plot size:)	1	= Total Cover	UPL species 25 x 5 = 125
1. Feches annolis	25	D NL	Column Totals: 135 (A) 460 (B)
2. Tlanc roms	15	FAC	Prevalence Index = B/A = 3, 4
3. The Vepens	20	D FAC	Hydrophytic Vegetation Indicators:
4. Mimox minitaris		FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Holauslanat		<u>FAC</u>	2 - Dominance Test is >50%
6. Poa compresse.	- <del>-                                  </del>	FACU	3 - Prevalence Index is ≤3.0¹
7. Vach / R glom	- <del>22</del> -	FACU	4 - Morphological Adaptations (Provide supporting
9.	_( <u>/\(_)</u>	D FAC	data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants
10.			Problematic Hydrophytic Vegetation¹ (Explain)
11			Indicators of hydric soil and wetland hydrology must
	- 601	Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1.		<del></del>	Hydrophytic
2			Vegetation Present? YesNo
% Bare Ground in Herb Stratum		Total Cover	110 4
Remarks;			
Vegetation not grown	7 95	hychop	yt, Facultative

VVIL		<del></del>
Profile Description: (Describe to the depth needed to do	cument the indicator or confirm t	the absence of Indicators.)
	edox Features	
(inches) Color (moist) % Color (moist)	% Type' Loc'	Texture Remarks
0-5 10413/2 100 -		10am
15-10 2543/3 99 IMP3/4	1 1 C M	Immessed - Caint redox
0-16 EV14/2 98 15403		
10-10 31 12 10 10-11C3		amy loan
	<del></del>	
IT and Carlo and the Carlo and	CC-Coursed on Control Cond Cont	an Standard Displace Linia - Machine
Type: C=Concentration, D=Depletion, RM=Reduced Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless o	· · · · · · · · · · · · · · · · · · ·	ns. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
	·	·
Histosol (A1) Sandy Redd	* D *	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Ma		Red Parent Material (TF2)
1 — · · · — · ·	ky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
1 <del></del>	red Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted M	atrix (F3) Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
		wetland hydrology must be present,
	ark Surface (F7) essions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	essions (1 b)	uniess disturbed of problematic.
	1	
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks: not meet 55 b/c not closs not meet F6 a 10" b	enough contrast	and 42%
does not the	L would be and -	a start at QU/not third
Lizes not meet 16 2 10 0	IC wools have	10 SIMT W O (Enough)
HYDROLOGY		
HYDROLOGY		Secondary Indicators (2 or more required)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a		
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a Surface Water (A1) Water-	opply) Stained Leaves (B9) (except	Secondary Indicators (2 or more required)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a Surface Water (A1) Water High Water Table (A2) ML:	opply) Stained Leaves (B9) (except RA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a graph of the second of t	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a graph of the second of t	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1) Water—High Water Table (A2) ML:  Saturation (A3) Salt Cr.  Water Marks (B1) Aquati Sediment Deposits (B2) Hydrog	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; check all that a gradual content of the primary Indicators (minimum of one required; chec	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along Living Roots	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  (C3) Geomorphic Position (D2)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a graph of the second of t	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) ten Sulfide Odor (C1) ad Rhizospheres along Living Roots toe of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a graph of the state	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a graph of the standard	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ged Rhizospheres along Living Roots ace of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a substitution of the su	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ged Rhizospheres along Living Roots ace of Reduced Iron (C4) t Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a substitution of the su	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ad Rhizospheres along Living Roots are of Reduced Iron (C4) thron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a substitution of the second of the substitution of the substitu	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) len Sulfide Odor (C1) ed Rhizospheres along Living Roots ice of Reduced Iron (C4) Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a substitution of the sequence of the control of the c	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) gen Sulfide Odor (C1) ad Rhizospheres along Living Roots are of Reduced Iron (C4) thron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) if Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that a surface Water (A1)	Stained Leaves (B9) (except RA 1, 2, 4A, and 4B) ust (B11) c Invertebrates (B13) per Sulfide Odor (C1) ed Rhizospheres along Living Roots ace of Reduced Iron (C4) it Iron Reduction in Tilled Soils (C6) d or Stressed Plants (D1) (LRR A) Explain in Remarks)  (inches): (inches): (inches): (inches): (inches):	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D8) (LRR A)  Frost-Heave Hummocks (D7)

Project/Site: R ENEP	Citv/C	County: Fern	dale Hum Sampling Date: 6-2-1
Applicant/Owner: Nuss Ranch + Time	5	10 m	State: CA Sampling Point UITZ -
Investigator(s):	Section	on, Township, Ra	nde.
Landform (hillstope, terrace, etc.): £loadolain	Loca	I relief (concave	ringe:
			Long: Datum:
Soil Map Unit Name;			
Are climatic / hydrologic conditions on the site typical for the	is time of years 2. V	/ Y N-	NVVI classification;
			III
			"Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS - Attach site map		-	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?  Yes X		·F3 F	C.C. \ I/SACE
Hydric Sail Present? Yes X		Is the Sampled	Area (Solviver)
Wetland Hydrology Present? Yes N	10	within a Wetlar	nd? Yes No No
Remarks:			
			- 2
VEGETATION – Use scientific names of plan	nts.		
Tree Stratum (Plot size:)		ninant Indicator	Dominance Test worksheet:
1	% Cover Spe		Number of Dominant Species
2.			That Are OBL, FACW, or FAC: (A)
3.			Total Number of Dominant Species Across All Strata: (B)
4		-5	
	<b>Ø</b> = To	tal 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:
2			OBL species  x1 = Q
3			FACW species  x2 = 0
5.			FAC species 90 x3 = 270
J	Ø - To	tal Cover	FACU species
Herb Stratum (Plot size:)		al Covel	UPL species  x 5 =
1. Holws lanalus	40 D	FAC	Column Totals: 100 (A) 310 (B)
2. Trollen irons	15_	FAC_	Prevalence Index = B/A = 3,16
3. France perenne	20 D	FAC	Hydrophytic Vegetation Indicators:
4. Poa compressa	- <u>10</u>	FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Manualis in ping	- 13	FAC	2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.01
7.       8.			4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants <sup>†</sup>
10			Problematic Hydrophytic Vegetation¹ (Explain)
11.			Indicators of hydric soil and wetland hydrology must
	00 = Tota	al Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1	- — —		Hydrophytic
2			Vegetation Present? Yes No
% Bare Ground in Herb Stratum	= Tota	al Cover	, , , , , , , , , , , , , , , , , , , ,
Remarks;			
			1

	nfirm the absence of Indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc	On S. Communication of the Com
	Sittleam
5-16543/2 95 10MR3/3 5 C N	<b>1</b>
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated San	
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>1</sup> :
Histosof (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLR)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)  Particled Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)  — Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Middly Millers (S4)  Sandy Gleyed Matrix (S4)  Redox Depressions (F8)	uniess disturbed or problematic.
Restrictive Layer (if present):	
Туре:	\$ .
Depth (inches):	Hydric Soil Present? Yes No No
Remarks.	
Typinano,	
	j
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required, check all that apply)	Consider Indicators (Consumer accident)
	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (except	
Surface Water (A1) Water-Stained Leaves (B9) (except High Water Table (A2) MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)
High Water Table (A2)	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (810)
High Water Table (A2) Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13)	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)  MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  MLRA 1, 2, 4A, and 4B)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  MLRA 1, 2, 4A, and 4B)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B1)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR  Other (Explain in Remarks)	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  MLRA 1, 2, 4A, and 4B) Salt Crust (B1) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Presence of Reduced Iron (C1) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR Other (Explain in Remarks) Field Observations:	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR)  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Depth (inches)	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Water Table Present?  MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):  Depth (inches):	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inches):  Depth (inches):  Univertebrates (B13)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Stunted or Stressed Plants (D1) (LR)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Depth (inches):  Depth (inches):	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Water Table Present?  MLRA 1, 2, 4A, and 4B) Salt Crust (B1) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Stunted or Stressed Plants (D1) (LR) Other (Explain in Remarks) Depth (inches): Depth (inches): Saturation Present?  Ves No Depth (inches): Depth (inches):	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Atgal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Water Table Present? Saturation Present? Yes No Depth (inches): Univertebrates (B13) Aquatic Invertebrates (B13) Aquatic Invertebr	Water-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  R A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
High Water Table (A2) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Secretary Freedom Previous Inspection  Contact (B11) Aquatic Invertebrates (B13) Aquatic Invertebrates (	Water-Stained Leaves (89) (MLRA 1, 2,
High Water Table (A2) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Atgal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Service Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	Water-Stained Leaves (89) (MLRA 1, 2,
High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes	Water-Stained Leaves (89) (MLRA 1, 2,
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Water Table Present? Saturation Present? Yes No Depth (inches): Saturation Present? Saturation Present P	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  R A) Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No

Project/Site: ENEP	City	v/County: Fer	State: CA Sampling Point: U T3 -
Applicant/Owner: Nuss Ramm +	1mber	33	State: CA Sampling Point: UIT3 -
Investigator(s):	Se	ction Township Ra	ange.
Landform (hillslope, terrace, etc.): _ Flood olar	1 Lo	cal relief (concave.	convex, none): Slope (%):
			Long: Datum:
Soil Map Unit Name			\$0.40 -t- 20 At
Are climatic / hydrologic conditions on the site typical for	this time of year?	Yes X No	(If no explain in Remarks )
			"Normal Circumstances" present? Yes
Are Vegetation, Soil, or Hydrology			
			ocations, transects, important features, etc.
The state of the s	No_X	T	
Hydric Soil Present? Yes		Is the Sampled	
Wetland Hydrology Present? Yes	No _X	within a Wetla	nd? Yes No
Remarks:	-		
VEGETATION – Use scientific names of pl	lants.		
Tree Stratum (Plot size:)		ominant Indicator pecies? Status	Dominance Test worksheet:
1,			Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2,			38 2 7 8
3.			Total Number of Dominant Species Across All Strata:  (B)
4,			,
Conline/Chruh Ctenture /Dist size	(B) =	Fotal 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 =
	40 =	Total Cover	FACU species x 4 =
Herb Stratum (Plot size:	20	D =	UPL species x 5 =
2. Dactylis alon	— <del>20</del> –	D_FAC	Column Totals: (A) (B)
3. PSA congrica	$-\frac{23}{10}$	D FACU	Prevalence Index = B/A =
4. Dames hard	— <i>50</i> - 4	D FACU FACU	Hydrophytic Vegetation Indicators:
5. Geranian dissect	<del>- ⊋</del> -		1 - Rapid Test for Hydrophytic Vegetation
6. Manne lus verens	10	FAC	2 - Dominance Test is >50%
7. Tume & press.		FANN	3 - Prevalence Index is \$3.01
8.			4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants
10.			Problematic Hydrophytic Vegetation¹ (Explain)
11			Indicators of hydric soil and wetland hydrology must
Minorly Vinn Stratum (Dlot sing)	100 = T	otal Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			Hydrophytic Vegetation
	10	otal Cover	Present? Yes No
% Bare Ground in Herb Stratum	<u> </u>	utai Cuver	
Remarks:			
Ca.			
			_

SOIL		Sampling Point 0173-0
Profile Description: (Describe to the	depth needed to document the indicator or confin	m the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type Loc²	
0-4 7.0431.2 34	10/K2/3 1/ ( VI)	loan taint/in social
7-16 6,5473 95	104RR314/SY4/5 C/R M	loany sand soil mixed law
<sup>1</sup> Type: C=Concentration, D=Depletion, I	RM=Reduced Matrix, CS=Covered or Coated Sand G	Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Solls <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	· · · · · ·	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Militeral (31) Sandy Gleyed Matrix (S4)	Depleted Dark Surface (F7) Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if present):		uniess disturbed of problematic.
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Chroma too high	and contrast too lon	JTS MEET 1-6 (0-6")
Joe not most 55	and contrast too long b/c not w/in 6" & S	urtale
Open when meet 25	, 9/2 //3	
	<u> </u>	
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one requ	rired; check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres along Living Roo	
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (Co	
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A	_
Inundation Visible on Aerial Imagery	· · · · · · · · · · · · · · · · · · ·	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface	.e (B8)	
Field Observations:	X	
Surface Water Present? Yes		
	No Depth (inches)	X
Saturation Present? Yes (includes capillary fringe)	No Depth (inches): Wetl	land Hydrology Present? Yes No.
	monitoring well, aerial photos, previous inspections),	if available:
Remarks:	×	<del></del>

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Fendale HUM Sampling Date: 10-2-Section, Township, Range: \_\_\_\_\_ Landform (hillslope, terrace, etc.): Flood plan Local relief (concave, convex, none): None Slope (%): \_\_\_\_\_ Long: \_\_\_\_ Subregion (LRR) Lat: Soil Map Unit Name: \_\_\_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? NO Are "Normal Circumstances" present? Yes X No Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Yes Is the Sampled Area Hydric Soil Present? No within a Wetland? Wetland Hydrology Present? Yes No\_ 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: (B) Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: (A/B) Sapling/Shrub Stratum (Plot size: \_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species \_\_\_\_ x 3 = FACU species \_\_\_ x 4 = \_\_ = Total Cover \_\_\_\_\_ × 5 = \_\_\_\_ UPL species Herb\_Stratum (Plot size: \_ DA 10mpressa Column Totals: \_\_\_ \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = \_\_ **Hydrophytic Vegetation Indicators:** \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_\_ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0<sup>1</sup> \_\_ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? \_\_= Total Cover % Bare Ground in Herb Stratum Remarks:

Sampling	Point U	173-	h
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a	VI.	14.0

Profile Description: (Describe to the depth needed to	document the Indicator or confirm	the absence of indicators.)		
Depth Matrix	Redox Features			
(inches) Color (moist) % Color (mo	oist)%Type <sup>1</sup> _Loc <sup>2</sup>	Texture Remarks		
0-7 2543/2 100 -	0	loan		
7-15 544/2 95 104R	3/2 5 C W			
1 2 10 10	15 2 2 11			
<sup>1</sup> Type: C=Concentration, D=Deptetion, RM=Reduced Ma	trix, CS=Covered or Coated Sand Gra	ains <sup>2</sup> Location: PL=Pore Lining, M=Matrix.		
Hydric Soil Indicators: (Applicable to all LRRs, unles	s otherwise noted.)	Indicators for Problematic Hydric Solls <sup>3</sup> :		
Histosol (A1) Sandy F	•			
	Matrix (S6)	2 cm Muck (A10)		
		Red Parent Material (TF2)		
l —	Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)		
	Bleyed Matrix (F2)	Other (Explain in Remarks)		
	Matrix (F3)	,		
	ark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and		
	Dark Surface (F7)	wetland hydrology must be present,		
	epressions (F8)	unless disturbed or problematic.		
Restrictive Layer (if present):				
Туре:				
Depth (inches):	*	Hydric Soll Present? Yes No		
Remarks:	1 1	100 7 110		
Soil featimes coul	d he remenses	-L 1-L 1 - 1		
0011 ( 000,0000	- IL I CHINEAU	T. 1015 01 201		
Lexture unixing bli	1) <1/1+ +-13	1 (-1		
Remarks: Soil features coult Lexture mixing by	a sill to the	. sand (= 10am)		
HYDROLOGY				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one required; check all the	st south)	December 1 4 A 40		
		Secondary Indicators (2 or more required)		
	ter-Stained Leaves (89) (except	Water-Stained Leaves (B9) (MLRA 1, 2,		
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)		
Saturation (A3) Sa	t Crust (B11)	Drainage Patterns (B10)		
	uatic Invertebrates (B13)	Dry-Season Water Table (C2)		
,	frogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)		
<del></del>				
<del>-</del>	dized Rhizospheres along Living Roots			
	sence of Reduced Iron (C4)	Shallow Aquitard (D3)		
	cent Iron Reduction in Tilled Soils (C6)	FAC-Neutral Test (D5)		
Surface Soil Cracks (B6) Stu	nted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)		
Inundation Visible on Aerial Imagery (B7) Oth	er (Explain in Remarks)	Frost-Heave Hummocks (D7)		
Sparsely Vegetated Concave Surface (B8)	,	_		
Field Observations:				
	-Market A			
	pth (inches):	\ .		
Water Table Present? Yes No De	pth (inches):	X		
Saturation Present? Yes No De	pth (inches): Wetlan	nd Hydrology Present? Yes No		
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if	available		
Remarks:	<u>-</u>	<u> </u>		
Remarks:				

#### WETLAND DETERMINATION DATA FORM -- Western Mountains, Valleys, and Coast Region City/County: Ferral Hum Sampling Date: 6-2 Applicant/Owner: Section, Township, Range: \_\_\_ Landform (hillslope, terrace, etc.): \_Hondalas Local relief (concave, convex, none): VCVC Subregion (LRR): Datum: \_ Soil Map Unit Name: \_\_\_ \_\_\_ NWI classification: \_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? W Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Is the Sampled Area Hydric Soil Present? Yes within a Wetland? Wetland Hydrology Present? Remarks: VEGETATION - Use scientific names of plants. Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: ) <u>% Cover</u> <u>Species?</u> Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species FACW species FAC species FACU species = Total Cover Herb Stratum (Plot size: **UPL** species Column Totals: Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% ✓ 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>†</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_

not acting as hydrophytes / seeded in

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Sampling Point

Profile Description: (Describe to the de	pth needed to document the indicator or	confirm the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	55 E
(inches) Color (moist) %	Color (moist) % Type	Loc <sup>2</sup> Texture Remarks
1-6 2.51312 99	2,54414 1. C	Msandyloam pockets of
6-18 254312 100		- lace with a lace
10 10 2 10 1 2 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3		- loany sare color variation
<sup>1</sup> Type: C=Concentration D=Depletion RM	=Reduced Matrix, CS=Covered or Coated	Sand Crains 21 position DI - Day Living Market
Hydric Soil Indicators: (Applicable to al	LRRs, unless otherwise noted )	Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosof (A1)	Sandy Redox (S5)	
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except N	Red Parent Material (TF2)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		and distributed of productivation
Туре		
Depth (inches):	<del></del>	Hedric Call Connection v
Remarks	<del></del>	Hydric Soil Present? Yes No
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one require	d: check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (exc	
High Water Table (A2)		
Saturation (A3)	MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	4A, and 4B)
Water Marks (B1)	•	Drainage Patterns (B10)
Sediment Deposits (B2)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Drift Deposits (B3)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
<u> </u>	Oxidized Rhizospheres along Liv	
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled S	
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1)	(LRR A) Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B	_	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (	B8)	
Field Observations:	<b>Y</b>	
Surface Water Present? Yes	No Depth (inches):	
Water Table Present? Yes	No Depth (inches):	
Saturation Present? Yes		Wetland Hydrology Present? Yes No
(Includes capillary fringe)		
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspe	ctions), if available:
Remarks:		
		*

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Fendale HUM Sampling Date: 6-2-1 Applicant/Owner: Russ Planch + timbe State: CA Sampling Point: U1T4 Investigator(s): CS +LW \_\_\_ Section, Township, Range: Landform (hillstope, terrace, etc.): +1000 plain Local relief (concave, convex, none): CONCAVE Slope (%) Lat: \_\_\_\_\_ Long: \_\_\_\_ Subregion (LRR): \_ Soil Map Unit Name: \_\_\_ \_\_\_\_ NWI classification Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks ) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed \( \mathcal{N} \) Are "Normal Circumstances" present? Yes $\underline{\mathcal{X}}$ No Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \_\_\_\_\_ No X CC (soils) (DSACE) is the Sampled Area Hydric Soil Present? Yes Y No \_\_\_\_ within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_ 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 = Total Cover That Are OBL, FACW, or FAC: (A/B) Sapling/Shrub Stratum (Plot size:\_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species 3. \_\_\_\_\_ FACW species FAC species FACU species = Total Cover UPL species 0 Herb Stratum (Plot size 330 Column Totals: Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_\_ 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.0 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) 1. Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum

US Army Corps of Engineers

Remarks:

SOIL	Sampling Point OTY-W
Profile Description: (Describe to the depth needed to document the indicator or o	
Depth Matrix Redox Features	
	.oc <sup>2</sup> Texture Remarks
0-9 2,543/1 93 104R3/3 5 C	M siltlam distinct
14-16 59912 95 104R314 S C 1	n 11 prominent
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated S	21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	and Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
·	
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	2 cm Muck (A10) Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except ML	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
Thick Dark Surface (A12)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type:	$\vee$
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Concerded Indicators (2 on more assured)
Surface Water (A1) Water-Stained Leaves (B9) (excel	Secondary Indicators (2 or more required)
High Water Table (A2)  MLRA 1, 2, 4A, and 4B)	
Salt Crust (B11)	4A, and 4B) Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	_ , ,
Sediment Deposits (B2)  Hydrogen Sulfide Odor (C1)	Dry-Season Water Table (C2)
Oxidized Rhizospheres along Livin	Saturation Visible on Aerial Imagery (C9)  ng Roots (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled So	
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (L	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No Depth (inches)	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Matterd Mudeeland Persont No.
(includes capitlary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	tions) if available:
	(ioris), ii avaliable
	itoris), ii avaitable.
Remarks:	acoris, il avallable
dense vegetation, although lower v.	persond told berm,
Remarks: dense veretation, arthord lower v. there are not primary or second	sevend told berm,
dense vegetation, although lower v.	persond told berm, lary hydrology new soils rises is upland

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: 1/L \_ City/County Fenda (0 Sampling Date: 0-2-Applicant/Owner: / Investigator(s): Section, Township, Range: \_\_\_ Landform (hillslope, terrace, etc.). <u>Hood plain</u> Local relief (concave, convex, none): Subregion (LRR): Lat: Long: Datum: Soil Map Unit Name: \_\_\_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soit \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? // Are "Normal Circumstances" present? Yes X No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? // (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes Is the Sampled Area Hydric Soll Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No 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 \_ = Total Cover That Are OBL, FACW, or FAC: (A/B) Sapling/Shrub Stratum (Plot size: ) Prevalence Index worksheet: 1. Total % Cover of. 2. \_\_\_\_\_ OBL species FACW species FAC species FACU species = Total Cover UPL species Herb Stratum (Plot size) Column Totals: Da Commerca Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_\_ 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 6. \_ UC3 - Prevalence Index is ≤3.01 \_\_ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 10/) = Total Cover Woody Vine Stratum (Plot size ) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum Remarks: Voyetation not acting as hydrophytes

SOIL								Sampling Point UT5-L
Profile Descrip	ption: (Describe	to the dept	h needed to docum	ent the i	ndicator o	or confirm	the absence	of indicators.)
Depth _	Matrix			Feature:				,
(inches)	Color (moist)		Color (moist)	%	Type	Loc²	<u>Texture</u>	Remarks
0-6	2543/2	IQP.	1 10 - 1	<u>Q</u>			<u>SILT</u>	
12-11 2	2,543/2	98	104K 3/3	2		N	Sittlean	-faint
11-16 2	2.544/1	98	114R3/3	2	2	m	11	
			/					
					<del></del>			
¹Type: C=Cond	centration, D=Dep	letion, RM=	Reduced Matrix, CS=	=Covered	or Coate	d Sand Gra	ains. <sup>2</sup> Loc	ation: PL=Pore Lining, M=Matrix.
I		able to all L	.RRs, unless otherv		ed.)		indicator	rs for Problematic Hydric Soils <sup>3</sup> :
Histosol (A	•		Sandy Redox (S:	•				Muck (A10)
Histic Epipe			Stripped Matrix ( Loamy Mucky Mi		l\ /aveant	MIDAA		Parent Material (TF2)
Hydrogen S	• •		Loamy Gleyed M			WLRA 1)		Shallow Dark Surface (TF12) r (Explain in Remarks)
1	lelow Dark Surface	e (A11)	Depleted Matrix (		,		0c	(CAPIGITITI NETIGINS)
	Surface (A12)		Redox Dark Surf	ace (F6)			3Indicator	s of hydrophytic vegetation and
1	ky Mineral (S1)	-	Depleted Dark St	•	7)			nd hydrology must be present,
	yed Matrix (S4) yer (if present):		Redox Depression	ons (F8)			unless	disturbed or problematic.
Type:	yer (ii present):						}	
Depth (inche	ac)		_					
B			<del>_</del>				Hydric Soil I	
does no	of mee	+ F3	b/c does	not	- sta	v+ "	n 410"	has
			•				1 10	<i>~</i> 5.
HYDROLOGY	Υ							
Wetland Hydro	logy Indicators:							
Primary Indicate	ors (minimum of o	ne required	check all that apply)				Second	dary Indicators (2 or more required)
Surface Wa	ater (A1)		Water-Stain	ed Leave	es (B9) (ex	cept		ater-Stained Leaves (B9) (MLRA 1, 2,
High Water	Table (A2)		MLRA 1,	2, 4A, a	nd 4B)		_	4A, and 4B)
Saturation (	(A3)		Salt Crust (E	311)			Dr.	ainage Patterns (B10)
Water Mark			Aquatic Inve	ertebrate	s (B13)		Dr	y-Season Water Table (C2)
] —	Deposits (B2)		Hydrogen S					turation Visible on Aerial Imagery (C9)
Drift Depos			Oxidized Rh					eomorphic Position (D2)
Algai Mai ol Iron Deposi	r Crust (B4)		Presence of					allow Aquitard (D3)
1	il Cracks (B6)		Recent Iron Stunted or S					C-Neutral Test (D5)
1	Visible on Aerial II	nagery (87)			•	) (ERR A)	_	ised Ant Mounds (D6) (LRR A)
l .	egetated Concave			2011 111 1 (6)	iliaina)		_ =	ost-Heave Hummocks (D7)
Field Observat			1.4					
Surface Water F	Present? Ye	es N	Depth (inch	nes):				
Water Table Pre	esent? Ye	es N	o Depth (inch					\ \
Saturation Prese	ent? Ye	esN	o Depth (inch				nd Hydrology	Present? Yes No
(includes capilla								103
Describe Record	oed Data (stream	gauge, mor	nitoring well, aerial ph	iotos, pre	evious insp	ections), if	f available:	
Pomarka:			<del></del>		-		<del></del>	
Remarks:								
!								

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region \_\_\_\_\_ City/County: Endo HUM Sampling Date: 6-Section, Township, Range: Investigator(s): ( Hoodolain Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%): Landform (hillslope, terrace, etc.): \_\_\_\_\_ Long: \_\_\_\_ Subregion (LRR): \_ Lat \_\_\_\_ Datum: \_ Soil Map Unit Name: \_\_\_\_ .... NWI classification: \_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? NO Are "Normal Circumstances" present? Yes X No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? No. within a Wetland? Wetland Hydrology Present? Yes No \_\_ 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 = Total Cover That Are OBL, FACW, or FAC: \_ (A/B) Sapling/Shrub Stratum (Plot size: \_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_ = Total Cover UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_ 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 7. \_\_ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. \_= Total Cover Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? \_\_\_\_= Total Cover % Bare Ground in Herb Stratum //)

actives as hydrophyte

Remarks:

SOIL								Sampling Po	oint UTS-W
Profile Desc	cription: (Describe	to the depti	needed to docum	ent the in	idicator	or confirm	n the absence		<del></del>
Depth	Matrix			Features				,	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc²	<u>Texture</u>	Remark	ks
11-6	2157341	<u> 100 .</u>		_0			Silloan	1 Inuchroma	due to A+0
12-16	574/2	98	2.544/4	2	$\mathcal{C}$	M	11		
	/	0.	1-1-						
								· · · · · · · · · · · · · · · · · · ·	
<del></del>									
		- 10 0 10 1							
	100	19							
	_								
Type: C=Ci	oncentration, D=Dep	letion PM=0	Poduced Matrix CS:		or Casta	d Cand C	21.0		
	Indicators: (Applic					u Sano Gi		cation: PL=Pore Lining ors for Problematic Hy	
Histosol			Sandy Redox (S		,			m Muck (A10)	dire sons :
	pipedon (A2)	_	Stripped Matrix (					Parent Material (TF2)	
'	stic (A3)	_	Loamy Mucky M		(except	MLRA 1)		y Shallow Dark Surface	
Hydroge	n Sulfide (A4)	_	Loamy Gleyed M		` •			er (Explain in Remarks	
	d Below Dark Surfac	e (A11) _	Depleted Matrix						§)
_	ark Surface (A12)	_	Redox Dark Surf					ors of hydrophytic veget	
	Mucky Mineral (S1)	_	Depleted Dark S		")			and hydrology must be p	
	Bleyed Matrix (S4) Layer (if present):		Redox Depression	ons (F8)			unles	ss disturbed or problem	atic.
Type:	Layer (ii present).							\	_
Depth (inc	chae)		<del></del>				1	X	<i>)</i>
Remarks:			<del>_</del>				Hydric Soil	Present? Yes	No
HYDROLO	GY						· ·		
Wetland Hye	drology Indicators:		<del></del> :-			<del></del>	<del></del>		<del></del>
Primary India	ators (minimum of o	ne required;	check all that apply	)			Seco	ndary Indicators (2 or m	nore required)
Surface	Water (A1)	3.	Water-Stain	ed Leaves	s (B9) (e:	xcept		Vater-Stained Leaves (F	
High Wa	iter Table (A2)	72	MLRA 1	, 2, 4A, an	id 4B)	·	_	4A, and 4B)	, , , , , , , , , , , , , , , , , , , ,
Saturatio	on (A3)		Salt Crust (	B11)			00	rainage Patterns (B10)	ļ
1	larks (B1)		Aquatic Inve	ertebrates	(B13)		0	ry-Season Water Table	≥ (C2)
1	nt Deposits (B2)		Hydrogen S					aturation Visible on Ae	rial Imagery (C9)
1	osits (B3)		Oxidized RI				ots (C3) G	eomorphic Position (D	2)
-	it or Crust (B4)		Presence of					hallow Aquitard (D3)	
1	oosits (B5)		Recent Iron					AC-Neutral Test (D5)	
1	Soil Cracks (B6)		Stunted or S			1) (LRR A)		laised Ant Mounds (D6)	
1	on Visible on Aerial I			ain in Rem	narks)		_ F	rost-Heave Hummocks	(D7)
Field Observ	Vegetated Concave	: Sunace (Bo	2)						
Surface Water		11	. 🚶 🖘	(90					
Water Table			Depth (incl						\ /
			O Depth (incl			_ ı			X
Saturation Proceed (includes care	resent? Y pillary fringe)	es N	o Depth (incl	nes):		-   Wetla	and Hydrolog	y Present? Yes	No
Describe Re	corded Data (stream	gauge, mon	itoring well, aerial pl	hotos, prev	vious ins	pections),	if available:	-	
						-			
Remarks:	1							<del></del>	
densel	4 NEGRTA	led, a	× hydrol	094	ind	icat	276		
	) ""	- / (	5		4 4				
I									

Project/Site: Suss EREP		City/Cr	ounty: Fernal	ale Hon	Sampling Date: 6/3/15
Applicant/Owner: Russ Karch + Timber		,		State: CA	Sampling Point: UIT6 - U
Investigator(s): Jordan Mayor		Section	n. Township, Ra	ange	_ Camping Cont
Landform (hillstope, terrace, etc.): flood plain		Local	relief (concave	convex none):	Sinne (%): 2
Subregion (LRR):					
					ication:
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology s	ignificantly	disturb	ed? Are	"Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrologyn	aturally pro	blemat	tic? (If no	eeded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sam	pling point l	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes Ne	0 <u>X</u>				
Hydric Soil Present? Yes No	° <del>×</del>		Is the Sampled within a Wetlan		No _X
Wetland Hydrology Present? Yes No	<u> </u>		William & Francis	165	NO
Remarks:					
VEGETATION – Use scientific names of plant					
vegetation – use scientific names of plant					
Tree Stratum (Plot size:)			nant Indicator ies? Status	Dominance Test work	
1.				Number of Dominant S That Are OBL, FACW,	
2				Total Number of Domi	nant
3.				Species Across All Str	
4				Percent of Dominant S	ineries
Sapling/Shrub Stratum (Plot size:)		= Tota	al Cover	That Are OBL, FACW,	
1				Prevalence Index wo	rksheet:
2.				Total % Cover of:	
3.				OBL species	
4.				FACW species	
5				FAC species	
		= Tota	al Cover	FACU species3	75 x4= <u>/40</u> x5=
Herb Stratum (Ptot size:)	20	n	ENP	UPL species	1
1. Festuca Derinnis 2. Poa compresa (tubors roles)	25		FACU		
3. Holas larates (yelled grass)	15		FAL	Prevalence Index	x = B/A = 3.37
4. Tribolium regers	15		FAL	Hydrophytic Vegetati	
5.					Hydrophytic Vegetation
6				2 - Dominance Te	
7				3 - Prevalence Ind	Adaptations <sup>1</sup> (Provide supporting
8.				data in Remark	Adaptations (Provide Supporting
9.				5 - Wetland Non-V	/ascular Plants <sup>1</sup>
10				Problematic Hydro	ophytic Vegetation¹ (Explain)
11					il and wetland hydrology must
	95	= Total	Cover	be present, unless dist	urbed or problematic.
Woody Vine Stratum (Plot size:)				ĺ	
1				Hydrophytic	
2				Vegetation   Present? Ye	es No <u>//</u>
% Bare Ground in Herb Stratum5	-100	= rotal	Cover		
Remarks:				· · · · · · · · · · · · · · · · · · ·	
Vegetation not acting as by	choph	(1)			
	11	-			

Profile Desi	cription: (Describe t	o the dept	th needed to document the Indicator or	confirm the	e absence of indicators.)
Depth	Matrix	·	Redox Features		
(inches)	Color (moist)	%		Loc²	TextureRemarks
0-4	2543/2	100	- 0 -	<	Siltlown
4-193	2543/2	9,9	104/23/2 10	m	11 1040 41.0 2% (10
1-10		40	10/2/12	<del>/ '  </del> _	11194 142 10 01111
					10% taint, 2% distinct
			<del></del>		
'Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS=Covered or Coated S	Sand Grains	
		ible to all I	LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (S5)		2 cm Muck (A10)
_	pipedon (A2)	-	Stripped Matrix (S6)		Red Parent Material (TF2)
	istic (A3) en Sulfide (A4)	3	Loamy Mucky Mineral (F1) (except MI	ILRA 1)	Very Shallow Dark Surface (TF12)
	d Below Dark Surface	(A11)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		Other (Explain in Remarks)
	ark Surface (A12)	. (****)	Redox Dark Surface (F6)		<sup>3</sup> Indicators of hydrophytic vegetation and
	fucky Mineral (S1)		Depleted Dark Surface (F7)		wetland hydrology must be present.
	Sleyed Matrix (S4)		Redox Depressions (F8)		unless disturbed or problematic.
Restrictive	Layer (if present):				
Type:					$\vee$
Depth (in	ches):			Н	lydric Soil Present? Yes No
Remarks:				1	
does n	of meet	Fal	ore tours		re 25%, and
00KS	Not me	ex+	13 6/C NOTGE	plede	& matrix (value 44)
HYDROLO	GY		/	1	
Wetland Hy	drology Indicators:				
-	cators (minimum of or	ne required	check all that anniv)		Secondary Indicators (2 or more required)
	Water (A1)		Water-Stained Leaves (B9) (exce	ont	
	iter Table (A2)		MLRA 1, 2, 4A, and 4B)	ehr	Water-Stained Leaves (B9) (MLRA 1, 2,
Saturation			Salt Crust (B11)		4A, and 4B)  Drainage Patterns (B10)
	larks (B1)		Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)
	nt Deposits (B2)		Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
	posits (B3)			ing Roots (C	C3) Geomorphic Position (D2)
-	at or Crust (B4)		Presence of Reduced Iron (C4)	ing roots (c	Shallow Aquitard (D3)
_	oosits (B5)		Recent Iron Reduction in Tilled S	Soils (C6)	FAC-Neutral Test (D5)
	Soil Cracks (B6)		Stunted or Stressed Plants (D1) (		Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial In	nagery (B7		(=,	Frost-Heave Hummocks (D7)
	Vegetated Concave		_		
Field Obser				1	
Surface Wat	er Present? Ye	es N	No Depth (inches):		
Water Table		es N			
Saturation P			No Depth (inches):	18/	Hydrology Present? Yes No
(includes car	pillary fringe)			1 .	
Describe Re	corded Data (stream	gauge, mo	nitoring well, aerial photos, previous inspec	ctions), if av	/ailable:
Remarks:		* *-		<del></del>	

Project/Site: ELEP		City/Cou	nly: Fem	date / Humbadd	Sampling Date: 6/8/15
Applicant/Owner: Russ Rarel + Timber				State: CA	Sampling Point: ひてんー W
Investigator(s): Sordan Mayor		Section.	Township, Ra	inge:	
Landform (hillslope, terrace, etc.):	_	Local re	lief (concave.	convex. none):	Sione (%): 2
Subregion (LRR):					
					ification:
Are climatic / hydrologic conditions on the site typical for the					
Are Vegetation, Soil, or Hydrology *100					
Are Vegetation, Soil, or Hydrology MO					" present? Yes 🔀 No
SUMMARY OF FINDINGS – Attach site map			•	eeded, explain any ansv ocations, transec	
Hydrophytic Vegetation Present? YesX	No			C	Vsoils \ USACE
Hydric Soil Present? Yes X	No		the Sampled		(man) osmoo
Wetland Hydrology Present? YesX	No	W	rithin a Wetlar	nd? Yes/	× ' No <u> </u>
Remarks:	-			-	
VEGETATION – Use scientific names of pla	nts.				
Tree Stratum (Plot size:)	Absolute % Cover		ant Indicator s? Status	Dominance Test wo	
1	<u> </u>	ODÇÇIÇ.	ST Olatus	Number of Dominant That Are OBL, FACV	Species /, or FAC:3 (A)
2				•	30
3.				Total Number of Dom Species Across All Si	
4				,	
Sapling/Shrub Stratum (Plot size:)		= Total	Cover	Percent of Dominant That Are OBL, FACW	/, or FAC:(A/B)
1				Prevalence Index w	
2				Total % Cover of	
3				OBL species	
4	<del>-</del>			FACW species	70 x2= 210
5				FACU species	
Herb Stratum (Plot size:)		= Total	Cover		0 x5=
1. Ramaculus repens	15	D	FAC		310 (B)
2. Trifolium repens	15	D	FAC		• • • • • • • • • • • • • • • • • • • •
3. Poa compressa	25	D	FACU	Hydrophytic Vegeta	ex = B/A = 3.24
4. Alonegurus saccatus	10		FAC	' ' ' -	r Hydrophytic Vegetation
5. = estuca perennis	30	D	FAC	2 - Dominance To	· · · · •
6	_			N 3 - Prevalence In	1
7				4 - Morphologica	Adaptations (Provide supporting
8				data in Remai	ks or on a separate sheet)
9.				5 - Wetland Non-	
10					ophytic Vegetation <sup>1</sup> (Explain)
11.				Indicators of hydric s	oil and wetland hydrology must sturbed or problematic.
Woody Vine Stratum (Plot size:)	95	= Total C	Cover	- processi armae die	
1				Livelya mbusta	
2				Hydrophytic Vegetation	V 522
		= Total C	over	Present? Y	es No No
% Bare Ground in Herb Stratum5					
Remarks:	A at 1	0			
veg, not octing as hy	One link	C			
'					

SOIL	Sampling Point UT6
Profile Description: (Describe to the depth needed to document the indicator or	
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type	Loc <sup>2</sup> Texture Remarks
$\frac{101012100}{-0}$	- Sittlean
2-5 SY412 40 2.54 3/3 10 C	M Sandy loam (VES) - Givet cede
5-18 5441 85 104R3/2 K C	M Sittlean prominent redo
	or ship 21/
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated 5	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)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MI	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)  Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	untess disturbed or problematic
Restrictive Layer (if present):	
Type:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (exce	
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3) Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)Oxidized Rhizospheres along Livi	
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Si	oils (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	EN
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	ctions), if available:
Remarks:	1
	*
	p.
	J.

Project/Site: EREP		City/County: Frank	ale / Humboldt Sampling Date: 6/3/15
Applicant/Owner: Russ Ranch + Tinh	~	Only/County. 1 2120	State: CA Sampling Point: V177 - U
Investigator(s): Jordan Mayor			
			convex, none): Slope (%):
1			
Subregion (LRR):			Long: Datum;
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical for	this time of ye	ar? Yes 🗡 No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology _ No	_ significantly	disturbed? Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or HydrologyN0	_ naturally pro	blematic? (If n	eeded, 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_X		
Hydric Soil Present? Yes		Is the Sample	
Wetland Hydrology Present? Yes	No X	withIn a Wetla	nd? Yes No X
Remarks:			
		<del></del>	
VEGETATION - Use scientific names of pl	ants.		
Tree Stratum (Plot size:)		Dominant Indicator	Dominance Test worksheet:
1	76 Cover	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.			matrie obl. FACV, of 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:
2			OBL species x 1 =
3.			FACW species x 2 =
4			FAC species 90 x 3 = 270
5			FACU species / O x 4 = 40
Herb Stratum (Plot size:		= Total Cover	UPL species x 5 =
1. Holcus I anatus	75	D FAC	Column Totals: 100 (A) 310 (B)
2. FESTURA peren	15	FAC	Prevalence Index = B/A = 3./
3. Poa compressa	10	FACU	Hydrophytic Vegetation Indicators:
4			1 - Rapid Test for Hydrophytic Vegetation
5			2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3.01
7			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
8			data in Remarks or on a separate sheet)
9,			5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
11	1-2		<sup>1</sup> Indicators of hydric soil and wettand hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	100	= Total Cover	
1			I hadrowky sto
2			Hydrophytic Vegetation
/		= Total Cover	Present? Yes No X
% Bare Ground in Herb Stratum			
Remarks:		1	101 10 - De MAD SOONE
& veg. not growing as he	y duro phyte	s, domina	ted by single TAC species

1

Sampling Point: UT7-U

Profile Description: (Describe to the de	pth needed to document the Indicator or conf	irm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist), %	Color (maist) % Type Loc2	
10-8 2.543/2		Silt loan
8-11 2543/2 94	10483/2 2 C M	11 -Cint codal
11 10 0 0 13/2 60	2000 5	- Tana vast
11-18 2.543/2 95	+.37K3/3 D C M	11 distinct redox
8		
		· · · · · · · · · · · · · · · · · · ·
<sup>1</sup> Type: C=Concentration, D=Deptetion, RN	1=Reduced Matrix, CS=Covered or Coated Sand	Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to al	I LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic
Restrictive Layer (if present):		
Type:	<u></u>	
Depth (inches):		Hydric Soil Present? Yes No
Remarks:	<del> </del>	
HYDROLOGY		
1150		
Wetland Hydrology Indicators:	ed check all that apply)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one require	· · · · · · · · · · · · · · · · · · ·	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Coots (C3) Geomorphic Position (D2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Titled Soils (	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Titled Soils (C4) Stunted or Stressed Plants (D1) (LRR	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Sparsely Vegetated Concave Surface (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Titled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bacterial Sparsely Vegetated Concave Surface Field Observations:  Surface Water Present? Yes  Water Table Present? Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR  Other (Explain in Remarks)  No  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tifled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches): Depth (inches): We	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living R  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils ( Stunted or Stressed Plants (D1) (LRR  Other (Explain in Remarks)  No  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Sparsely Vegetated Concave Surface  Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tifled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches): Depth (inches): We	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (Bacterial Concave Surface Field Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tifled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches): Depth (inches): We	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E  Sparsely Vegetated Concave Surface of Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, m	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tifled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches): Depth (inches): We	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E  Sparsely Vegetated Concave Surface of Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, m	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tifled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches): Depth (inches): We	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (E  Sparsely Vegetated Concave Surface of Field Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, m	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tifled Soils ( Stunted or Stressed Plants (D1) (LRR Other (Explain in Remarks)  No Depth (inches): Depth (inches): We	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Coots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) C6) FAC-Neutral Test (D5) A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Applicant/Downer: Res Rench Timber Section, Township, Range: Load relief (concave, convex, nene): Stope (%): 2 Subregion (LRR): Load plack. Local relief (concave, convex, nene): Slope (%): 2 Subregion (LRR): Long: Datum: Long: NM classification: Long: Datum: Long: NM classification: Are Vegetation Soil or rhydrology nD algorificantly disturbed? Are Nomati Circumstances: present? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size typical for this time of year? Yes No instruction of the size that the sampled Area within a Westland? Yes No instruction of Dominance Test worksheet: Number o	Project/Site: EREP		Cib/Co	unter In	dale, Hunsoldt Sampling Date: 6/3/15
Investigator(s):   Section   Mean   Section   Course   Stope (%):					
Landform (Nillslope, terrace, etc.): Lost relief (concave, convex, none): Slope (%): Subregion (LRR): Lat: Long: Datum: Solida putin Name: NNI classification (LRR): NNI class					
SubmaRY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic vegetation Present? Yes No Is the Sampled Are Wetland Hydrology Plant Present? Yes No Within a Wetland? Yes No	Landform (hillstone terrace etc.): Appl place		Local	rollof (concave	soniov nanoli Slane (9/1). 2
Soil Map Unit Name:  Are climatic / hydrologic conditions on the site typical for this time of year? YesX No ((Ino. explain in Remarks) Are climatic / hydrologic conditions on the site typical for this time of year? YesX No ((Ino. explain in Remarks) Are Yogelation Soil or Hydrology _/ID_ significantly disturbed?  Are Vegetation Soil or Hydrology _/ID_ naturally problematic? ((Inneeded, explain any answers in Remarks.)  SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Yes No Yes No	1				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes					
Are Vegetation Soll or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soll or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No					
Summary   Soil					
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydricophytic Vegetation Present?  Yes					
Hydrophytic Vegetation Present?   Yes   No   Weltand Hydrology Present?   Yes   No   Weltand Hydrology Present?   Yes   No   Within a Weltand?   Yes   No   Weltand Hydrology Present?   Yes   No   Within a Weltand?   Yes   No   Weltand Hydrology Present?   Yes   No   Weltand Hydrology		* -		· ·	
Hydric Soil Present?   Yes   No   Is the Sampled Area within a Wetland?   Yes   No   Wetland hydrology Present?   Yes   No   Within a Wetland?   Yes   No   Yes   No   Wetland?   Yes   Wetland?   Yes   No   Wetland?   Yes   Wetland?   Yes   No   Wetland?   Y			sam	pling point l	ocations, transects, important features, etc.
Wetland Hydrology Present?   Yes   No	1 · · · · · · <del> · -</del>			ls the Sampled	1 Area
VEGETATION - Use scientific names of plants.   Dominant Indicator Species   Statum (Plot size:			- 1	•	
VEGETATION - Use scientific names of plants.   Absolute					
VEGETATION - Use scientific names of plants.   Absolute	PEMI A F				
Absolute	,				
Tree Stratum (Plot size:	VEGETATION – Use scientific names of plant				!
1	Tree Stratum (Plot size:				
Total Number of Dominant Species Across All Strata:    Sapling/Shrub Stratum (Plot size:     = Total Cover					
3.   Species Across All Strata:   All Strata:   Species Across All Strata:   All Strat					
Sapling/Shrub Stratum (Plot size:   1   That Are OBL, FACW, or FAC:   (A/B)					
Sapling/Shrub Stratum (Plot size:   1   That Are OBL, FACW, or FAC:   (A/B)	4				Percent of Dominant Species
1.	Sanling/Shrub Stratum /Plot size:		= Tota	l Cover	
2. 3. 4. 5. Herb Stratum (Plot size: 1. Poa compresso 2. Festura perchalis 3. Rumer streems 4. Triblium repens 5. Ramunulus repens 6. Holas landvis 7. Cirsaim vilgare 8. 9. 10. 10. 11. Woody Vine Stratum (Plot size: 11. 2. Woody Vine Stratum (Plot size: 12. Woody Vine Stratum (Plot size: 13. Water streems 14.  Woody Vine Stratum (Plot size: 15.  Woody Vine Stratum (Plot size: 16.  Woody Vine Stratum (Plot size: 17.  Woody Vine Stratum (Plot size: 18.  18.  19.  10.  10.  11.  45.  10.  11.  45.  10.  11.  45.  10.  11.  10.  11.  11.  11.  11.  1					Prevalence Index worksheet:
3.   Collegee's					
FAC species					
Herb Stratum (Plot size:	4.				FACW species $2 = \sqrt{2}$
Herb Stratum (Plot size:	5				
1. Poa compressa 30 D FACU 2. Festura percasis 30 D FACU 3. Rumer solicione truns 5 FACW 4. Triblium repens 10 FAC 5. Renunculus repens 15 D FAC 6. Holaus landus 5 5 FACW 8. Cirscium vulgare 5 FACW 9. Tollium repens 10 FACU 11. Tollium repens 10 FACU 11. Tollium repens 10 FACU 12. Triblium repens 10 FACU 13. Prevalence Index = B/A = 3.0  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0' 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants' Problematic Hydrophytic Vegetation' (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Woody Vine Stratum (Plot size:  1. Hydrophytic Vegetation  'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation Present? Yes No  Remarks:	Hack Stantium (Diet sins:		= Tota	ıl Cover	
2. Festuca perchals 3. Rumex satisfies truns 4. Tribitum repens 5. Rapid Test for Hydrophytic Vegetation Indicators: 10 FAC 1. Rapid Test for Hydrophytic Vegetation 2. Dominance Test is >50% 6. Holws landers 5. FAW 8. Sirstim vulgare 5. FAW 9. Sirstim vulgare 10. FAC 10. Sirstim vulgare 10. Sirstim vulgar		70	D	FACU	
3. Romer Satisface Trus:  4. Trifolium repens  5. Remunculus repens  6. Holaus laments  5. FACU  7. Cirsam vulgare  9			<u>D</u>		
4. Triblium repens 5. Ranumulus repens 6. Holaus lamatus 7. Cirsain vulgare 8. Seminal vulgare 10. FAC 11. Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0' 4 - Morphological Adaptations! (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants! 10. Separation Problematic Hydrophytic Vegetation (Explain) 11. Separation Problematic Hydrophytic Vegetation (Explain) 12. Hydrophytic Vegetation Present, unless disturbed or problematic.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No Prevalence Index is \$3.0' 4 - Morphological Adaptations! (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants!  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No Prevalence Index is \$3.0' 1 - Rapid Test for Hydrophytic Vegetation Prevalence Index is \$4.0' 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0' 4 - Morphological Adaptations! (Provide supporting data in Remarks or on a separate sheet)  The problematic Hydrophytic Vegetation Present?  No Prevalence Index is \$4.0' 1 - Rapid Test for Hydrophytic Vegetation Prevalence Index is \$4.0' 1 - Rapid Test for Hydrophytic Vegetation Prevalence Index is \$4.0' 1 - Rapid Test for Hydrophytic Vegetation Prevalence Index is \$4.0' 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0' 4 - Morphological Adaptations! (Provide supporting data in Remarks or on a separate sheet)	3. Romer Salicione trus	5		FACW	
5. Range lus repers 6. Holus landrés 5	4. Tribolium repens	10		FAC	
7	5. Ranga ou los repens		b	FAIC	
8					3 - Prevalence Index is ≤3.01
9	7. <u>Cirscium volgore</u>			FAW	4 - Morphological Adaptations¹ (Provide supporting
Total Cover    Problematic Hydrophytic Vegetation (Explain)					1
11					<u>,  —                                   </u>
Woody Vine Stratum (Plot size:  1					1.
Woody Vine Stratum (Plot size:  1	11	95	- Total		
1	Woody Vine Stratum (Plot size:)	71.4	_= Total	Cover	
2	1				Hydrophytic
% Bare Ground in Herb Stratum5= 10tal Cover	2				1
Remarks:	N/ Para Cround in Horb Stratus		= Total	Cover	rresent? Yes No No
	Remarks:				
veg. and by an information					
	veg. ading as roportion				

SOIL		Sampling Point: UT7-1
Profile Description: (Describe to the	depth needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix	Redox Features .	
(inches) Color (moist) %	Color (maist) % Type Loc	
0-3 2.577/2/0	0	Siltlean
3-1-65432 9	0/04R313/0 = n	7 4 Gent redex
7-12< VUIT, 917	1/1403/2 18 C W	1 /1 ON White LOUDS
7	- 10 1645 70 <u>C</u> "	Day N. CO 107R-13
<del></del>		
Type: C=Concentration D=Depletion 6	RM=Reduced Matrix, CS=Covered or Coated San	od Coning Standing Standing
Hydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted )	nd Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	-
Histic Epipedon (A2)	Stripped Matrix (S6)	2 cm Muck (A10) Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLR.	
Hydrogen Sulfide (A4)	Loarny Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)		
Thick Dark Surface (A12)	Redox Dark Surface (F6)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic
Restrictive Layer (If present):		
Type:	<del></del>	
Depth (inches):		Hydric Soil Present? Yes No
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one requ		Secondary Indicators (2 or more required)
Surface Water (A1)	Water-Stained Leaves (B9) (except	
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Sediment Deposits (B2)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Drift Deposits (B3)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Roots (C3) Geomorphic Position (D2)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils	Shallow Aquitard (D3) 5 (C6) FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LR	
Inundation Visible on Aerial Imagery		Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface	· · · · · · · · · · · · · · · · · · ·	Prost-neave Huminocks (D7)
Field Observations:		***
Surface Water Present? Yes	No X Depth (inches):	
Water Table Present? Yes		A
		Wetland Hydrology Present? Yes No
(includes capillary fringe)	N3	, , ,
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previous inspectio	ns), if available:
Remarks		

Project/Site: ERED		City/County:	Fernd	ale/ Homboldt Sampling Date: 6/4/	125
Applicant/Owner: Russ Ranch + T	wher			State: CA Sampling Point: U2T1	-0
Landform (hillslope, terrace, etc.):		Local relief (	concave,	convex, none): Salve Y / i not Slope (%):	0
Subregion (LRR):					
Soil Map Unit Name:				NWI classification:	
Are climatic / hydrologic conditions on the site typical	for this time of ye	ar? Yes	×_No_	(If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology					
Are Vegetation, Soil, or Hydrology					
SUMMARY OF FINDINGS - Attach site					, etc.
Hydrophytic Vegetation Present? Yes	NoX				
Hydric Soil Present? Yes	_ No		Sampled		
Wetland Hydrology Present? Yes	_ No	Withir	n a Wetlar	TesNo	
Remarks:					
VEGETATION – Use scientific names of	plants.				
	Absolute			Dominance Test worksheet:	
Tree Stratum (Plot size:)  1	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	
2		. —— -		That Are OBL, FACW, or FAC:	(A)
				Total Number of Dominant Species Across All Strata:	(B)
4.					. <del>5)</del>
		_ = Total Cove	er	Percent of Dominant Species That Are OBL, FACW, or FAC: 50%	(A/B)
Sapling/Shrub Stratum (Plot size:	)			Prevalence Index worksheet:	
1			122	Total % Cover of: Multiply by:	
3.				OBL species	İ
4	<del></del>			FACW species x 2 = 20	
5				FAC species 39 x3= 1/7	
		= Total Cove	er	FACU species <u>35</u> x4 = <u>140</u>	
Herb Stratum (Plot size:)	25	5	EARL	UPL species	(D)
1. Browns hordeaceus 2. Rumer soliens truins	10	. <u>-                                   </u>	FACU	Column Totals: 100 (A) 357	(B)
3. Festiva perinis		<u> </u>	FAC	Prevalence Index = B/A = 3.57	
4. Sanchus asper	15		NL	Hydrophytic Vegetation Indicators:	
5. Hordeum monum	4		FAC	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%	
	10		FAW	2 - Dominance Test is >50%  √3 - Prevalence Index is ≤3.0¹	
7. Geranim di section			NL	4 - Morphological Adaptations¹ (Provide suppo	nting
8				data in Remarks or on a separate sheet)	g
9				5 - Wetland Non-Vascular Plants <sup>1</sup>	ļ
10				Problematic Hydrophytic Vegetation <sup>†</sup> (Explain)	
11	00			Indicators of hydric soil and wetland hydrotogy mu be present, unless disturbed or problematic.	ist
Woody Vine Stratum (Plot size:)	100	_= Total Cove	r	To proceed a section of proceduration	
1				   Hydrophytic	
2				Vegetation	
4		= Total Cove	r	Present? Yes No	
% Bare Ground in Herb Stratum					
Neuralia.					
					- 1

<u> 271-1</u>	)
	<u>- 11-1</u>

_	$\overline{}$		
9	r n	п	

	oth needed to document the indicator or confin	m die absence of malcators.
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type¹ Loc²	Texture Remarks
0-3 2.543/2 ICK	)	loam
3-12 2.543/2 95	1041C3/3 5 Cm;	Silt loan faint redox
12-182,543/2/101	- 7 -	Sandy Logue
		The state of the s
l		
1		
	=Reduced Matrix, CS=Covered or Coated Sand G	
Hydric Soil Indicators: (Applicable to all		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Black Histic (A3)	Stripped Matrix (S6)	Red Parent Material (TF2)
Hydrogen Sulfide (A4)	Loarny Mucky Mineral (F1) (except MLRA 1) Loarny Gleved Matrix (F2)	) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:		49
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
The state of the s		-
	<u> </u>	
HYDROLOGY		
Wetland Hydrology Indicators:		
	d: check all that apply)	Secondary Indicators (2 or more required)
Primary Indicators (minimum of one require		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one require Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ols (C3)  Geomorphic Position (D2)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ols (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (£RR A7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (£RR A7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes Saturation Present? Yes Saturation Present?	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2,  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B Sparsely Vegetated Concave Surface (Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (Includes capillary fringe) Describe Recorded Data (stream gauge, mo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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Project/Site: ERED		City/Co	unty: Fem	dale / that of Sampling Date: 6/4/15
Applicant/Owner: Russ Each - Timber		,		State: CA Sampling Point: U2TI-W
Investigator(s):		Section	Township Pa	orace.
Landform (billstone towns ato): Lande		300000	i, Township, ite	(Araca alliana)
Landform (hillslope, terrace, etc.):				
Subregion (LRR):				20
Soil Map Unit Name:				NWI classification:
Are climatic / hydrologic conditions on the site typical for this	s time of ye	ar? Yes	s No _	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly	disturbe	ed? //Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology n	aturally pro	blemati	c? (If no	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map			•	
Hydrophytic Vegetation Present? Yes N	0		· · ·	
Hydric Soil Present? Yes N	o		s the Sampled	
Wetland Hydrology Present? Yes N	<u> </u>		within a Wetla	nd? Yes No
Remarks:				
VEGETATION - Use scientific names of plan	ts.			
	Absolute		nant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Specie	es? Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:l (B)
4				Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		_ = Tota:	Cover	That Are OBL, FACW, or FAC: (A/B)
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species <u>55</u> x 1 = <u>55</u>
4				FACW species x 2 =
5				FAC species $\frac{1}{2}$ $\times 3 = \frac{30}{40}$
- 4.		= Total	l Cover	FACU species 10 x4= 70
Herb Stratum (Ptot size:)	1.00			UPL species <u>25</u> x5 = <u>125</u>
1. Potentilla angerha		D		Column Totals: 100 (A) 250 (B)
2. Sanchus agree	15		NL	Prevalence Index = B/A =
3. Germin dissection	10		<u>NL</u>	Hydrophytic Vegetation Indicators:
4. <u>Circium vulgare</u> 5. Festuca Desensis	5		FACU	1 Rapid Test for Hydrophytic Vegetation
13. 4	- 5	_	- FAC	2 - Dominance Test is >50%
7. Por compresse	5		FAC	✓ 3 - Prevalence index is ≤3.01
		-	FACU	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants <sup>1</sup>
10				Problematic Hydrophytic Vegetation¹ (Explain)
11				¹Indicators of hydric soil and wetland hydrology must
111	1.500200	= Total	Course	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: /)	100	= rotar	Cover	
1				Hydrophytic
2				Vegetation
,		= Total	Cover	Present? Yes No
% Bare Ground in Herb Stratum				
Remarks:	11			
veg. acting as hydrophyle	·)			
1 0				

-		
	-14	

Sampling Point: UZT-W

Profile Description: (Describe to the dept	h needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	Color (moist) % Type¹ Loc²	Texture Remarks.
0-3 2.5/3/2 98	104R3/4 2 C m	Silt-loan distract very
2-10 7 5V41, QE	114P 41 5 C VO	
10 FIJI 115.	10412 1/9	11 promint really
		1
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, CS=Covered or Coated Sand Gr	ains. <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)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	It-disabase of business, at a constant and
1 - 1		<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Type:	_	
Depth (inches):	<del></del> .	Hydric Soil Present? Yes No
Remarks:		
		1.00
		\
		\
HVDBOLOCV		
	V.	
HYDROLOGY Wetland Hydrology Indicators:	W.	
	check all that apply)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:		Secondary Indicators (2 or more required) Water-Stained Leaves (89) (MLRA 1, 2)
Primary Indicators (minimum of one required:  Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Pattems (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Pattems (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Pattems (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soits (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soits (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soits (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Roof  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Solts (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B)  Field Observations:  Surface Water Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soits (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Pattems (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soits (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soits (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required:  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (BField Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roof Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solts (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Season Stail (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

Project/Site: EREP		City/Cou	nty: Ferry	Lale / Humbold Sampling Date: 6/4/15
Applicant/Owner: Russ Rand + Tim	ber	J.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		State: CA Sampling Point: U2T2-U
Investigator(s): Jordan Mayor				
Landform (hillstone terrace etc.): endof levee		Locatre	lief (concave	convex, none) ONYLK   INOCLYSTope (%): 2
Subregion (1 BP):	l at:	Locario	iici (concave,	Long: Datum:
				NVI classification:
Are climatic / hydrologic conditions on the site typical for t				
Are Vegetation, Soil, or Hydrology _NO				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology NO	_ naturally pro	oblematic	? (If ne	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site may	showing	sampl	ling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No <u></u>			
Hydric Soil Present? Yes	No	- 1	the Sampled ithin a Wetlar	/
Wetland Hydrology Present? Yes	No	<b>"</b>	illilli a Wellai	165
Remarks:				
5				
VECETATION Line scientific names of pla				
VEGETATION – Use scientific names of pla		D'-		
Tree Stratum (Plot size:)	Absolute % Cover		ant Indicator s? 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				
		_ = Total	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
Sapting/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
1.				Total % Cover of: Multiply by:
2.				OBL species
3				FACW species  x 2 = 0
4.				FACW species $0$ $x = 0$ FAC species $85$ $x = 255$ FACU species $40$ $x = 40$
J		= Total	Cover	FACU species x 4 = 40
Herb Stratum (Plot size:)		-		UPL species x 5 =
1. Festica perinnis	65	<i>D</i>	FAC	Column Totals;
2. Trifolium repens	<u>5</u>		FAC	Prevalence Index = B/A =
3. Holas lanatis	_ 15_		FAC	Hydrophytic Vegetation Indicators:
4. Potentilla ansenira	5		OBL	1 - Rapid Test for Hydrophytic Vegetation
5. <u>Poa compresso</u>			FACU	2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.01
7				4 - Morphological Adaptations (Provide supporting
8				data in Remarks or on a separate sheet)
9				5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain)
10.				Indicators of hydric soil and wetland hydrology must
11				be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	100	_= 10tal (	Jover	
1.				Hydrophytic
2.				Vegetation
		= Total C	Cover	Present? Yes No X
% Bare Ground in Herb Stratum				
Remarks:	. 12		cas td.	adaa Cas DT
* veg. not growing as hy.	dropy to	) v (0	ייני טיינ	edge for PI,
I dominated bu	1'1	ac.	Speci	es that is planted

Profile Description: (Describe to the dept	in needed to document the indicator or confir	ini the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type¹ Loc²	<u>Texture</u> Remarks
0-4 loyR3/2 100		10an
4-8 104R3/2018	7.54R3132 C M.	31Hour Gaint Vedex
C2-16 10482668	1AUP3/2 7 C M	
8-10 10 1C729 8	1091275 Z C//	lam
l		
1		2
	Reduced Matrix, CS=Covered or Coated Sand C	
Hydric Soil Indicators: (Applicable to all I	·	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1	. — .
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		difficult distances of prodictinatio.
Type:		
Depth (inches):	<del></del>	Hydric Soil Present? Yes No
does not meet F6	of faint redox and	45%,
Bocy	•	
HADBOLOGA		
HYDROLOGY		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)	: check all that apply) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (BFIeld Observations:  Surface Water Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C  Stunted or Stressed Plants (D1) (LRR A  Other (Explain in Remarks)  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7 Sparsely Vegetated Concave Surface (BFIeld Observations: Surface Water Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7 Sparsely Vegetated Concave Surface (BFIeld Observations: Surface Water Present? Yes N	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (BFIeld Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (BFIeld Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (BFIeld Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (B7  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)  Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (B7  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)  Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7  Sparsely Vegetated Concave Surface (B7  Field Observations:  Surface Water Present? Yes N  Water Table Present? Yes N  Saturation Present? Yes N  (includes capillary fringe)  Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wet	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Oots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

Project/Site: ERED	City/C	ounty Fema	lale / thousand Sampling Date: 6/4/15
Applicant/Owner: Russ Ranch + Timber		ounty:	State: Sampling Point: U2TOF
Investigator(s). Forden Mayor	Saction	no Township Par	orac Sampling Form.
Investigator(s): Sorden Mayor  Landform (hillstope, terrace, etc.): level transition to fe	iedd Local	relief (concave	CORNER PORO (MCC/1 - (1) PEGO (94) 2
Subregion (LRR):	Lat:	rener (correave, t	Longia Datum
Soil Map Unit Name:			
Are climatic / hydrologic conditions on the site typical for this		100	
Are Vegetation, Soll, or Hydrology NO _si			
Are Vegetation, Soil, or Hydrology NO no			Normal Circumstances" present? Yes No
	• •	·	eded, explain any answers in Remarks,)
SUMMARY OF FINDINGS - Attach site map s		ipling point k	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No		Is the Sampled	Aron
Hydric Soil Present? Yes No.		within a Wetlan	./
Wetland Hydrology Present? Yes No Remarks:			
r Contract C			
VEGETATION - Use scientific names of plant	ts.		
		ninant Indicator	Dominance Test worksheet:
	% Cover Spe	cies? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1.			
3.			Total Number of Dominant Species Across All Strata: 2 (B)
4			(0,
Sapling/Shrub Stratum (Plot size:)	= To	tal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:
1			Prevalence Index worksheet:
2.			Total % Cover of: Multiply by:
3			OBL species
4			FAC species 75 x3 = 25
5			FACU species x 4 =
Herb Stratum (Plot size:)	= To	tal Cover	
1. Festuca pernals	35	FAC	UPL species x5 = Column Totals: 100 (A) 295 (B)
2. Ranuncylus repens	15	FAC	Prevalence Index = B/A =
3. Por compressa	10	FACU	Hydrophytic Vegetation Indicators:
4. Komer saturas truns	15	FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Holws lanates	20 I	7	2 - Dominance Test is >50%
6. Trifolium repens		FAC	3 - Prevalence Index is ≤3,01
7			4 - Morphological Adaptations¹ (Provide supporting
8			data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹
9			Problematic Hydrophytic Vegetation¹ (Explain)
10			Indicators of hydric soil and wetland hydrology must
	/60 = Tot	al Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	100	ai 00vei	
1			Hydrophytic
2			Vegetation Present? Yes No
% Bare Ground in Herb Stratum	= Tot	al Cover	183 110
Remarks:			
Veg. acting as a hydrophy	He		

Sampling Point: UZTZ-W

Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type Loc2	Texture Remarks
J-3 25482 10	0 - 0	lam
3-6 2.5436 9	8 107R3/32 CM	11 faint redox
-18 54412 99	5 18419365 CM	11 prominent read
		The Activities of the Coars
Type: C=Concentration D=Depletion B	RM=Reduced Matrix, CS=Covered or Coated Sand G	rains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	<del></del>
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
_ Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic,
lestrictive Layer (if present):		
Type:		\ \ \ \ \ \ \
Depth (inches):		Hydric Soil Present? Yes / No
Vetland Hydrology Indicators:	ired; check all that apply)	Secondary Indicators (2 or more required)
etland Hydrology Indicators:	ired; check all that apply) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2,
/etland Hydrology Indicators: rimary Indicators (minimum of one requi		
/etland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> </ul>
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Vetland Hydrology Indicators:  rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	<ul> <li>Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)</li> <li>Drainage Patterns (B10)</li> <li>Dry-Season Water Table (C2)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> </ul>
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Roc</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
Vetland Hydrology Indicators:  rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A6)  (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Vetland Hydrology Indicators:  rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A6)  (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface ield Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod  Presence of Reduced fron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A6)  (B7)  Other (Explain in Remarks)  e (B8)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface ield Observations:	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A6)  (B7)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface indicated Observations:  Surface Water Present?  Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A6)  (B7)  Other (Explain in Remarks)  e (B8)  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface indicated Concav	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced tron (C4)  Recent Iron Reduction in Tilled Soils (Ct Stunted or Stressed Plants (D1) (LRR A  (B7)  Other (Explain in Remarks)  (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) ots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface (B4) Vater Table Present? Ves Saturation Present? Ves	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  (B7)  Other (Explain in Remarks)  (B8)  Depth (inches):  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface (B4) Vater Table Present? Ves Saturation Present? Ves	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced tron (C4)  Recent Iron Reduction in Tilled Soils (Ct Stunted or Stressed Plants (D1) (LRR A  (B7)  Other (Explain in Remarks)  (B8)  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Primary Indicators (minimum of one requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Ves Saturation Present? Ves Saturation Present? Ves Includes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  (B7)  Other (Explain in Remarks)  (B8)  Depth (inches):  Depth (inches):  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Ves Vater Table Present? Ves Saturation Present? Ves Includes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A6) (B7) Other (Explain in Remarks) e (B8)  No Depth (inches): No Depth (inches): Wetl monitoring well, aerial photos, previous inspections).	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Vetland Hydrology Indicators:  Primary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface (Beld Observations:  Surface Water Present? Yes  Saturation Present? Yes  Saturation Present? Yes  Includes capillary fringe)  Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A6) (B7) Other (Explain in Remarks) e (B8)  No Depth (inches): No Depth (inches): Wetl monitoring well, aerial photos, previous inspections).	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Vetland Hydrology Indicators: rimary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface ield Observations: urface Water Present?  Ves  vater Table Present?  Yes  aturation Present?  Yes  childes capillary fringe)  escribe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A6) (B7) Other (Explain in Remarks) e (B8)  No Depth (inches): No Depth (inches): Wetl monitoring well, aerial photos, previous inspections).	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one requi  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes  Nater Table Present? Yes Saturation Present? Yes Saturation Present? Yes Sincludes capillary fringe) Describe Recorded Data (stream gauge,	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Rod Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  (B7)  Other (Explain in Remarks)  (B8)  No  Depth (inches):  No  Depth (inches):  Depth (inches):  Wetl  monitoring well, aerial photos, previous inspections),	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Ots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

Project/Site: EREP		City/Co	ounty: Fend	ale/Husold+ Samplin	ng Date: 6/3/15
Applicant/Owner: Russ Ranch - Timber				State: LA Samplir	ng Point: UP-1
Investigator(s): Jordan Mayor					3.0
Landform (hillslope, terrace, etc.): road berm		Local	relief (concave,	convex, none) CMVec/1\ww	Slope (%): _
Subregion (LRR):				All the second of the second o	Datum:
Soil Map Unit Name:				NWI classification:	
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Ye		200	
Are Vegetation, Soil, or Hydrology signals				Normal Circumstances" present?	
Are Vegetation, Soil, or Hydrology _NO _na				eded, explain any answers in Ren	
SUMMARY OF FINDINGS - Attach site map s	howing	sam	pling point l	ocations, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present? Yes No				_	
Hydric Soil Present? Yes No			Is the Sampled within a Wetlan		\t
Wetland Hydrology Present? Yes No	<u> </u>		Within a Freda	165110	
Remarks:					
VEGETATION – Use scientific names of plant	<u> </u>				
		Dom	inant Indicator	Dominance Test worksheet:	
			ies? Status	Number of Dominant Species	
1.		_		That Are OBL, FACW, or FAC:	(A)
2				Total Number of Dominant	
3				Species Across All Strata:	(B)
4			-10:	Percent of Dominant Species	50°/
Sapling/Shrub Stratum (Plot size:)		_= 100	al Cover	That Are OBL, FACW, or FAC:	50°/2 (A/B)
1				Prevalence Index worksheet:	
2				Total % Cover of:	
3				OBL species 5 x	
4					3= 36
5				4	4= 32
Herb Stratum (Plot size:)		= Tot	al Cover	UPL species 35 x	5= 175
1. Junus c.f. patens	10		FACW	Column Totals: 90 (A	
2. Trifolium wormskieldii	35	7	FACW	Prevalence Index = B/A =	
3. Speraulana macrotheca	2		FAC	Hydrophytic Vegetation Indica	ntors:
4. Festiva macrostacher	35	D	NL	1 - Rapid Test for Hydrophy	
5. Festula perinnis	5		FAC	2 - Dominance Test is >50%	-
6. Itolaus lanatus	5		FAC	3 - Prevalence Index is ≤3.0	)1
7. Medicago polynorpha	_8_		FACU	4 - Morphological Adaptation	
8				data in Remarks or on a	· . · · · · · · · · · · · · · · · · · ·
9				5 - Wetland Non-Vascular P Problematic Hydrophytic Ve	
10				Indicators of hydric soil and wet	
11,	100			be present, unless disturbed or p	
Woody Vine Stratum (Plot size/)	100	= rota	il Cover	149	
1				Hydrophytic	
2				Vegetation	/
N. Borra Constraint State Const		= Tota	Cover	Present? Yes	No
% Bare Ground in Herb Stratum					

Sampling Point

Profile Description: (Describe to the depth needed to document the Indica	or or confirm the absence of indicators.)	
Depth Matrix Redox Features		
(inches) Color (moist) % Color (moist) % Type	Loc <sup>2</sup> Texture Remarks	
0-5 2.544/2 100	- Voan -	
5-10 2.544/2 60 - 40 -	- Loans G100 + 2/8/1 10/8/	
To 16 0 (V36 00 1-110-1-		
10-10 2,5172 90 109×3/3 10 C	- M silf loan faint redox	
True Constant B B Island B Isl		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Co. Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)		
	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol (A1) Sandy Redox (S5) Histic Epipedon (A2) Stripped Matrix (S6)	2 cm Muck (A10)	
Histic Epipedon (A2) Stripped Matrix (S6) Loamy Mucky Mineral (F1) (exc	Red Parent Material (TF2)	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)		
Depleted Below Dark Surface (A11)  Depleted Matrix (F3)	Other (Explain in Remarks)	
Thick Dark Surface (A12) Redox Dark Surface (F6)	<sup>3</sup> indicators of hydrophytic vegetation and	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)	wetland hydrology must be present,	
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.	
Restrictive Layer (if present):		
Туре:		
Depth (inches):	Hydric Soil Present? Yes No	
5-10" soil mixed intexture + color w/ c	lods of non insitu soil (~40%)	
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required, check all that apply)	Conneder Indicators /2	
Surface Water (A1) Water-Stained Leaves (B9)	Secondary Indicators (2 or more required)	
High Water Table (A2)  MLRA 1, 2, 4A, and 4B	, , ,	
Saluration (A3) Salt Crust (B11)	. , ,	
Water Marks (B1) Aquatic Invertebrates (B13	Drainage Patterns (B10) Dry-Season Water Table (C2)	
Sediment Deposits (B2)  Hydrogen Sulfide Odor (C1		
	) Saturation Visible on Aerial Imagery (C9) ng Living Roots (C3) Geomorphic Position (D2)	
Algal Mat or Crust (B4) Presence of Reduced Iron		
Iron Deposits (B5) Recent Iron Reduction in T		
Surface Soil Cracks (B6) Stunted or Stressed Plants		
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)		
Sparsely Vegetated Concave Surface (B8)	restarted to the minor (D7)	
Field Observations:	Vis.	
Surface Water Present? Yes No Depth (inches):	7///	
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:		
· ·		
top of road serm upland topo/ver	je/soils indicates not	

Project/Site: EREP		City/County: Frond	ale / Hundoldt Sampling Date: 6/3/15
Applicant/Owner: Russ Ranch + Timber			State: CA Sampling Point: UP-2
Investigator(s): Jordan Mayor		Section, Township, Ra	ange:
Landform (hillstope, terrace, etc.); road beem		Local relief (concave,	convex, none) ONVY   [ih/08/ope (%): ]
Subregion (LRR):	Lat:		Long: Datum:
Soil Map Unit Name:			NWI classification:
Are climatic / hydrologic conditions on the site typical for t			(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	_ significantly	1	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally pro	oblematic? (If no	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing	sampling point l	ocations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No	In the Complete	
Hydric Soil Present? Yes	No	Is the Sampled within a Wetla	1000
Wetland Hydrology Present? Yes	NO		
Terraria.			
			100
VEGETATION – Use scientific names of pla	ints.		
	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species
1.			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
4.	_		Species Across Ali Strata: (B)
Sapling/Shrub Stratum (Plot size:)		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)
1			Prevalence Index worksheet:
2			Total % Cover of: Multiply by:
3.			OBL species
4			FACW species 20 x 2 = 40  FAC species 20 x 3 = 60
5			FAC species 20 x3 = 60 FACU species 45 x4 = 180
Herb Stratum (Plot size:)		_ = Total Cover	UPL species
1. Anthoxanthum odoratum	15	D FACU	Column Totals: 100 (A) 355 (B)
2. Hypochaeris radicata	10	FACU	Prevalence Index = B/A = 3.55
3. Bellis perinnis	15	D NL	Hydrophytic Vegetation Indicators:
4. <u>Cirsium</u> vulgare	15	n FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Juneus effusus	20	1 FACH	2 - Dominance Test is >50%
6. Medicago polymorpha	_ 5	FACU	3 - Prevalence Index is ≤3.0¹
7. Trifolium repens 8. Festura perinnis	10	FAC FAC	4 - Morphological Adaptations (Provide supporting
		PAC	data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹
9		<del></del>	Problematic Hydrophytic Vegetation¹ (Explain)
11.			Indicators of hydric soil and wetland hydrology must
	100	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	35577		
1			Hydrophytic
2		Table 0	Vegetation   Present?   Yes No
% Bare Ground in Herb Stratum		= Total Cover	
Remarks:			

	Sampling Point: U \
document the indicator or cor	nfirm the absence of indicators.)
Redox Features	- V
<u> </u>	) siltlage distinct redos
- 0	loans (VFS)
3/3 2 C N	2%2544/1 R/M
	faint redox
<del></del>	TAINT TEOUX
triu CE-Coursed or Control Sec	of Coning 2) posting: Bi - Doro 1 ining 14-14 atriu
	nd Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solls <sup>3</sup> :
	2 cm Muck (A10)
, ,	Red Parent Material (TF2)
	Other (Explain in Remarks)
* -	<sup>3</sup> Indicators of hydrophytic vegetation and
• •	wetland hydrology must be present,
epressions (F8)	unless disturbed or problematic.
	Hydric Soil Present? Yes No
at apply)	Secondary Indicators (2 or more required)
ter-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
MLRA 1, 2, 4A, and 4B)	4A, and 4B)
. ,	Drainage Patterns (B10)
	Dry-Season Water Table (C2)
<u> </u>	Saturation Visible on Aerial Imagery (C9)
	Roots (C3) Geomorphic Position (D2)
	Shallow Aquitard (D3)
the state of the s	
, , ,	
er (Explain in Remarks)	Frost-Heave Hummocks (D7)
anth (inches)	
110000	5
	Wetland Hydrology Present? Yes No
pun (inches)	Metigur Bartologa Stazatri, Jaz
aerial photos, previous inspectio	ons), if available:
	Redox Features    Sist)

Project/Site: EREP		City/C	ounty: Femo	lab/Hubokt san	pling Date: 6/4/15
Applicant/Owner: Russ Ranch + Timber				State: CA Sam	
Investigator(s): 5 orda Mayor		Section	n, Township, Ra	nge:	
Landform (hillslope, terrace, etc.):					
Subregion (LRR):					
Soil Map Unit Name:		_			
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrologysi				"Normal Circumstances" preser	
Are Vegetation, Soil, or Hydrology wo na	_			eded, explain any answers in l	
SUMMARY OF FINDINGS – Attach site map s					
Hydrophytic Vegetation Present? Yes No	/			C.C./soil)	ACE (plats)
Hydric Soil Present? Yes X No			Is the Sampled within a Wetlan	Alea .	
Wetland Hydrology Present? Yes No			Attuin a Meria	1d? Yes <u>X</u>	NO
Remarks:				709 709	
VEGETATION – Use scientific names of plant					
VEGETATION - Ose scientific fiames of plant		Dom	inant Indicator	Dominance Test workshee	4.
Tree Stratum (Plot size:)			cies? Status	Number of Dominant Specie	
1				That Are OBL, FACW, or FA	
2				Total Number of Dominant	
3				Species Across All Strata:	<del></del>
4		- <del></del>	hal Carras	Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size:)		_ = 101	al Cover	That Are OBL, FACW, or FA	(,,,,,
1				Prevalence Index workshed Total % Cover of:	
2				OBL species	Multiply by: x 1 =
3		- —		FACW species 20	
4				FAC species 48	x3= 144
5				FACU species	x4= 20
Herb Stratum (Plot size:)		100	ai Covei	UPL species 27	
1. Juneus e.f. padens	20	<u> </u>	FACW	Column Totals:	(A) <u>339</u> (B)
2. Trifolium repens	23	D		Prevalence Index = B/A	A= 3.39
3. Geranim disyetism	25		<u>NL.</u>	Hydrophytic Vegetation Inc	licators:
4. Holas lanatus 5. Bromus microstochys	20	- D	FAC	1 - Rapid Test for Hydro	
5. Bellic prinnic	2		NL NL	2 - Dominance Test is >	
7. Hypochoenis radicata	5		FACU	3 - Prevalence Index is s 4 - Morphological Adapta	100
8				data in Remarks or or	n a separate sheet)
9.				5 - Wetland Non-Vascula	ar Plants <sup>1</sup>
10				Problematic Hydrophytic	
11				Indicators of hydric soil and	
Woody Vine Stratum (Plot size:)	100	_= Tota	al Cover	be present, unless disturbed	or problematic.
1					
2.	-			Hydrophytic Vegetation	
		= Tota	al Cover		No
% Bare Ground in Herb Stratum					
Remarks:					

C		11
a	u	1

Sampling Point: UP 3

Profile Description: (Describe to the depth needed to document the indicator or confi	imi the absence of indicators.)
Depth Matrix Redox Features	<u>=</u>
(inches) Color (moist) % Color (moist) % Type Loc2	
0-2 $104R3/2$ $100 - 0$	10am_
2-7 SY4/2 90 104R34 10 - 1-	SIH prominent redax
1 16 5/4/2 GA C (1/3/2 C C to his	
7-10 - 10 6-54713 B 6-11/699	instand mixed w Silt SO/SO
GAMA 2,513/3 5	
	and the second s
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand	
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2) Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loarny Mucky Mineral (F1) (except MLRA	
Hydrogen Sulfide (A4) Loarny Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	Manufacture of the second
Thick Dark Surface (A12) Redox Dark Surface (F6)	Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)  Sandy Glaved Matrix (S4)  Depleted Dark Surface (F7)  Peday Depressions (F9)	wetland hydrology must be present, untess disturbed or problematic.
Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Restrictive Layer (if present):	unless disturbed or problematic.
Type:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
1-18 Mixed In Silve due to	5 and Clock SOL
7-18" Mixed, not in situ due to with high chroma	
HYDROLOGY	
HYDROLOGY  Westland Mydrology Indicators:	
Wetland Hydrology Indicators:	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) High Water Table (A2) Saturation (A3)  Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  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)  MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except  High Water Table (A2) MLRA 1, 2, 4A, and 4B)  Saturation (A3) Salt Crust (B11)  Water Marks (B1) Aquatic Invertebrates (B13)  Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Saturation (A3) Salt Crust (B11)  Water Marks (B1) Aquatic Invertebrates (B13)  Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)  Drift Deposits (B3) Oxidized Rhizospheres along Living R	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3) Geomorphic Position (D2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Saturation (A3) Salt Crust (B11)  Water Marks (B1) Aquatic Invertebrates (B13)  Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)  Drift Deposits (B3) Oxidized Rhizospheres along Living R Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Saturation (A3) Salt Crust (B11)  Water Marks (B1) Aquatic Invertebrates (B13)  Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)  Drift Deposits (B3) Oxidized Rhizospheres along Living R	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) 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) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)  Water Marks (B5) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  C6) FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Coots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  C6)  FAC-Neutral Test (D5)  A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

Project/Site: EleD		City/County	: Fend	ale / Homboldt Sampling Date: 6/4/15
Applicant/Owner: Russ Ranch + Timber	3			State: CA Sampling Point: UP-4
Investigator(s): Jordan Mayor		Section, To	wnship, Rai	nge:
Landform (hillslope, terrace, etc.):		Local relie	f (concave, o	convex, none): IN WALL INOG Slope (%):
Subregion (LRR):	Lat:	•		Long: Datum:
Soil Map Unit Name:				=======================================
Are climatic / hydrologic conditions on the site typical for this t				
Are Vegetation, Soil, or Hydrology^JD sig				
Are Vegetation, Soil, or Hydrology NO nat				eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map si				
Hydrophytic Vegetation Present? Yes No	Υ			
Hydric Soil Present? Yes No			ne Sampled nin a Wetlan	
Wetland Hydrology Present? Yes No	×	AAICI	iiii a watiai	iur ies <u>No A</u>
Remarks:				
VEGETATION – Use scientific names of plants				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
The state of the s		Species?		0
1	_			Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4		- T-1-10-		Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		_ = Total Co	over	That Are OBL, FACW, or FAC: 50% (A/B)
1		-:-		Prevalence Index worksheet:
2				Total % Cover of: Multiply by:  OBL species x 1 =
3				FACW species x 1 =
4				FAC species x3 = /80
5				FACU species 40 x4= 160
Herb Stratum (Plot size:)		_ = Total Co	over	UPL species x 5 =
1. Holas lanatus	30	D	FAC	Column Totals: 100 (A) 340 (B)
2. Bromus hordeaceus	30	<u>D</u>	FACU	Prevalence Index = B/A = 3,4
3. Festuca perinnis	15	-	FAC	Hydrophytic Vegetation Indicators:
4. Trifolium repens	15		FAC	1 - Rapid Test for Hydrophytic Vegetation
5. Poa campestas			FACU	2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0¹
7				4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants <sup>1</sup>
10			-	Problematic Hydrophytic Vegetation¹ (Explain)
11.				Indicators of hydric soil and wetland hydrology must
	100	_= Total Co	ver	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)				
1				Hydrophytic
2		- <del> </del>		Vegetation   Present?
% Bare Ground in Herb Stratum		_= Total Co	ver	
Remarks				
veg. not acting as hydroph	y+es			
	1			

S	O	1	L

Sampling Point: UP-U

Profile Description: (Describe to the dep	th needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) 1 %	Color (moist) % Type¹ Loc²	Texture Remarks
10-5 104R312 10U	- 0	- Viam
2-8 10483/2980	7.54R3/2 2 - M	sill man traint rodox
7,14 2513/2012	12103/2 6 6	THE TOTAL COLOR
8-10 6.547673	104R3/35 ( M)	TO MATICIA
		<u>w15/5/1 2%</u>
l — — — — —		
l — — — — —		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM	=Reduced Matrix, CS=Covered or Coated Sand Gr	ains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)	Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3)	Loamy Mucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Thick Dark Surface (A12)	Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:	<del></del>	, , , , , , , , , , , , , , , , , , , ,
Tiornama.		
HYDROLOGY		
HYDROLOGY Westland Hydrology Indicators:		
Wetland Hydrology Indicators:	di alcada all that anala)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required)		Secondary Indicators (2 or more required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	<ul> <li>Water-Stained Leaves (B9) (except</li> <li>MLRA 1, 2, 4A, and 4B)</li> <li>Salt Crust (B11)</li> <li>Aquatic Invertebrates (B13)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living Root</li> </ul>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3) Geomorphic Position (D2)  Shaflow Aquitard (D3)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Titled Soils (C6) Stunted or Stressed Plants (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shaflow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11)  Aquatic Invertebrates (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Stunted or Stressed Plants (D1) (LRR A)  Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shaflow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B)  Sparsely Vegetated Concave Surface (B)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shaflow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B')  Sparsely Vegetated Concave Surface (Beld Observations:  Surface Water Present?  Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shaflow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required and sequence)  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B') Sparsely Vegetated Concave Surface (B1) Fleid Observations: Surface Water Present? Yes Water Table Present? Yes	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required and state of the stat	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3)  Geomorphic Position (D2)  Shaflow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B')  Sparsely Vegetated Concave Surface (B1)  Fleid Observations:  Surface Water Present?  Water Table Present?  Yes  Saturation Present?  Yes  (includes capillary fringe)	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Is (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
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Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B)  Sparsely Vegetated Concave Surface (B1)  Fleid Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, mo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Is (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B)  Sparsely Vegetated Concave Surface (B1)  Fleid Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, mo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Is (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No
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Wetland Hydrology Indicators:  Primary Indicators (minimum of one required Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B)  Sparsely Vegetated Concave Surface (B1)  Fleid Observations:  Surface Water Present? Yes  Water Table Present? Yes  Saturation Present? Yes  (includes capillary fringe)  Describe Recorded Data (stream gauge, mo	Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)  Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Other (Explain in Remarks)  Depth (inches): Depth (inches): Wetla	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Is (C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No
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Project/Site: EREP		City/County:	Fernd	ale / Humbordt Sampling Date: 6/3/15
Applicant/Owner: Russ Ranch + Timber		Ony/Oddiny.		State: CA Sampling Point: WP-1
Investigator(s): Jordan Mayor  Landform (hillslope, terrace, etc.): bern along ditch	J	Local relief /	concave	convex none).
Subregion (LRR):				
•				NWI classification:
Are climatic / hydrologic conditions on the site typical for this				
Are Vegetation, Soil, or Hydrology No s				"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology No n				eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sampling	point l	ocations, transects, important features, etc
Hydrophytic Vegetation Present? Yes No		1-41-	011	1.4
Hydric Soil Present? Yes N	<u> </u>		Sampled a Wetlar	
Wetland Hydrology Present? Yes Ne	°			100
Renairs.				
VEGETATION – Use scientific names of plant	ts.			
	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1.	· ———			That Are OBL, FACW, or FAC: (A)
3.				Total Number of Dominant
4.				Species Across All Strata: (B)
		= Total Cove	er	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 <u>70</u> x 1 = <u>70</u>
4/				FACW species x 2 =
5.				FAC species x 3 =
		= Total Cove		FACU species x 4 =
Herb Stratum (Plot size:)		_		UPL species x5=
1. Potentilla (Argentina) anserina 2. Eleochanis Madustrus	<u>55</u>		OBL	Column Totals: 100 (A) 155 (B)
3. Rumar Gallion trans.	10		FACW	Prevalence Index = B/A =/, 55
4. Poa compressa	5		FACU	Hydrophytic Vegetation Indicators:
5. Festiva perin	5		FAC	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
6. Holas laretus	10		FAC	✓ 3 - Prevalence Index is ≤3.0¹
7.				4 - Morphological Adaptations¹ (Provide supporting
8				data in Remarks or on a separate sheet)
9,				5 - Wetland Non-Vascular Plants <sup>1</sup>
10		-		Problematic Hydrophytic Vegetation (Explain)
11	4-0	- 12		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size/	100	= Total Cove	г	To proceed a minimum or productions.
1				Liudeanhudia
2				Hydrophytic Vegetation
1		= Total Cove	г	Present? Yes No
% Bare Ground in Herb Stratum				
Remarks:	nohile			
veq. acting as a hydr	nh ye			

Profile Description: (Describe to the depth needed to document the indicator or co	onfirm the absence of indicators )
Depth Matrix Redox Features	on managers
0-18 544/1 90 104R3/3 10 C. M	2 silt loans distinct teda
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sa	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Solis <sup>3</sup> :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Histic Epipedon (A2)  Stripped Matrix (S6)	Red Parent Material (TF2)
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLf Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	
Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Depleted Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12) Redox Dark Surface (F6)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)  Depleted Dark Surface (F7)	wetland hydrology must be present.
Sandy Gleyed Matrix (S4) Redox Depressions (F8)	unless disturbed or problematic.
Restrictive Layer (if present):	
Type:	
Depth (inches):	Hydric Soil Present? Yes_ No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)
Surface Water (A1) Water-Stained Leaves (B9) (excep	t Water-Stained Leaves (B9) (MLRA 1, 2,
High Water Table (A2) MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1) Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Oxidized Rhizospheres along Living	
Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5) Recent Iron Reduction in Tilled Sol	
Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (Li	, ,
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes NoX _ Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspecti	ions), if available
Remarks:	

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: R MEP City/County: Fonds(0, HUM Sampling Date: 9-17-15 Applicant/Owner: Nest Name + Timber State: A Sampling Point: V3T1-U Investigator(s): 115 \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_ Plond plan. Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%); \_\_\_\_\_ Landform (hillslope, terrace, etc.): \_\_Lat: \_\_\_\_\_\_ Datum: \_\_\_\_\_ Subregion (LRR): Soil Map Unit Name: \_\_\_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Yes is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes 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 = Total Cover That Are OBL, FACW, or FAC: \_\_ (A/B) Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: 1. Total % Cover of: 2, \_\_\_\_ OBL species \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_ = Total Cover UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Herb, Stratum (Plot size: 1. tordam marine Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) 2. ( VINOXI MUS PONHAN 20 Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% \_\_\_ 3 - Prevalence Index is ≤3.0<sup>1</sup> 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants<sup>1</sup> 10.\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 100 = Total Cover Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum Remarks:

4 der 1

SOIL							9/17	15 Sampling Point: U 3/1
Profile Desc	ription: (Describe	to the dept	th needed to docun	nent the	indicator	or confirm	the absence of	Indicators.)
Depth	Matrix			x Feature				•
(inches)	Cotor (moist)	%	Color (moist)	%	Type		Texture	Remarks
0-6							Siltloan	
6-14	2.54 4/2	80	7.44R416	20	(	m	Sil+ 600	67
			/					
								-
	-							
	oncentration, D=Dep					d Sand Gr		on: PL=Pore Lining, M=Matrix.
	Indicators: (Application				ea.)			for Problematic Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (S	100			2 cm N	
	pipedon (A2)		Stripped Matrix	• •	45/	111 D 4 45		arent Material (TF2)
	istic (A3) en Sulfide (A4)		Loamy Mucky M		100	MILKA 1)		hallow Dark Surface (TF12)
	d Below Dark Surface	s (A11)	Loamy Gleyed I Depleted Matrix		1		Other (	(Explain in Remarks)
	ark Surface (A12)	- (AII)	Redox Dark Sur				3Indicatore	of hydrophytic vegetation and
	Aucky Mineral (S1)	1	Depleted Dark S					hydrology must be present.
	Sleyed Matrix (S4)		Redox Depressi		4			disturbed or problematic.
	Layer (if present):				<u> </u>		1	production of productions
Donth for	-h\:	-					Hydria Sail De	nearth Van Na V
Remarks:	GIIC3).						Hydric Soil Fr	esent? Yes No
res	ime ( based	on To	Position P	is itia	). R	rduce	Temenou	osent? Yes No your No your Arrange area
HYDROLO	GY							•
Wetland Hv	drology Indicators:							
_	cators (minimum of o	ne required	check all that anni-	Λ			Seconda	ary Indicators (2 or more required)
	Water (A1)	<del>No regaliçõ</del>	Water-Stai		os (BO) (o	vaont		
	ater Table (A2)			1, 2, 4A, a		kceht		er-Stained Leaves (B9) (MLRA 1, 2,
Saturation			Salt Crust		anu 46)			A, and 4B)
_	, ,			, ,	- (D43)			nage Patterns (B10)
	larks (B1)		Aquatic Inv					Season Water Table (C2)
	nt Deposits (82)		Hydrogen S					aration Visible on Aerial Imagery (C9)
	posits (B3)		Oxidized R				<del></del>	morphic Position (D2)
-	at or Crust (B4)		Presence o					llow Aquitard (D3)
Iron Dep			Recent Iro					-Neutral Test (D5)
_	Soil Cracks (B6)		Stunted or		-	1) (LRR A)	- D.	ed Ant Mounds (D6) (LRR A)
	on Visible on Aerial I			lain in Re	emarks)		Fros	t-Heave Hummocks (D7)
	y Vegetated Concave	Surface (E	38) 					
Field Obser			\ <u>/</u>					
Surface Wate	er Present? Y	es N	No Depth (inc	hes):		_		
Water Table	Present? Y	es N	No Depth (inc					N
Saturation Pi (includes cap	pillary fringe)_	es f		-21		J		resent? YesNo
Describe Re	corded Data (stream	gauge, mo	nitoring well, aerial p	hotos, pr	evious ins	pections), i	f available:	
Remarks:	pland ar	cu 0 -	f spoil	Pite.	A53	uwed	no we	Honds hydrology
ط	ase on	Topos	iraphic p	asitio	v.			Honds hydrology

Project/Site: REPED.	City/Co	untv.Fema	4n6, Hum Sampling Date: 9-17-19
Applicant/Owner: 121+			State: CA Sampling Point: U3TI-
10 00	Section		inge
	Locate	elief (concave	convex, none): CONCAVE + Stope (%): < Z
			Long: Datum:
			NWI classification
Are climatic / hydrologic conditions on the site typical for the			
Are Vegetation, Soil, or Hydrology	significantly disturbe	ed? NO Are	"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	naturally problemati	c? NO (If ne	eeded, explain any answers in Remarks )
			ocations, transects, important features, etc.
Hydrophylic Vegetation Present? Yes	No		
		s the Sampled	Area
	No	within a Wetlar	nd? Yes No No
Remarks:			
total 2 3 feet 1	som be	inda	
VEGETATION - Use scientific names of pla	nts.	-	
Trop Charles (Diet day)		ant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1			Number of Dominant Species That Are OBL, FACW, or FAC:
2,			Total Number of Dominant
3,			Species Across All Strata(B)
4,	= Tota	l 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 =
	= Total	Cover	FACU species x 4 =
Herb Stratum (Plot size:)	20 6	***	UPL species x 5 =
1 Salicomia pacifica	_ <u>-30</u> _ <u>\</u>	032	Column Totals (A) (B)
2 terdom marinm.	160 D	- tAC	Prevalence Index = B/A =
4. LOUS CANCULARS.	_ 1520 D	FAC	Hydrophytic Vegetation Indicators:
	- 12	FAC	1 - Rapid Test for Hydrophytic Vegetation
6. Ciaim Marc	-10	FACU	2 - Dominance Test is >50%
7.	- 45	FACU	3 - Prevalence Index is ≤3.01
			4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
9.			5 - Wetland Non-Vascular Plants <sup>1</sup>
10			Problematic Hydrophytic Vegetation¹ (Explain)
11.			¹Indicators of hydric soil and wetland hydrology must
	100 = Total	Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size)			
1			Hydrophytic
2			Vegetation Present? Yes No
% Bare Ground in Herb Stratum	= Total	Cover	Present? Yes X No
Remarks:	<u> </u>		

rofile Desc	ription: (Describe)	to the depti	h needed to docume	ent the ir	ndicator	or confirm	n the absence	of indicate	rs.)	
Depth	Matrix			Features					,	
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc2	Texture		Remarks	
0 - 5	2.544/2		9				51/+ Loa		· · · · · · · · · · · · · · · · · · ·	
3-16	2.544/2	80	7.54R4/4	20		<u>_M_</u>	SiltLo	a <u>m</u>		
<u>-</u>								•-		
Fyne: C=Ci	oncentration D=Den	letion RM=I	Reduced Matrix, CS=	Covered	or Coate	d Sand G	rains <sup>2</sup> Lor	ration DI =	Pore Lining, M=Matri	85
ydric Soil	Indicators: (Application	able to all L	RRs, unless otherw	ise note	d.)	O Darid Gi			lematic Hydric Soil	
_ Histosol			Sandy Redox (S5		•			n Muck (A10	-	
_ Histic Ep	oipedon (A2)	_	Stripped Matrix (S				Red	Parent Mat		
	stic (A3)	п -	Loamy Mucky Mis			MLRA 1)			ark Surface (TF12)	
	in Sulfide (A4) d Below Dark Surface	- - /Δ11)	Loamy Gleyed M  Depleted Matrix (				Oth	er (Explain i	n Remarks)	
	ark Surface (A12)	7 (117)	Redox Dark Surfa	,			3Indicate	rs of hydror	hytic vegetation and	
_	lucky Mineral (S1)	_	Depleted Dark St		7)				y must be present,	
	Bleyed Matrix (S4)		Redox Depressio	ns (F8)			unles	s disturbed	or problematic.	
	Layer (if present):								-	
Type:	-t> <sup>58</sup>		<del></del>					_	\	
	ches):									
emarks:							Hydric Soil	Present?	Yes No _	
/DROLO							Hydric Soil	Present?	Yes No _	
YDROLO	drology Indicators:	ne required	check all that applied	Ш						
/DROLO /etland Hydrimary Indic	drology Indicators: cators (minimum of o	ne required,	check all that apply)		s (BQ) /e	vcont	Secon	ndary Indica	tors (2 or more requi	red)
DROLO Setland Hydrimary Indic	drology Indicators: cators (minimum of o Water (A1)	ne required:	Water-Stain	ed Leave		xcept	Secon	ndary Indica Vater-Staine	tors (2 or more requi	red)
DROLO etland Hydinary India	drology Indicators: cators (minimum of o Water (A1) ater Table (A2)	ne required,	Water-Stain- MLRA 1,	ed Leave 2, 4A, a		xcept	Secon V	ndary Indica Vater-Staine	tors (2 or more requi d Leaves (B9) (MLR. B)	red)
OROLO Setland Hydrimary Indic Surface High Wa	drology Indicators: cators (minimum of o Water (A1) ater Table (A2)	ne required	Water-Stain	ed Leave 2, 4A, a 311)	nd 4B)	xcept	<u>Secor</u> V	ndary Indica /ater-Staine 4A, and 4 rainage Pat	tors (2 or more requi	red)
OROLO Vetland Hydrimary India Surface High Wa Saturatia Water M	drology Indicators: cators (minimum of o Water (A1) hter Table (A2) on (A3)	ne required:	Water-Stains MLRA 1, Salt Crust (E	ed Leave 2, 4A, and 311) rtebrates	nd 4B)	xcept	<u>Secor</u> W	ndary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season \	tors (2 or more requi d Leaves (B9) (MLR. B) terns (B10)	r <u>ed)</u>
'DROLO 'etland Hydrimary Indic _ Surface _ High Wa _ Saturatic _ Water M _ Sedimer _ Drift Dep	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3)	ne required,	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve	ed Leave 2, 4A, and 311) rtebrates utfide Od izosphen	nd 4B) (B13) or (C1) es along	Living Roo	Secon V D S ots (C3) G	ndary Indica Vater-Staine 4A, and 4 rainage Pat ry-Season Va aturation Viseomorphic	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2)	r <u>ed)</u>
'DROLO 'etland Hydrimary Indic _ Surface _ High Wa _ Saturatic _ Water M _ Sedimer _ Drift Dep _ Algal Ma	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	ne required	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Se Oxidized Rh	ed Leave 2, 4A, and 311) rtebrates utfide Od- izosphen Reduced	nd 4B) (B13) or (C1) es along I Iron (C4)	Living Roo	Secon  — V  — D  — S  ols (C3) — G	ndary Indica Vater-Staine 4A, and 4 rainage Pat ry-Season V aturation Viseomorphic thallow Aqui	tors (2 or more required Leaves (B9) (MLR.B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3)	r <u>ed)</u>
/DROLO /etland Hydrimary Indic _ Surface _ High Wa _ Saturatic _ Water M _ Sedimer _ Drift Dep _ Algal Ma _ Iron Dep	drology Indicators: cators (minimum of o Water (A1) Inter Table (A2) In (A3) Iarks (B1) In Deposits (B2) In Deposits (B3) Inter Crust (B4) Inter Table (B4) Inter Table (A2) Int	ne required:	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen So Oxidized Rh Presence of Recent Iron	ed Leave 2, 4A, and 311) rtebrates utfide Od izosphen Reduced Reductio	nd 4B)  i (B13)  or (C1)  es along  d Iron (C4)  in in Tille	Living Roo () d Soils (C6	Secon  — V  — D  — S  — S  — S  — S	ndary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season Vi aturation Vi eomorphic hallow Aqui AC-Neutral	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5)	r <u>ed)</u>
/DROLO /etland Hydrimary Indice Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicators: cators (minimum of o Water (A1) Inter Table (A2) In (A3) Iarks (B1) Int Deposits (B2) Introduction (B3) Introduction (B4) Introduction (B5) Introduction (B5) Introduction (B6) Interpolation (B6	=	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si	ed Leave 2, 4A, and 111) Intebrates utifide Odi izosphere Reduced Reduction	ind 4B)  is (B13)  or (C1)  es along  d Iron (C4)  in in Tiller  Plants (D	Living Roo () d Soils (C6	Secon  W D D Solts (C3) — S F F R	Adary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season Valuration Viste eomorphic lateral hallow Aquital AC-Neutral aised Ant M	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)	r <u>ed)</u>
/DROLO /etland Hydrimary Indic _ Surface _ High Wa _ Saturatic _ Water M _ Sedimer _ Drift Dep _ Algal Ma _ Iron Dep _ Surface _ Inundation	drology Indicators: cators (minimum of o Water (A1) Inter Table (A2) In (A3) Iarks (B1) In Deposits (B2) In Deposits (B3) Inter Crust (B4) Inter Table (B4) Inter Table (A2) Int	magery (B7)	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave 2, 4A, and 111) Intebrates utifide Odi izosphere Reduced Reduction	ind 4B)  is (B13)  or (C1)  es along  d Iron (C4)  in in Tiller  Plants (D	Living Roo () d Soils (C6	Secon  W D D Solts (C3) — S F F R	Adary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season Valuration Viste eomorphic lateral hallow Aquital AC-Neutral aised Ant M	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5)	r <u>ed)</u>
/DROLO /etland Hydrimary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial In	magery (B7)	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave 2, 4A, and 111) Intebrates utifide Odi izosphere Reduced Reduction	ind 4B)  is (B13)  or (C1)  es along  d Iron (C4)  in in Tiller  Plants (D	Living Roo () d Soils (C6	Secon  W D D Solts (C3) — S F F R	Adary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season Valuration Viste eomorphic lateral hallow Aquital AC-Neutral aised Ant M	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)	r <u>ed)</u>
VDROLO Vetland Hydrimary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations:	magery (B7) e Surface (B	Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave 2, 4A, and 111) rtebrates utfide Od izospheri Reduced Reductio tressed I nin in Rer	nd 4B) s (B13) or (C1) es along 1 Iron (C4) on in Tilled Plants (D narks)	Living Root !) d Soils (C6 1) (LRR A	Secon  W D D Solts (C3) — S F F R	Adary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season Valuration Viste eomorphic lateral hallow Aquital AC-Neutral aised Ant M	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)	r <u>ed)</u>
/DROLO /etland Hydrimary Indice Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely feld Observantace Water M	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations: er Present?	magery (B7) e Surface (B	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si Other (Explains)	ed Leave 2, 4A, a 311) rtebrates utfide Od izosphen Reduced Reductio tressed I in in Rer	nd 4B) s (B13) or (C1) es along d Iron (C4) on in Tillee Plants (D narks)	Living Roo b) d Soils (C6 1) (LRR A	Secon  W D D Solts (C3) — S F F R	Adary Indica Jater-Staine 4A, and 4 rainage Pat ry-Season Valuration Viste eomorphic lateral hallow Aquital AC-Neutral aised Ant M	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)	r <u>ed)</u>
/DROLO /etland Hydrimary Indice Surface High Water Mage Sedimer Drift Dep Algal Mage Iron Dep Surface Inundation Sparsely ield Observation Per aturation Per aturation Per Algal Mage Iron Dep	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations: er Present? Present? Yesent?	magery (B7) Surface (B	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si Other (Explains) Depth (inch	ed Leave 2, 4A, and all 1) rtebrates utfide Od izosphere Reduccto Reductio tressed I ain in Rer es):es):es):es	nd 4B) s (B13) or (C1) es along d Iron (C4 in in Tiller Plants (D narks)	Living Roots) d Soils (C6 1) (LRR A	Secon  W D D Solts (C3) — S F F R	ndary Indica Jater-Staine  4A, and 4  rainage Pat  ry-Season Valuration Via  eomorphic of the comorphic of	dors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks (D7)	red) A 1, 2, ry (C9)
Crimary Indic Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation Per Includes cap	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations: er Present? Present? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent?	magery (B7) e Surface (B es N es N es N	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si Other (Explains) Depth (inch	ed Leave 2, 4A, at 111) rtebrates utfide Od izosphen Reducer Reductio tressed I in in Rer es):es):es):es):es):es):es):es):es):es):es):es):es):es):es):es):es):es):es):	nd 4B) s (B13) or (C1) es along d Iron (C4) in in Tiller Plants (D narks)	Living Root) d Soils (C6 1) (LRR A	Secon	ndary Indica Jater-Staine  4A, and 4  rainage Pat  ry-Season Valuration Via  eomorphic of the comorphic of	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks (D7)	red) A 1, 2, ry (C9)
YDROLO Vetland Hydrimary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obsert Surface Water Vater Table Saturation Pencludes cap Describe Rec	drology Indicators: cators (minimum of o Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B2) Inter Table (B2) Inter Table (B3) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B5) Inter Table (B6) Inter	magery (B7) Surface (B es N es N gauge, mor	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Explains) Depth (inch Depth (inch Depth (inch	ed Leave 2, 4A, and all 1) rtebrates utfide Oddizospheri Reduccto Reductio rtressed I rin in Rer es): es): otos, pre	nd 4B) s (B13) or (C1) es along d Iron (C4) in in Tiller Plants (D narks)	Living Root) d Soils (C6 1) (LRR A	Secon	ndary Indica Jater-Staine  4A, and 4  rainage Pat  ry-Season Valuration Via  eomorphic of the comorphic of	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks (D7)	red) A 1, 2, ry (C9)
YDROLO Vetland Hydrimary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obsert Surface Water Vater Table Saturation Pencludes cap Describe Rec	drology Indicators: cators (minimum of o Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B2) Inter Table (B2) Inter Table (B3) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B5) Inter Table (B6) Inter	magery (B7) Surface (B es N es N gauge, mor	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Explains) Depth (inch Depth (inch Depth (inch	ed Leave 2, 4A, and all 1) rtebrates utfide Oddizospheri Reduccto Reductio rtressed I rin in Rer es): es): otos, pre	nd 4B) s (B13) or (C1) es along d Iron (C4) in in Tiller Plants (D narks)	Living Root) d Soils (C6 1) (LRR A	Secon	ndary Indica Jater-Staine  4A, and 4  rainage Pat  ry-Season Valuration Via  eomorphic of the comorphic of	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks (D7)	red) A 1, 2, ry (C9)
/DROLO /etland Hydrimary India Surface High Wa Saturatia Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatia Sparsely leld Obserurface Water /ater Table aturation Pencludes cap escribe Res	drology Indicators: cators (minimum of o Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B2) Inter Table (B2) Inter Table (B3) Inter Table (B4) Inter Table (B4) Inter Table (B4) Inter Table (B5) Inter Table (B6) Inter	magery (B7) Surface (B es N es N gauge, mor	Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si Other (Explains) Depth (inch	ed Leave 2, 4A, and all 1) rtebrates utfide Oddizospheri Reduccto Reductio rtressed I rin in Rer es): es): otos, pre	nd 4B) s (B13) or (C1) es along d Iron (C4) in in Tiller Plants (D narks)	Living Root) d Soils (C6 1) (LRR A	Secon	ndary Indica Jater-Staine  4A, and 4  rainage Pat  ry-Season Valuration Via  eomorphic of the comorphic of	tors (2 or more required Leaves (B9) (MLR. B) terns (B10) Vater Table (C2) sible on Aerial Image Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks (D7)	red) A 1, 2, ry (C9)

Project/Site: R EREP	City/Court	y Fendal	, HUM s	ampling Date: 9-17-15
Applicant/Owner: 155 Ranch +				ampling Point 2372-
Investigator(s):				
Landform (hillslope, terrace, etc.):	In in Local reli	ef (concave, convi	ex. none):	Sione (%):
Subregion (LRR):	Lat	Lor	)a:	Datum
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes			on;
Are Vegetation, Soil, or Hydrology	_ significantly distorbed	A A Norm	iai Circumstances" pres	sent? Yes No
Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS - Attach site ma				
Hydrophytic Vegetation Present? Yes X		g point tood		inportant reatures, etc.
Hydric Soil Present? Yes	11	the Sampled Area	3	
Wetland Hydrology Present? Yes		thin a Wetland?	Yes	No
Remarks:				
took oit is a ZE	et from	Ganda	2	
VEGETATION – Use scientific names of pl			1	
	Absolute Dominar		minance Test workshe	eet:
Tree Stratum (Plot size:)  1	<u>% Cover</u> <u>Species</u>	I NUI	mber of Dominant Spec at Are OBL, FACW, or F	
2		Tot	al Number of Dominant	7
3,	<del></del>		ecies Across All Strata	
Sapling/Shrub Stratum (Plot size)	= Total C		rcent of Dominant Speci at Are OBL, FACW, or F	
1		Pre	valence Index worksh	eet:
2.			Total % Cover of:	Multiply by:
3.			L species	
4		100	CW species	
5			C species	
Mark Division (Division )	= Total C	.over i	CU species	
Herb Stratum (Plot size:)	15 D		L species	
1. Postica perennice 2. Distichlis Spirota.	45 5	FAW	Prevalence Index = 6	(A) (B)
3. Salicania parilia	<u> </u>	OBL Hy	drophytic Vegetation I	
4. Holes Cartabus		FAC V	1 - Rapid Test for Hydi	rophytic Vegetation
5		- —   _	2 - Dominance Test is	>50%
6			3 - Prevalence Index is	s ≤3 0¹
7	<u> </u>		4 - Morphological Adap	otations1 (Provide supporting
8				on a separate sheet)
9			5 - Wetland Non-Vasco	
10				tic Vegetation <sup>1</sup> (Explain) d wetland hydrology must
	Total Co		present, unless disturbe	d or problematic
Woody Vine Stratum (Plot size)	1-(710tal Cl	7461		
1,		- Hyd	drophytic	
2	— <del></del>	Veg	getation	,, <u>x</u>
% Bare Ground in Herb Stratum	= Total Co	ovet LLe	sent? Yes _	No 4
Remarks:			<del></del>	
Vegetration not go	only as hyd	Inophy to	or upland	berms.

			market .			the absence of	•
Depth Matrix (inches) Color (moist)	%	Color (moist)	Features %	Type	Loc²	Texture	Remarks
0-3 2.543/2							/ Nemeros
3-16 637.4/6	<del></del>	754R4/6	<u>/U</u>		nx_		
							-
		•					
Type: C=Concentration, D=Depl	etion RM=I	Reduced Matrix CS=	:Covered	or Coate		aine <sup>2</sup> l ocati	ion: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applica					J Sariu Gir		for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		Sandy Redox (S5		•		2 cm N	•
Histic Epipedon (A2)	_	Stripped Matrix (	*				arent Material (TF2)
Black Histic (A3)	2	Loamy Mucky Mi	neral (F1)	(except	MLRA 1)		hallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	-	Loamy Gleyed M				Other	(Explain in Remarks)
Depleted Below Dark Surface	(A11) _	Depleted Matrix (	-			1.	
Thick Dark Surface (A12)	-	Redox Dark Surfa					of hydrophytic vegetation and
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	-	Depleted Dark Start Redox Depression		)			hydrology must be present, disturbed or problematic.
Restrictive Layer (if present):	-	redux Depressio	113 (1 6)		_	uniess t	isturbed of problematic.
Туре:							
Depth (inches):		<del></del>				Hydric Soli Pr	resent? Yes No
Remarks:		<u> </u>				11,721.10 00.111	103
5044							
	dition	as U	<u>3 Tl-</u>	- U			
YDROLOGY	dition	as U	<u>3 Tl-</u>	- U			
YDROLOGY Wetland Hydrology Indicators:			•	- U		Seconda	ary Indicators (2 or more required)
YDROLOGY Wetland Hydrology Indicators:					cept		ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of or		check all that apply)	ed Leave:	s (B9) (ex	cept	Wat	
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)		check all that apply)  Water-Stain  MLRA 1,  Salt Crust (8	ed Leave: <b>2, 4A,</b> ar 311)	s (B9) (ex nd 4B)	cept	Wat	er-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)		check all that apply)  Water-Stain MLRA 1,	ed Leave: <b>2, 4A,</b> ar 311)	s (B9) (ex nd 4B)	cept	Wat Drai	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)		check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve	ed Leaves 2, 4A, ar 311) Intebrates ulfide Odd	s (B9) (ex nd 4B) (B13) or (C1)	·	Wat Drai Dry- Satu	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)		check all that apply)  Water-Stain  MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh	ed Leave: 2, 4A, ar 311) retebrates ulfide Odd	s (B9) (ex nd 4B) (B13) or (C1) es along L	iving Roo	Wat Drai Dry Satu ts (C3) Geo	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)		check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh	ed Leave: 2, 4A, ar 311) ritebrates ulfide Odd izosphere Reduced	s (B9) (ex nd 4B) (B13) or (C1) es along L Iron (C4)	iving Roo	Wat Drai Dry Satu ts (C3) Geo	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)		check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leave: 2, 4A, ar 311) Intebrates ulfide Odd izosphere Reduced Reduction	s (B9) (ex nd 4B) (B13) or (C1) es along L Iron (C4) n in Tilled	iving Roof	Wat Drai Dry Satu ts (C3) Geo Shal	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Iration Visible on Aerial Imagery (C9) morphic Position (D2) Ilow Aquitard (D3) -Neutral Test (D5)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	ne required;	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si	ed Leaves 2, 4A, ar 311) Intebrates Ulfide Odd izosphere Reduced Reduction itressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled	iving Roof	Wate A	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) flow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In	ne required;	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves 2, 4A, ar 311) Intebrates Ulfide Odd izosphere Reduced Reduction itressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled	iving Roof	Wate A	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Iration Visible on Aerial Imagery (C9) morphic Position (D2) Ilow Aquitard (D3) I-Neutral Test (D5)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Sparsely Vegetated Concave	ne required;	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves 2, 4A, ar 311) Intebrates Ulfide Odd izosphere Reduced Reduction itressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled	iving Roof	Wate A	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) flow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave	ne required: magery (B7) Surface (B	check all that apply)  Water-Stain- MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)	ed Leaves 2, 4A, ar 311) rebrates ulfide Odd izosphere Reduced Reduction stressed F ain in Rem	s (B9) (ex ad 4B) (B13) or (C1) es along L Iron (C4) n in Tilled Plants (D1 nearks)	iving Roof	Wate A	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) flow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?	magery (B7) Surface (B	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leave: 2, 4A, ar 311) ritebrates ulfide Odd izosphere Reduced Reduction itressed F ain in Rem	s (B9) (ex nd 4B) (B13) or (C1) es along L Iron (C4) n in Tilled Plants (D1 narks)	iving Roof	Wate A	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) flow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A)
YDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present? Ver	magery (B7) Surface (B	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch	ed Leaves 2, 4A, ar 311) Intebrates Ulfide Odd izosphere Reduced Reduction itressed Fain in Rem ies):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	.iving Roof Soils (C6) ) (LRR A)	Wate Wate A Draine Sature Sature Shale FACE Rais Fros	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present? Water Table Present? Yes	magery (B7) Surface (B	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves 2, 4A, ar 311) Intebrates Ulfide Odd izosphere Reduced Reduction itressed Fain in Rem ies):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	.iving Roof Soils (C6) ) (LRR A)	Wate Wate A Draine Sature Sature Shale FACE Rais Fros	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) flow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?  Yew	magery (B7) Surface (B es N es N	check all that apply)  Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or Si Other (Explain)  Depth (inch Depth (inch	ed Leave: 2, 4A, ar 311) ritebrates ulfide Odd izosphere Reduced Reduction itressed F ain in Rem es): es):	s (B9) (ex nd 4B) (B13) or (C1) es along L Iron (C4) n in Tilled Plants (D1 narks)	Soils (C6) (LRR A)	Wate  Wate  Drai  Dry- Satu  Shal  FAC  Rais  Fros	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) tration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) ted Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?  Water Table Present?  Yet (includes capillary fringe)  Describe Recorded Data (stream)	magery (B7) Surface (B es N es N gauge, mor	Check all that apply)  Water-Stain- MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch Depth (inch Depth (inch	ed Leaves 2, 4A, ar 311) rebrates ulfide Odd izosphere Reduced Reduction stressed P ain in Rem es): es): es):	s (B9) (ex ad 4B)  (B13)  or (C1)  es along L  fron (C4)  n in Tilled  Plants (D1  narks)	Soils (C6) (LRR A)  Wetla	Wate A Drai Dry- Sature Share Share FAC Rais Fros	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (LRR A) It-Heave Hummocks (D7)
YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of or  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial In  Sparsely Vegetated Concave  Field Observations:  Surface Water Present?  Very Water Table Present?  Yes Saturation Present?	magery (B7) Surface (B es N es N gauge, mor	Check all that apply)  Water-Stain- MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch Depth (inch Depth (inch	ed Leaves 2, 4A, ar 311) rebrates ulfide Odd izosphere Reduced Reduction stressed P ain in Rem es): es): es):	s (B9) (ex ad 4B)  (B13)  or (C1)  es along L  fron (C4)  n in Tilled  Plants (D1  narks)	Soils (C6) (LRR A)  Wetla	Wate A Drai Dry- Sature Share Share FAC Rais Fros	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
Vetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial In Sparsely Vegetated Concave Field Observations: Surface Water Present? Vater Table Present?	magery (B7) Surface (B es N es N gauge, mor	Check all that apply)  Water-Stain- MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch Depth (inch Depth (inch	ed Leaves 2, 4A, ar 311) rebrates ulfide Odd izosphere Reduced Reduction stressed P ain in Rem es): es): es):	s (B9) (ex ad 4B)  (B13)  or (C1)  es along L  fron (C4)  n in Tilled  Plants (D1  narks)	Soils (C6) (LRR A)  Wetla	Wate A Drai Dry- Sature Share Share FAC Rais Fros	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) -Neutral Test (D5) sed Ant Mounds (D6) (LRR A) It-Heave Hummocks (D7)

Project/Site: R ENEP	City/County Ex	date, HUM Sampling Date:
Applicant/Owner Russ Ranch +	-Timbe	State: C4 Sampling Point: U3 T2
Investigator(s): M.S. +CS	Section Township B	State Sampling Point: U 5 1 2
Landform (hillslope, terrace, etc.) Flood 0/0	Local relief (concave	, convex, none): Slope (%):
Subregion (LRR):	Let: Cocarteles (concave	, convex, nane): Slope (%):
		Long: Datum:
Soil Map Only Name		NWI classification.
Are climatic / hydrologic conditions on the site typical for to		
Are Vegetation, Soil, or Hydrology	significantly disturbed? 10 Are	"Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? NO (If r	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point	locations, transects, important features, etc.
	No	
	No Is the Sample	1/
	No within a Wetla	ind? Yes_X No
Remarks:		
tost pit 2 4 feet	from bundo	un.
VEGETATION - Use scientific names of pla		
Tree Stanton (District	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1		Number of Dominant Species That Are OBL, FACW, or FAC:
2		Total Number of Dominant
3		Species Across Ali Strata: (B)
4	- <del></del>	Percent of Dominant Species //a
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 =
Herb Stratum (Plot size:)	= Total Cover	FACU species x 4 =
1. Lows conjulates	15 FAW	UPL species x 5 = (A) (B)
2. In alocan shiata.	10	
3. Rinderve pening his	20 D NL	Prevalence Index = B/A =
4. Disherlis Spicate	25 D FAW	Hydrophytic Vegetation Indicators:
5. Frinca never	25 D FAC	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
V		3 - Prevalence Index is <3.01
7		4 - Morphological Adaptations¹ (Provide supporting
8		data in Remarks or on a separate sheet)
9		5 - Wetland Non-Vascular Plants¹
10.		Problematic Hydrophytic Vegetation¹ (Explain)
11		Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:)	Total Cover	be present, unless disturbed or problematic.
1		
2.		Hydrophytic Vegetation
	= Total Cover	Vegetation Present? Yes No No
% Bare Ground in Herb Stratum	- Tutal Cover	
Remarks:		
0.0		

SOIL								Sampling	Point: <u>U372</u>
Profile Desc	ription: (Describe	to the dept	th needed to docum	ent the ir	ndicator	or confirm	the absence of		-
Depth	Matrix		Redox	Features					
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture	Rer	narks
0-16	2.54 4/2	3.0	75424/6	20		M	Silt Loui	M	
	•								
<del></del>	-								
l ———									
l	,								
<del></del>									
			Reduced Matrix, CS			d Sand Gra		tion: PL=Pore Li	ning, M=Matrix.
1		able to all !	LRRs, unless other		d.)		Indicator	s for Problematic	c Hydric Soils <sup>3</sup> :
Histosol			Sandy Redox (S	•				Muck (A10)	
	pipedon (A2)		Stripped Matrix (					Parent Material (T	
	istic (A3) en Sulfide (A4)		Loamy Mucky Mi Loamy Gleyed M			MILKA 1)		Shallow Dark Sur	
	d Below Dark Surfac	e (Δ11)	Depleted Matrix				Other	(Explain in Rema	arks)
	ark Surface (A12)	2 ( )	Redox Dark Surf				3Indicators	s of hydrophytic v	egetation and
	fucky Mineral (S1)	•	Depleted Dark S		7)			d hydrology must	_
	Sleyed Matrix (S4)	·	Redox Depression	•	•			disturbed or prob	1,000
Restrictive	Layer (if present):							-	
Type:									
Depth (in	ches):						Hydric Soil P	resent? Yes	No_
Remarks:	33.00							<del>-</del>	
		- 29							
HYDROLO	GY								
Wetland Hy	drology Indicators:								
Primary India	cators (minimum of o	ne required	check all that apply	)			Second	ary Indicators (2	or more required)
Surface	Water (A1)		Water-Stain	ed Leave	s (B9) (e)	xcept	Wa	ter-Stained Leave	es (B9) (MLRA 1, 2,
High Wa	iter Table (A2)		MLRA 1	, 2, 4A, a	nd 4B)			4A, and 4B)	( · · · / ( · · · · · · · · · · · · · ·
Saturation	on (A3)		Salt Crust (I	311)				inage Patterns (E	310)
Water M	larks (B1)		Aquatic Inve	ertebrates	(B13)		Dny	-Season Water T	able (C2)
Sedimer	nt Deposits (B2)		Hydrogen S	ulfide Od	or (C1)				Aerial Imagery (C9)
Drift Deg	oosits (B3)		X Oxidized RI	nizospher	es along l	Living Root	s (C3) 📈 Ge	omorphic Position	1(D2) Low
Algal Ma	at or Crust (B4)		Presence of	Reduced	l Iron (C4	)		allow Aquitard (D:	
Iron Dep	osits (B5)		Recent Iron	Reductio	n in Tillec	Soils (C6)		C-Neutral Test (D	
Surface	Soil Cracks (B6)		Stunted or S	Stressed F	Plants (D	1) (LRR A)	,	sed Ant Mounds	
Inundation	on Visible on Aerial I	magery (B7						st-Heave Hummo	
Sparsely	Vegetated Concave	Surface (B	38)						, ,
Field Obser	vations:								
Surface Water	er Present? Y	es N	lo <u> </u>	nes):		_			
Water Table		es N	N. a.			_			
Saturation P	resent? Y	es N	5 4			_ Wetla	nd Hydrology I	Present? Yes	∠ No

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

Remarks: Base on suils and Tupographic position

(includes capillary fringe)

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: REP City/County: Frndale, HVM Sampling Date: 9-17-1 Applicant/Owner: Nun Nancon + Timber State Sampling Point: U3 73 Section, Township, Range: Landform (hillslope, terrace, etc.): Flood plass Local relief (concave, convex, none): Concave Slope (%): < Z Soil Map Unit Name: \_\_\_ \_\_\_\_ NWI classification \_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks ) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? MO Are "Normal Circumstances" present? Yes X No \_\_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? 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 V Hydric Soil Present? Is the Sampled Area Wetland Hydrology Present? within a Wetland? Yes \_\_\_ 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: = Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC: 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 \_\_\_\_\_ x 4 = \_\_\_\_ = Total Cover Herb Stratum (Plot size: UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ 1. Blustanalus Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Prevalence Index = B/A = Phimx so Hydrophytic Vegetation Indicators: 4. FUMOX TRANSINGS \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_\_ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3 0¹ \_\_\_\_ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> 10.\_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) Hydrophytic Vegetation Present? % Bare Ground in Herb Stratum \_

								Sampling Point: USTS-C
Profile Des	scription: (Describe t	o the depth	needed to docum	ent the in	dicator	or confirm	n the absence of	indicators.)
Depth	Matrix		Redox	Features				
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	_Loc²	<u>Texture</u>	Remarks
6-3	104123/2						Siltloam	
3-15	2.544/2	80	7.54 R K/6	20	_	M	SiHLoam	
	/		1 7				9111010	
	• ———							
l ———								
Ì								
¹Type: C=C	Concentration D-Dont	otion Did-C	Participal States CC			1010	2, 2,	. = 5. 5
Hydric Soll	Concentration, D=Deplical Indicators: (Applica	hie to all I	RRs unless other	eise noter	or Coate	d Sand Gr		ion: PL=Pore Lining, M=Matrix, for Problematic Hydric Soils <sup>3</sup> :
Histoso			_ Sandy Redox (S		<b>.</b> ,			•
_	pipedon (A2)	_	Stripped Matrix (					Auck (A10) arent Material (TF2)
_	listic (A3)	_	Loamy Mucky M		(except	MLRA 1)		Shallow Dark Surface (TF12)
	en Sulfide (A4)	_	Loamy Gleyed N		(	,		(Explain in Remarks)
Deplete	ed Below Dark Surface	(A11)	Depleted Matrix					(
	ark Surface (A12)	_	_ Redox Dark Surf				3Indicators	of hydrophytic vegetation and
	Mucky Mineral (S1)	_	_ Depleted Dark S		)			hydrology must be present.
	Gleyed Matrix (S4)		_ Redox Depressi	ons (F8)	_		unless o	disturbed or problematic.
	Layer (If present):							· · · · · · · · · · · · · · · · · · ·
Type:	· · · · · · · · · · · · · · · · · · ·		<del>_</del>					
Depth (in			<u> </u>				Hydric Soil Pr	resent? Yes No
Remarks:	No as is	- 443-	5-100		7 .			ophic position -
- 33	100 49016	_ 10101	21016 16	ZinG	645	e/ On	toposyo	phic position -
1 7h	US 16. 1	1 .					-	1 [
,	7 70+ a	hyde.	- · · -					
		7011	6 Sal 7	aday.	No.		+ (.	1.1 65
HADBOLO	)CV	7011	C Soil R	edox	T. 9	minco	+ from	brode areas
		7011	C Soil R	edox	F. 4	menco	t from 1	bridge areas
Wetland Hy	drology Indicators:				Γ. 9	menco	t from	bride areas
Wetland Hy Primary Indi	drology Indicators: icators (minimum of on		check all that apply	)				ary Indicators (2 or more required)
Wetland Hy Primary Indi Surface	drology Indicators: icators (minimum of on Water (A1)		check all that apply	) ned Leaves	(B9) (ea		Seconda	
Wetland Hy Primary Indi Surface High Wa	rdrology Indicators: icators (minimum of on v Water (A1) ater Table (A2)		check all that apply Water-Stain MLRA 1	ned Leaves	(B9) (ea		Seconda	ary Indicators (2 or more required)
Wetland Hy Primary Indi Surface High Wa	rdrology Indicators: icators (minimum of on Water (A1) ater Table (A2) ion (A3)		check all that apply Water-Stain MLRA 1 Salt Crust (	) ned Leaves , <b>2, 4A, an</b> B11)	(B9) (e) d 4B)		<u>Seconda</u> Wate Drai	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10)
Wetland Hy Primary Indi Surface High Water Mater	rdrology Indicators: icators (minimum of on water (A1) later Table (A2) ion (A3) Marks (B1)		check all that apply  Water-Stain  MLRA 1  Salt Crust (I	ned Leaves , 2, 4A, an B11) ertebrates	(B9) (e) d 4B) (B13)		<u>Seconda</u> Wat Drai Dry-	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2)
Wetland Hy Primary Indi Surface High Water N Water N Sedimer	drology Indicators: icators (minimum of on Water (A1) ater Table (A2) ion (A3) Marks (B1) ont Deposits (B2)		check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve	) ned Leaves , 2, 4A, an B11) ertebrates sulfide Odo	(B9) (e) d 4B) (B13) r (C1)	cept	<u>Seconda</u> Wat Drai Dry Satu	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10)
Wetland Hy Primary Indi Surface High Water M Sediment	rdrology Indicators: icators (minimum of one water (A1) ater Table (A2) ion (A3) Marks (B1) posits (B2) posits (B3)		check all that apply  Water-Stain  MLRA 1  Salt Crust (i  Aquatic Inve	) ned Leaves , 2, 4A, an B11) ertebrates sulfide Odo nizosphere	(B9) (e) d 4B) (B13) r (C1) s along i	ccept	Seconda Wate Drai Dry Satu ts (C3) Geo	er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imagery (C9) morphic Position (D2)
Wetland Hy Primary Indi Surface High Water M Sediment Drift De Algal Ma	rdrology Indicators: icators (minimum of one water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4)		check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve	) ed Leaves , 2, 4A, an B11) ertebrates sulfide Odo nizosphere f Reduced	(B9) (ex d 4B) (B13) r (C1) s along i	ccept  Living Roo	Seconda Wate Drai Dry Satu ts (C3) Geo Shale	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9) morphic Position (D2)
Wetland Hy Primary Indi Surface High Water Mater	rdrology Indicators: icators (minimum of on water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5)		check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Ri Presence of	ned Leaves , 2, 4A, an B11) ertebrates sulfide Odo nizosphere f Reduced Reduction	(B9) (exid 4B) (B13) r (C1) s along the line (C4) in Tilled	ccept  Living Roo  Soils (C6)	Seconda  Wate  4  Drai  Dry- Satu  ts (C3) — Geo  Shal  FAC	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) E-Neutral Test (D5)
Wetland Hy Primary Indi Surface High Water Now Sediment Drift Del Algal Mater Now Sediment Sediment Sediment Sediment Surface	rdrology Indicators: icators (minimum of one water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	e required;	check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron Stunted or S	ned Leaves , 2, 4A, an B11) ertebrates sulfide Odo nizosphere f Reduced Reduction Stressed P	(B9) (exit depth d	ccept  Living Roo  Soils (C6)	Seconda  Wate  4  Drai  Dry- Satu  ts (C3) — Geo  Shal  FAC	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) I-Neutral Test (D5) ied Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Water N Sedimen Drift De Algal Mater N Surface Iron Dep Inundati	rdrology Indicators: icators (minimum of one water (A1) iater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) is Soil Cracks (B6) ion Visible on Aerial In	ne required;	check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expli	ned Leaves , 2, 4A, an B11) ertebrates sulfide Odo nizosphere f Reduced Reduction Stressed P	(B9) (exit depth d	ccept  Living Roo  Soils (C6)	Seconda  Wate  4  Drai  Dry- Satu  ts (C3) — Geo  Shal  FAC	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) E-Neutral Test (D5)
Wetland Hy Primary Indi Surface High Water M Sediment Drift De Algal Mater M Iron Dep Surface Inundati Sparsel	rdrology Indicators: icators (minimum of one water (A1) ater Table (A2) ion (A3) Marks (B1) ont Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aerial In y Vegetated Concave	ne required;	check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expli	ned Leaves , 2, 4A, an B11) ertebrates sulfide Odo nizosphere f Reduced Reduction Stressed P	(B9) (exit depth d	ccept  Living Roo  Soils (C6)	Seconda  Wate  4  Drai  Dry- Satu  ts (C3) — Geo  Shal  FAC	ery Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (C9) morphic Position (D2) Illow Aquitard (D3) I-Neutral Test (D5) ied Ant Mounds (D6) (LRR A)
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#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region \_\_\_ City/County: Fendal HUM Sampling Date: 9-17-15 Applicant/Owner: 1250 Investigator(s): \_\_\_\_\_ \_\_\_\_\_ Section, Township, Range: \_\_\_\_\_ Landform (hillstope, terrace, etc.): Flora plain Local relief (concave, convex, none): None Slope (%): \_\_\_\_\_\_ Long: \_\_\_\_\_ Subregion (LRR):\_ Datum: Soil Map Unit Name: \_\_\_\_\_ \_\_\_\_\_ NWI classification: \_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_X\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ 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? Yes 🗡 No. within a Wetland? Wetland Hydrology Present? No 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: (B) Percent of Dominant Species = 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 \_\_\_\_\_ x 4 = \_\_\_\_ = Total Cover UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_ \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_\_ 2 - Dominance Test is >50% 6. 3 - Prevalence Index is ≤3.0¹ 7. 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 760 \_= Total Cover Woody Vine Stratum (Plot size: 1. \_\_\_\_\_ Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum

Remarks:

OIL								Sampling Point: (/3 7.
		e to the dep	oth needed to docum		licator o	r confir	n the absence o	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features '	Type <sup>1</sup>	Loc²	Texture	Remarks
12-3			7.548414		<u> </u>	M1	5.14Loam	
2 12	2-3/4/6	-73	7-10 11		<u> </u>	F- 1	100	
5-14	2.57 972	<u> 80</u>	1.54R 4/6	70_	<u> </u>	m	Siltlogu	1
	<del>-</del>		<del></del>					
						_		
			=Reduced Matrix, CS			Sand G		ation: PL=Pore Lining, M=Matrix.
_		cable to all	LRRs, unless other		.)			s for Problematic Hydrlc Soils <sup>3</sup> :
Histoso			Sandy Redox (S	•				Muck (A10)
	pipedon (A2) listic (A3)		Stripped Matrix (		/===== ·	MI DA A		Parent Material (TF2)
	en Sulfide (A4)		Loamy Mucky M Loamy Gleyed N		(except i	MLKA 1)		Shallow Dark Surface (TF12)
_ , ,	en Sunde (A4) ed Below Dark Surfa	ce (A11)	Z Depleted Matrix				Othe	r (Explain in Remarks)
	ark Surface (A12)	100 (F111)	Redox Dark Sur				3Indicator	s of hydrophytic vegetation and
	Mucky Mineral (S1)		Depleted Dark S					d hydrology must be present.
Sandy (	Gleyed Matrix (S4)		Redox Depressi					disturbed or problematic.
lestrictive	Layer (if present):						1	
Type:								
Depth (in	nches):						Hydric Soil i	Present? Yes X No
Remarks:	11763							
Ĩ	9							14
								n
Netland Hy	ydrology Indicators							1. Se
Vetland Hy Primary Indi	drology Indicators		d; check all that apply	ù			Secon	dary Indicators (2 or more required)
Vetland Hy rimary Indi	ydrology Indicators icators (minimum of a Water (A1)		od; check all that apply		(B9) (ex	cept		dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hy Primary Indi	drology Indicators		Water-Stair			cept		
Vetland Hy Primary Indi Surface High W Saturat	ydrology Indicators icators (minimum of water (A1) fater Table (A2) ion (A3)		Water-Stair	ned Leaves I, 2, 4A, and		cept	W	ater-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hy Primary Indi Surface High W Saturati Water M	ydrology Indicators icators (minimum of water (A1) later Table (A2) ion (A3) Marks (B1)		Water-Stair MLRA 1 Salt Crust (	ned Leaves I, 2, 4A, and	d 4B)	cept	W	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime	ydrology Indicators icators (minimum of water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv.	ned Leaves , <b>2, 4A, and</b> B11) ertebrates ( Sulfide Odor	(B13)		W Dr Dr Sa	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De	ydrology Indicators icators (minimum of water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S	ned Leaves I, <b>2, 4A, and</b> B11) ertebrates ( Sulfide Odor hizospheres	d 4B) (B13) (C1) s along L	iving Ro	W	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen S	ned Leaves , <b>2, 4A, and</b> B11) ertebrates ( Sulfide Odor	d 4B) (B13) (C1) s along L	iving Ro	W Dr Dr Sa ots (C3) Ge	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9 comorphic Position (D2) allow Aquitard (D3)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De	ydrology Indicators icators (minimum of water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5)		Water-Stair MLRA 1 Salt Crust ( Aquatic Inv. Hydrogen 5 Oxidized Ri Presence o	ned Leaves I, <b>2, 4A, and</b> B11) ertebrates ( Sulfide Odor hizospheres	d 4B) (B13) (C1) (C1) (Salong Litron (C4)	iving Ro	W Dr Dr Sa ots (C3) Ge	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9 comorphic Position (D2)
Vetland Hy Primary Indi Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface	ydrology Indicators icators (minimum of a Water (A1) later Table (A2) ion (A3) Marks (B1) ent Deposits (B2) aposits (B3) lat or Crust (B4) aposits (B5) a Soil Cracks (B6)	one require	Water-Stair MLRA 1 Salt Crust ( Aquatic Inv Hydrogen S Oxidized Ri Presence o Recent Iror	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Pla	d 4B) (B13) (C1) s along Lilron (C4) in Tilled ants (D1)	iving Roo Soils (Co	William	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9 comorphic Position (D2) allow Aquitard (D3)
Vetland Hy rimary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De Surface Inundate	ydrology Indicators icators (minimum of a Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) a Soil Cracks (B6) ition Visible on Aerial	one require	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized Ri  Presence o  Recent Iron  Stunted or S  Other (Expl	ned Leaves  1, 2, 4A, and  B11)  ertebrates ( Sulfide Odor  hizospheres  if Reduced I  n Reduction	d 4B) (B13) (C1) s along Lilron (C4) in Tilled ants (D1)	iving Roo Soils (Co	Windows	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9 comorphic Position (D2) allow Aquitard (D3) c-Neutral Test (D5)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De Surface Inundate Sparsel	ydrology Indicators icators (minimum of a Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) a Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar	one require	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized Ri  Presence o  Recent Iron  Stunted or S  Other (Expl	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Pla	d 4B) (B13) (C1) s along Lilron (C4) in Tilled ants (D1)	iving Roo Soils (Co	Windows	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) uC-Neutral Test (D5) bised Ant Mounds (D6) (LRR A)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De Surface Inundate Sparsel	ydrology Indicators icators (minimum of a Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) a Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar	one require	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized Ri  Presence o  Recent Iron  Stunted or S  Other (Expl	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Pla	d 4B) (B13) (C1) s along Lilron (C4) in Tilled ants (D1)	iving Roo Soils (Co	Windows	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) uC-Neutral Test (D5) bised Ant Mounds (D6) (LRR A)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De Surface Inundate Sparsel	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar rvations: iter Present?	one require I Imagery (B	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized Ri  Presence o  Recent Iror  Stunted or :  Other (Expl.)	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I in Reduction Stressed Pla lain in Rema	d 4B) (C1) (C1) s along L fron (C4) in Tilled ants (D1)	iving Roo Soils (CC) (LRR A	Windows	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) uC-Neutral Test (D5) bised Ant Mounds (D6) (LRR A)
Vetland Hy Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De Surface Inundate Sparset Field Obset	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar rvations: iter Present?	one require I Imagery (B	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized Ri  Presence o  Recent Iron  Stunted or :  Other (Expl	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I in Reduction Stressed Pla lain in Rema	d 4B) (C1) (C1) s along L (ron (C4) in Tilled ants (D1) arks)	iving Roo Soils (CC) (LRR A	Windows	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) uC-Neutral Test (D5) bised Ant Mounds (D6) (LRR A)
Primary Indi Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Wa Water Table Saturation Fincludes ca	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar rvations: eter Present? e Present? epillary fringe)	one require I Imagery (B ve Surface ( Yes Yes Yes	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iror  Stunted or S  Other (Expl.  (B8)  No Depth (inc.  No Depth (inc.	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Platain in Remainables): hes): hes):	d 4B) (C1) s along L fron (C4) in Tilled ants (D1)	Soils (Co.) (LRR A	Wind	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
Primary Indi Surface High W Saturate Water M Sedime Drift De Algal M Iron De Surface Inundat Sparset Field Obser Surface Water Table Saturation F includes ca	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar rvations: eter Present? e Present? epillary fringe)	one require I Imagery (B ve Surface ( Yes Yes Yes	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or :  Other (Expl.)  No Depth (inc.)	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Platain in Remainables): hes): hes):	d 4B) (C1) s along L fron (C4) in Tilled ants (D1)	Soils (Co.) (LRR A	Wind	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) uC-Neutral Test (D5) bised Ant Mounds (D6) (LRR A)
Vetland Hy Primary Indi Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obser Surface Wa Water Table Saturation Fincludes ca	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar rvations: eter Present? e Present? e Present? epillary fringe) ecorded Data (strean	one require  I Imagery (B ve Surface ( Yes Yes The gauge, m	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or :  Other (Expl.  (B8)  No Depth (inc.  No Depth (inc.  Onitoring well, aerial p	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Platain in Remainables): hes): hes):	d 4B) (C1) s along L fron (C4) in Tilled ants (D1)	Soils (Co.) (LRR A	Wind	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Vetland Hy rimary Indi  Surface  High W  Saturate  Water M  Sedime  Drift De  Algal M  Iron De  Surface  Inundate  Sparsel  Ield Observator Table  saturation Facilides cal	ydrology Indicators icators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aerial ly Vegetated Concar rvations: eter Present? e Present? e Present? epillary fringe) ecorded Data (strean	one require  I Imagery (B ve Surface ( Yes Yes The gauge, m	Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iror  Stunted or S  Other (Expl.  (B8)  No Depth (inc.  No Depth (inc.	ned Leaves 1, 2, 4A, and B11) ertebrates ( Sulfide Odor hizospheres of Reduced I n Reduction Stressed Platain in Remainables): hes): hes):	d 4B) (C1) s along L fron (C4) in Tilled ants (D1)	Soils (Co.) (LRR A	Wind	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: LIRE Sampling Date: 5/19 Applicant/Owner: State: Sampling Point: Investigator(s): 1. McDanald, M. Schuze Section, Township, Range: Landform (hillstope, terrace, etc.): Slope (%): 10 Subregion (LRR): 🗡 Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes \_\_\_\_\_ No \_\_ Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? Yes \_\_\_\_ No \_\_/ within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_ No V Remarks: Actificial sand berm, formerly adjacent to channel 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 That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: 1. 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 (Plot size: 1 UPL species \_\_\_\_ x 5 = \_\_\_\_ 1. Cakile maritima Column Totals: \_\_\_ \_\_\_\_\_ (A) \_\_\_\_\_ (B) 2. Distichlis exicata 15 Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 60 = Total Cover Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? \_\_\_ = Total Cover % Bare Ground in Herb Stratum 40 Remarks:

SOIL						5/14/2	INRE	MB5 Sampling Point: U1-	TI
Profile Des	cription: (Describe	to the depth	needed to docu	ment the	indicator i	or confirm	10.00	of indicators.)	W -1
Depth	Matrix	WEST AN		ox Feature				or maioatora,	
(inches)	Color (moist)	_ %	Color (moist)	%	Type	Loc <sup>2</sup>	Texture ,	Remarks	
0-16	2.543/2	100	~		10	_	Sand		16
						20	-		_
							- 6	7 7 8 80	
			70	75	00	3 10			-
				<b>3</b>				- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	_
<u>r y</u>			_ ~ =				# 6°1	CL AVO.	201
¹Type: C=C	oncentration, D=Dep	etion, RM=Re	educed Matrix, C	S=Covered	or Coate	d Sand Gr		ation: PL=Pore Lining, M=Matrix.	<u> </u>
	Indicators: (Applic	able to all LR			ed.)			rs for Problematic Hydric Solls <sup>3</sup> :	
Histosol		-	_ Sandy Redox (					Muck (A10)	
E-10	pipedon (A2)	-	Stripped Matrix					Parent Material (TF2)	
Hydroge	istic (A3) en Sulfide (A4)	_	Loamy Mucky I Loamy Gleyed			MLRA 1)		Shallow Dark Surface (TF12) r (Explain in Remarks)	
	d Below Dark Surface	(A11)	Depleted Matri:				TI 16	,	
	ark Surface (A12)	_	Redox Dark Su					rs of hydrophytic vegetation and	
	Mucky Mineral (S1) Gleyed Matrix (S4)		Depleted Dark		7)			nd hydrology must be present,	
	Layer (if present):		Redox Depress	sions (FB)			unless	disturbed or problematic.	
Type:	augus (ii prosons).								
	ches):		_				Mondata Colti		_
Remarks:	G103)						Hydric Soil	Present? Yes No _>	
YDROLO	20 Co. Co.				6				Tq.
	drology Indicators:						_		
	cators (minimum of or	ie requirea; ci	and the same of th	to the contract of			100000	dary Indicators (2 or more required	
	Water (A1) ster Table (A2)		Water-Sta	ined Leave 1, 2, 4A, a	GALLEY IN	cept	w	ater-Stained Leaves (B9) (MLRA 1 4A, and 4B)	, 2,
Saturation	BC/VIII		Salt Crust		110 40)		Dr	ainage Patterns (B10)	
CONTRACTOR OF THE PARTY OF THE	larks (B1)		Aquatic In		(B13)		14	y-Season Water Table (C2)	
	nt Deposits (B2)			Sulfide Od			771	turation Visible on Aerial Imagery	(C9)
Drift Dep	oosits (B3)					iving Root		eomorphic Position (D2)	
Algal Ma	at or Crust (B4)			of Reduced			57.1	allow Aquitard (D3)	
Iron Dep	osits (B5)		Recent Iro	n Reductio	n in Tilled	Soils (C6)	FA	C-Neutral Test (D5)	
	Soil Cracks (B6)		Stunted or	Stressed I	Plants (D1	) (LRR A)	Ra	ised Ant Mounds (D6) (LRR A)	
	on Visible on Aerial In	97 PB	Other (Exp	olain in Rer	marks)		Fn	ost-Heave Hummocks (D7)	
Field Observ	Vegetated Concave	Surface (B8)	A			0	E0.E (Y.)	2-83 I W	
Surface Wate		o No.	V 5			30			
Water Table			Depth (inc	1 11 11	7 (47.7 (48.	204			
Saturation Pr	resent? Ye		Depth (inc			_   Wetlar	nd Hydrology	Present? Yes No X	
(includes cap Describe Red	corded Data (stream	jauge, monito	ring well, aerial p	photos, pre	vious insp	ections), if	available:		W. 1
									-
Remarks:	7/1 00 /	λ. n.	a Dide	X		35	M E	1.99	- 20
	plot on C	,eu 00	e hinge			10			
	• 11				, 30		1 2		
	Upland p	107 2.	5 trom	Wet	Yaul/	UN/600	1 Down	dele	

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: WEF City/County: \_\_\_\_\_ Sampling Date: \_ Applicant/Owner: State: \_\_\_\_\_ Sampling Point: Section, Township, Range: Investigator(s): Landform (hillslope, terrace, etc.): Sand becom Local relief (concave, convex, none): Convex Slope (%): 10 Soil Map Unit Name: \_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes V \_\_ No \_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Hydric Soil Present? Is the Sampled Area Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_\_ within a Wetland? 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 That Are OBL, FACW, or FAC: 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 \_\_\_\_\_ x 4 = \_\_\_\_ \_\_\_\_\_ = Total Cover Herb Stratum (Plot size: 100 ) UPL species \_\_\_\_\_ x 5 = \_\_\_\_ 1. Disticulis spicata 30 Y FACI Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence index is ≤3.0¹ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Woody Vine Stratum (Plot size: ) Hydrophytic Vegetation Present? \_\_\_\_= Total Cover % Bare Ground in Herb Stratum 7

Remarks:

Profile Description: (Describe to th		- 1		
	e depth needed to docum	ent the indicator	or confirm	IRE MBS Sampling Point: U   -
Depth Matrix	Redox	Features		
	Color (moist)		Loc2	Texture Remarks
0-3 2.543/2 1	Co ==		-	Sand/ Coarse Sand (1)
3-12 2-545/2 9	1048414	10 (-	m	11 11 11
	00		11-3	Silt Loan (2)
Type: C=Concentration, D=Depletion Hydric Soil Indicators: (Applicable of Histosol (A1)	to all LRRs, unless otherv	vise noted.)	d Sand Gr	Indicators for Problematic Hydric Soils <sup>1</sup> :
Histic Epipedon (A2)	Sandy Redox (St			2 cm Muck (A10)
Black Histic (A3)		oo) neral (F1) (except	MLRA 1	Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Gleyed M			Other (Explain in Remarks)
Depleted Below Dark Surface (A1	A PARTY OF THE PAR			
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Dark Surfa	design of the second se		3Indicators of hydrophytic vegetation and
Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)	Depleted Dark St Redox Depression	the officers of the same of th		wetland hydrology must be present,
Restrictive Layer (if present):	Neuva Depressio	iis (ro)		unless disturbed or problematic.
Type:			2.95	
Depth (inches):				Hydric Soil Present? Yes No
Remarks:	Compact part of			the second secon
YDROLOGY	Marsh Soil (a	vertopped	of w	wash wash sand)
Vetland Hydrology Indicators:				
rimary Indicators (minimum of one rec	uired: check all that apply)			Secondary Indicators (2 or more required)
Surface Water (A1)	The second secon	ed Leaves (B9) (ex	cent	Water-Stained Leaves (89) (MLRA 1, 2,
High Water Table (A2)		2, 4A, and 4B)		4A, and 48)
Saturation (A3)	Salt Crust (B			Drainage Patterns (810)
_ Water Marks (B1)	Aquatic Inve	rtebrates (B13)		Dry-Season Water Table (C2)
_ Sediment Deposits (B2)	Hydrogen St	iffide Odor (C1)		Saturation Visible on Aerial Imagery (C9
_ Drift Deposits (B3)		zospheres along L		s (C3) Geomorphic Position (D2)
Algal Mat or Crust (B4)		Reduced Iron (C4)		Shallow Aquitard (D3)
Iona Danaelle (DC)	Recent Iron I	Reduction in Tilled	Soile (CA)	CAC Mandaul Tank (DC)
Iron Deposits (B5) Surface Soil Cracks (B6)	Display Di			
_ Surface Soil Cracks (B6)		ressed Plants (D1)		Raised Ant Mounds (D6) (LRR A)
Surface Soil Cracks (86) inundation Visible on Aerial imager	y (87) Other (Expla			
<ul> <li>Surface Soil Cracks (86)</li> <li>Inundation Visible on Aerial imager</li> <li>Sparsely Vegetated Concave Surfa</li> </ul>	y (87) Other (Expla	ressed Plants (D1)		Raised Ant Mounds (D6) (LRR A)
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfaled Observations:	y (87) Other (Expla ce (88)	tressed Plants (D1) in in Remarks)		Raised Ant Mounds (D6) (LRR A)
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa leid Observations: urface Water Present? Yes	y (B7) Other (Expla ce (B8) No Depth (inchi	treased Plants (D1) in in Remarks) as):		Raised Ant Mounds (D6) (LRR A)
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa field Observations: surface Water Present? Vater Table Present? Yes Yes saturation Present? Yes	y (87) Other (Expla ce (88)	tressed Plants (D1) in in Remarks) as):	(LRR A)	Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa leid Observations: surface Water Present? Yes Vater Table Present? Yes Katuration Present? Yes Includes capillary fringe)	y (B7) Other (Explained (B8) No Depth (inchise No Depth (inchise No Depth (inchise Depth (i	tressed Plants (D1) in in Remarks) as):	(LRR A)	Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa leid Observations: surface Water Present? Yes Vater Table Present? Yes Katuration Present? Yes Includes capillary fringe)	y (B7) Other (Explained (B8) No Depth (inchise No Depth (inchise No Depth (inchise Depth (i	tressed Plants (D1) in in Remarks) as):	(LRR A)	Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No No
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa leid Observations: surface Water Present? Yes Vater Table Present? Yes caturation Present? Yes caturation Present? Yes escribe Recorded Data (stream gauge	y (B7) Other (Explained (B8) No Depth (inchise No Depth (inchise No Depth (inchise Depth (i	tressed Plants (D1) in in Remarks) as):	(LRR A)	Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No No
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa ield Observations: surface Water Present? Vater Table Present? Yes	y (87) Other (Explained (188) No Depth (inchess No Depth (inchess No Depth (inchess nonlitoring well, serial pho	tressed Plants (D1) in in Remarks) as): as): as): asp: asp: asp: asp: asp: asp: asp: asp	Wettar	Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No
Surface Soil Cracks (86) inundation Visible on Aerial imager Sparsely Vegetated Concave Surfa field Observations: surface Water Present? Yes Vater Table Present? Yes Xaturation Present? Yes nocludes capillary fringe) escribe Recorded Data (stream gauge	y (B7) Other (Explained (B8) No Depth (inchise No Depth (inchise No Depth (inchise Depth (i	tressed Plants (D1) in in Remarks) as): as): as): asp: asp: asp: asp: asp: asp: asp: asp	Wettar	Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)  and Hydrology Present? Yes No No available:

CNG Charles Intil a charge of	01 mil/1909-10.10			Standard of	ampling Date: <u>5/6/2</u> /
Project/Site: WEE		City/County:	Oleden		Impling Point: 14W
pplicant/Owner:	D				impling Point: (100)
the state of the s	Committee and Control of the Control				6
andform (hillslope, terrace, etc.): Levee					Slope (%): <u>5</u>
Subregion (LRR):	Lat:	48 P42 8 9 1 1 1 1		0 %	Datum:
oil Map Unit Name:		200 to 17 to 10 to	2 700 777 1 77	1.0	on:
re climatic / hydrologic conditions on the site typical for	or this time of ye	ar? Yes No _	(If no,	explain in Rem	arks.)
re Vegetation, Soil, or Hydrology	significantly	disturbed? Are "	Normal Circu	mstances" pres	ent? Yes No
re Vegetation, Soil, or Hydrology	naturally pro	blematic? (If ne	eded, explain	any answers i	n Remarks.)
SUMMARY OF FINDINGS - Attach site m	nap showing	sampling point k	ocations, t	transects, ii	mportant features, etc
Hydrophytic Vegetation Present? Yes	No	d later as the s		Fig. m. Met.	deal in Cooking the disc
Hydric Soil Present? Yes	No	is the Sampled			CALLORON H
Wetland Hydrology Present? Yes	_ No	within a Wetlan	id?	Yes	No
Remarks: Top of lever- Stro	1 / 1	iox and OB	Lplan:	ts pres	U.F.
/EGETATION – Use scientific names of p	Absolute	Dominant Indicator	Dominana	e Test worksh	Chipada
<u>Tree Stratum</u> (Plot size:) 1.		Species? Status	Number of	Dominant Spec BL, FACW, or f	ies 🥎
2,	ely Jani	25 257	Total Numb	er of Dominant	7 Story of the Ca
3		1	the second course of the	ross All Strata:	and the same of th
4	1 6		Percent of I	Dominant Spec	ias ( / a/
C-II-4Charle Charless (Dich areas	1 - 2	_ = Total Cover		BL, FACW, or f	
Sapling/Shrub Stratum (Plot size:)		1000	Prevalence	index workst	neet:
2.		- 25	AT ARREST MANAGEMENT	6 Cover of:	THE RESERVE OF THE PARTY OF THE PARTY AND PART
3.	THE THE		OBL specie	MR 7 - 1 7/8	x 1 =
4.	527	to Miller based	\$100 EXPLANATION (\$10)	cies	and the second s
5.	The same		FAC specie	1	A THE REAL WATER WITH THE LAND LAND
Total San At	No	= Total Cover	The second of the	ides	TANK BOAR - LONG TO THE PARTY
Herb Stratum (Plot size: 1 M2) 1. Cotula Coronapulo162	16	1 007	120000	tals:	(A) (B)
2 Matricaria discolora	- 13	1 ost	100 - N	5 V	
3. Specaled 2 Merina	5×5	Y	press and	lence Index =	
4. Opticulus acata	100	FACD	White Street	ic Vegetation	Indicators: Irophytic Vegetation
5. Atablex prostate	300 700	FAC		ninance Test is	AND A SECURE OF THE PARTY OF TH
6. Lepidem didemina	15	Y Not-Liste	Name of Control of	valence Index i	CALLANDO SINALOTAL VARIABLES
7. Gestura annamacia	15	FAC	No. of Concession, Name of Street, or other Publisher, Name of Street, or other Publisher, Name of Street, Nam	THE RESIDENCE OF THE PARTY OF T	ptations <sup>1</sup> (Provide supporting
8. Junes bufacius	7.	CACM	data	in Remarks o	on a separate sheet)
9.		24 18 1	17 SAC - 367C	tland Non-Vasc	THE RESIDENCE AND ADMINISTRATION OF SHIP
10.	1		KIND DESCRIPTION	LOSS WILLIAMS	rtic Vegetation <sup>1</sup> (Explain)
11.	Normal Printers	4 186			nd wetland hydrology must ed or problematic.
Moody Vino Stratum (Dist size:	61	= Total Cover	DO prosont,		and a superior of the superior
Woody Vine Stratum (Plot size:	Av.C. V. (Little III. 14)	The second of the second	Madeson	The September	White male of successions
2.	5 20	The Cart	Hydrophyt Vegetation		Wall a sport of
to the second	Look.	= Total Cover	Present?	Yes	<u> </u>
% Bare Ground in Herb Stratum			15A	1	51 1
Remarks: Passes Fac-Neutral					

Depth Matrix (inches) Color (moist) %	Color (moist)	O/ Towns	1 - 2	Tanking	The state of the s
0-9 2.5 YR3 1 81		W Type'	Loc² _	Texture	Remarks
2.7 12.311				QMAZYMAD	to SAND
AND THE PERSON OF THE PERSON O	2.5 YP3/4	1 %	-	f i	old superior applicabilities
7-14 754R3/1 70	016 754R4/6	20%	Held 1	I)	ulitara Errenti
9-14	2.5 4/03/4	10%	a rus jay	OF Law In	Action State of
	205 (12)	- DO M	or the above to be to be	A Charlest a an lan ;	emilione and they had a
The second secon	and of the three out with	1 South Market	Arken Money	SECTION OF SECTION	AND A TOUCHA
ATT TO	Alle Call Communication to	To Desiration and		editional is	man market
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=	Covered or Coate	d Sand Grain	s. <sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applicable to	o all LRRs, unless otherv	vise noted.)	THE SOUR		blematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Sandy Redox (S	E-SHOW HET HALF	- 91	2 cm Muck (A	10)
Histic Epipedon (A2)	Stripped Matrix (		14/	Red Parent M	
Black Histic (A3)		ineral (F1) (except	MLRA 1)		Dark Surface (TF12)
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11)	Loamy Gleyed M ) Depleted Matrix (			∠ Other (Explain	in Remarks)
Thick Dark Surface (A12)	Redox Dark Surf			3 Indicators of buda	ophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Si		,ehnole		opnytic vegetation and egy must be present,
Sandy Gleyed Matrix (S4)	Redox Depression		Marine A		d or problematic.
Restrictive Layer (if present):	ATTOCINE INITIALIZATION LESS		PARTY.		a di probioinatio.
Type:	ME 1981 WAS BOTT				
The second secon					~
presticulty berm	ud up, pote	ntially t	sm ne	Hydric Soil Present?	Yes No
Remarks: Artifically berm	THE CANALITY .	ntially t	1		Yes No
YDROLOGY Vetland Hydrology Indicators:	Figure Capt (	iny. The Park	1	tland.	panai Richard Salada
YDROLOGY Vetland Hydrology Indicators:	uired; check all that apply)	my. Fine Tark	rom me	Secondary Indic	ators (2 or more required)
YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one requ	uired: check all that apply) Water-Stain	iny. The Park	rom me	Secondary Indic	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2
YDROLOGY Vetland Hydrology Indicators:  Inimary Indicators (minimum of one required)  Surface Water (A1)	uired: check all that apply) Water-Stain	ed Leaves (B9) (e) 2, 4A, and 4B)	rom me	Secondary Indic Water-Stain 4A, and	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2
YDROLOGY Vetland Hydrology Indicators:  Irimary Indicators (minimum of one required)  Surface Water (A1)  High Water Table (A2)	uired; check all that apply)  Water-Staine MLRA 1,  Salt Crust (E	ed Leaves (B9) (e) 2, 4A, and 4B)	rom me	Secondary Indic Water-Stain 4A, and Drainage Pa	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10)
YDROLOGY Wetland Hydrology Indicators: Inimary Indicators (minimum of one required by the second sec	uired: check all that apply)  Water-Staine MLRA 1,  Salt Crust (E	ed Leaves (B9) (e) 2, 4A, and 4B) 311)	rom me	Secondary Indic Water-Stain 4A, and Drainage Pa Dry-Season	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) atterns (B10) Water Table (C2)
YDROLOGY  Vetland Hydrology Indicators:  Irimary Indicators (minimum of one requestry)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	uired: check all that apply)  Water-Staine MLRA 1,  Salt Crust (E  Aquatic Inve	ed Leaves (B9) (e) 2, 4A, and 4B) 311) rtebrates (B13)	xcept	Secondary Indic Water-Stain 4A, and Drainage Pa Dry-Season Saturation V	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10)
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YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	uired; check all that apply)  Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Ilfide Odor (C1) Izospheres along L Reduced Iron (C4) Reduction in Tilled	kcept Living Roots (6)	Secondary Indic Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3)
Process  YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one regions)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	uired: check all that apply)  Water-Stains MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Si Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Intelligible Odor (C1) Izospheres along L Reduced Iron (C4)	kcept Living Roots (6)	Secondary Indic  Water-Stain  4A, and  Drainage Pa  Dry-Season  Saturation V  C3) Geomorphic  Shallow Aqu	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) itterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requested by the second of the second	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Ilfide Odor (C1) Izospheres along L Reduced Iron (C4) Reduction in Tilled	kcept Living Roots (6)	Secondary Indic  Water-Stain  4A, and  Drainage Pa  Dry-Season  Saturation V  C3)  Geomorphic  Shallow Aqu  FAC-Neutral  Raised Ant I	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) atterns (B10) Water Table (C2) atterns (D2) atterns (D3) Test (D5)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requestriance Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Ilfide Odor (C1) Izospheres along L Reduced Iron (C4) Reduction in Tilled	kcept Living Roots (6)	Secondary Indic  Water-Stain  4A, and  Drainage Pa  Dry-Season  Saturation V  C3)  Geomorphic  Shallow Aqu  FAC-Neutral  Raised Ant I	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) Test (D5) Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Inimary Indicators (minimum of one requirement Indicators (Male Indicators (Minimum of one requirement Indicators (Male Indicators (Minimum of one requirement Indicators (Male Indicators (Minimum of one requirement Indicators (Male Indicators (Minimum of one requirement Indicators (Male Indicators (Minimum of one requirement Indicators (Minimum of one requir	uired; check all that apply)  Water-Stains MLRA 1,  Salt Crust (E  Aquatic Inve  Hydrogen Si  Oxidized Rh  Presence of  Recent Iron  Stunted or S  (B7)  Other (Explance (B8)	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interprate (B13) I	kcept Living Roots (6)	Secondary Indic  Water-Stain  4A, and  Drainage Pa  Dry-Season  Saturation V  C3)  Geomorphic  Shallow Aqu  FAC-Neutral  Raised Ant I	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) Test (D5) Mounds (D6) (LRR A)
POROLOGY  Vetland Hydrology Indicators:  Inimary Indicators (minimum of one requirement Indicato	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explaine) Depth (inch.)	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Illifide Odor (C1) Izospheres along L Reduced Iron (C4) Reduction in Tilled Itressed Plants (D1) In in Remarks)	kcept Living Roots (6)	Secondary Indic  Water-Stain  4A, and  Drainage Pa  Dry-Season  Saturation V  C3)  Geomorphic  Shallow Aqu  FAC-Neutral  Raised Ant I	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) Test (D5) Mounds (D6) (LRR A)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one requirement of the requirement o	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explaine (B8)	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Illide Odor (C1) Izospheres along L Reduced Iron (C4) Reduction in Tilled Itressed Plants (D1) In in Remarks)  es):	kcept Living Roots (6)	Secondary Indic  Water-Stain  4A, and  Drainage Pa  Dry-Season  Saturation V  C3)  Geomorphic  Shallow Aqu  FAC-Neutral  Raised Ant I	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 4B) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) Test (D5) Mounds (D6) (LRR A)
Process  YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of one requested Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface Water Present?  Ves  Surface Water Present?  Ves  Saturation Present?  Ves  Includes capillary fringe)	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explaine Ce (B8)  No X Depth (inche	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interpreted (B	kcept  Living Roots (0)  I Soils (C6)  (LRR A)  Wetland	Secondary Indic Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 48) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Hounds (D6) (LRR A) Hummocks (D7)
Process  YDROLOGY  Netland Hydrology Indicators:  Primary Indicators (minimum of one requested Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surface Water Present?  Ves  Surface Water Present?  Ves  Saturation Present?  Ves  Includes capillary fringe)	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explaine Ce (B8)  No X Depth (inche	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interpreted (B	kcept  Living Roots (0)  I Soils (C6)  (LRR A)  Wetland	Secondary Indic Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 48) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Hounds (D6) (LRR A) Hummocks (D7)
POROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required in the property of the pr	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explaine (B8)  No Depth (inches) No Depth (inches) Monitoring well, aerial pho	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interpreted (B	kcept  Living Roots (0)  I Soils (C6)  (LRR A)  Wetland	Secondary Indic Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 48) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Hounds (D6) (LRR A) Hummocks (D7)
POROLOGY  Wetland Hydrology Indicators:  Irimary Indicators (minimum of one requested Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery  Sparsely Vegetated Concave Surfact (B4)  Indicated Water Present?  Water Table Present?  Yes  aturation Present?  Yes  Includes capillary fringe)  escribe Recorded Data (stream gauge, emarks:	uired: check all that apply)  Water-Staine MLRA 1, Salt Crust (E Aquatic Inve Hydrogen Staine Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explaine Ce (B8)  No X Depth (inche	ed Leaves (B9) (e) 2, 4A, and 4B) 311) Intebrates (B13) Intebrates (B13) Intebrates (B13) Intebrates (B13) Interes along to the term (C4) Interes along to the term (C4) Interessed Plants (D1) Interessed Pla	Living Roots (f)  I Soils (C6)  I) (LRR A)  Wetland	Secondary Indic  Water-Stain  4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutral Raised Ant I Frost-Heave  Hydrology Present?	ators (2 or more required) ed Leaves (B9) (MLRA 1, 2 48) htterns (B10) Water Table (C2) isible on Aerial Imagery (C Position (D2) itard (D3) I Test (D5) Hounds (D6) (LRR A) Hummocks (D7)

Project/Site: LIVE	就 (10年) (10年 年)		Log Disbestille	ALC: NO SECTION	1 2 6 6
		City/County:			ampling Date: 5/6/6
					ampling Point:
nvestigator(s): <u>Lelsey McDorold</u> Rose					_
andform (hillslope, terrace, etc.): be					Slope (%):
ubregion (LRR): A	Lat:		_ Long:		Datum:
oil Map Unit Name:			1	VVI classificati	on:
re climatic / hydrologic conditions on the site typical for	or this time of yea	ır? Yeş No _	(If no,	explain in Ren	narks.)
re Vegetation, Soil, or Hydrology	significantly of	disturbed? Are	"Normal Circu	mstances" pre	sent? Yes No
re Vegetation, Soil, or Hydrology	naturally prol	blematic? (If no	eeded, explair	any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site in	nap showing	sampling point l	ocations,	transects, i	mportant features, e
Hydrophytic Vegetation Present? YesYes	No	i lajos calismento	Leibum - Na	Larry of	Hic Servi Breatons (A) M
Hydric Soil Present? Yes		Is the Sampled within a Wetla		Yes	No
	No	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N 1/8/2015		Particular and Particular
Remarks: Previous upland now	> domina	ited by sa	1tmars	h plan	+5
		re en acoura	A bodower!	11 11 11 11 11	
EGETATION – Use scientific names of	olants.	Si estille	Dentities (		DELLANDA JANDA
provide a provide the provide	Absolute	Dominant Indicator	Dominance	e Test worksh	eet: [xt] a Marayuu Hittiga
Tree Stratum (Plot size:)	% Cover	Species? Status		Dominant Spec	
2.					120 1 27 11710
3.	31-			er of Dominan ross All Strata:	
4.					
		= Total Cover		Dominant Spec BL, FACW, or I	
Sapling/Shrub Stratum (Plot size:)				Index works	0,1-
1			Total %	Cover of:	Multiply by:
2			OBL specie	es	x 1 =
3		1.00	FACW spec		x 2 =
4.		men was reader	FAC specie	S EDIT	x 3 =
·		= Total Cover	FACU spec	ies	x 4 =
Herb Stratum (Plot size: 1 m²)		14.18/1/94/1	UPL specie	s	x 5 =
1. Attridex prostrata	_ 17_	Y FAC	Column To	tals:	(A) (E
2. Salitornia pacifica		in when while the	Preva	lence Index =	B/A =
3 Potentilla ancerina	10	ter a su estimane poi tor	Hydrophyt	ic Vegetation	Indicators:
Schoenopeatus pungens	1745	<u>4</u> 06L	Rap	old Test for Hyd	frophytic Vegetation
s. Cotula cormopifelia	1637, 26 2, 50	The state of the s	2 - Don	ninance Test is	i >50%
Distichi's spirata	15	Y PAUL	3 - Pre	valence Index	is ≤3.0¹
T. SE SECULE COMPLET		revindada tu masi et a	4 - Mor	phological Ada	ptations <sup>1</sup> (Provide supporti r on a separate sheet)
B				lland Non-Vasc	J. Challenger and M. S.
9		(VERLO III)	A Secretary		tic Vegetation¹ (Explain)
10		(Reduce)	95	The same	nd wetland hydrology must
11.	52	= Total Cover			ed or problematic.
Woody Vine Stratum (Plot size:)	0	= Total Cover	E David	and objects	nice Pasquad Data Team
1	April 10 miles	THE STATE SEA	Hydrophyt		The same of the sa
2.		- In the second	Vegetation		
		= Total Cover	Present?	Yes_	VNo
% Bare Ground in Herb Stratum Cl Remarks: Passes FAC-Neutral	1.1				

Depth	Matrix			x Features		-		
inches)	Color (moist)	_%	Color (moist)		Type'	Loc	<u>Texture</u>	Remarks
0-3.5	2.5 4 3/1	199%	7,5 YR4/L	1%	C	PL	SAND _	di non di
15-5.5	25 / 3/1	90%	7.5 YR3/4	10%	C	PL+M	SILTLOAM	See Section 1
- 1/1	0 ( ) - 11	0.	1 - 110 2 112	7-41		<u> </u>		S works and as
5-14	2.5 y 3/1	00	7.5 YR3/4	CS W	-	PLAM	SILT LOPIN	the mostless has the last of
			£	C y	-	richt berger		and the second
			-Reduced Matrix, CS			ed Sand Gr	ains. <sup>2</sup> Locatio	n: PL=Pore Lining, M=Matrix.
dric Soll	Indicators: (Applic	able to all	LRRs, unless other	wise note	d.)	15	Indicators for	or Problematic Hydric Solis <sup>3</sup> :
_ Histosol	(A1)	- 47	Sandy Redox (S	S5)	T	-I /V	2 cm Mu	ick (A10)
	pipedon (A2)		Stripped Matrix		1	CECURE IN	the second secon	ent Material (TF2)
_ Black Hi			Loamy Mucky N			t MLRA 1)		allow Dark Surface (TF12)
-75	n Sulfide (A4)	- /4.44	Loamy Gleyed I	, ,			Other (E	xplain in Remarks)
	Below Dark Surface	e (A11)	Depleted Matrix		-		31_41_4	E broden abrodia a a a desir a a a d
	ork Surface (A12) Tucky Mineral (S1)		Redox Dark Sur Depleted Dark S		7)	otts.		f hydrophytic vegetation and ydrology must be present,
	ileyed Matrix (S4)	Warm the F	Redox Depressi		Seller -	A Busheld	Control of the Contro	sturbed or problematic.
	ayer (if present):	ALD ALLES AND	P. Co. Assemble 1995	atte Land	STATE OF	DEVICE IT	0111000 011	A WEST AND A PROPERTY
Type:		1	30 siA te (1		-		100	
		ecu	_					V
EIA)	A. T. H.	q > ms	Physics of	mp10/1/	[W] -	- 11	Hydric Soil Pre	
marks:	J) - II	q > MA zw q > Ma y ( ) h G w Webs	# (02)	mp13/1/	[w] -		Hydric Soil Pre	
DROLO	GY Irology Indicators:	L WE	MASS MICHAEL		(20)			
DROLO  etland Hyd  mary Indic	GY Indicators: prology Indicators:	L WE	; check all that apply	n	A. C.	xcent	Secondary	/ Indicators (2 or more required)
DROLO etland Hyc mary Indic	GY Irology Indicators: ators (minimum of o Water (A1)	L WE	; check all that apply	r) ned Leave:	s (B9) (e	xcept	Secondar Water	/ Indicators (2 or more required) -Stained Leaves (89) (MLRA 1,
DROLO otland Hyd mary Indic Surface High Wa	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2)	L WE	; check all that apply Water-Stain MLRA 1	r) ned Leaves	s (B9) (e	xcept	Secondar Water	/ Indicators (2 or more required) -Stained Leaves (89) (MLRA 1,
DROLO etland Hyd mary Indic Surface High Wa Saturatio	GY  Irology Indicators: ators (minimum of o  Water (A1) ter Table (A2) on (A3)	L WE	; check all that apply Water-Stail MLRA 1	r) ned Leaves 1, 2, 4A, an (B11)	s (B9) (e nd 4B)	xcept	Secondary Water 4A	/ Indicators (2 or more required) -Stained Leaves (89) (MLRA 1, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
DROLO  otland Hyd  mary Indio  Surface  High Wa  Saturatio  Water M	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1)	L WE	: check all that apply  Water-Stain  MLRA 1  Salt Crust (	ned Leaves 1, 2, 4A, an (B11) rertebrates	s (B9) (end 4B)	xcept	Secondary Water 4A Draina Dry-S	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2) , and 4B) age Patterns (B10) eason Water Table (C2)
DROLO  otland Hyd  mary Indic  Surface  High Wa  Saturatio  Water M  Sedimen	GY  Irology Indicators: ators (minimum of o  Water (A1) ter Table (A2) on (A3)	L WE	: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S	ned Leaves 1, 2, 4A, an (B11) rertebrates Sulfide Odd	s (B9) (end 4B) (B13) Or (C1)		Secondan Water 4A Draina Dry-S Satura	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C
DROLO  etland Hyd  mary Indic  Surface  High Wa  Saturatio  Water M  Sedimen  Drift Dep	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1)	L WE	: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S	ned Leaves 1, 2, 4A, an (B11) rertebrates Sulfide Odd thizosphere	s (B9) (end 4B) (B13) or (C1) es along	Living Root	Secondary Water 4A Draina Dry-S Satura ts (C3) Geom	/ Indicators (2 or more required) -Stained Leaves (89) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2)
DROLO  otland Hyd  mary Indic  Surface  High Wa  Saturatio  Water M  Sedimen  Drift Dep  Algal Ma	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) oosits (B3)	L WE	: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen 5  Oxidized R  Presence of	ned Leave: 1, 2, 4A, an (B11) rertebrates Sulfide Odd rhizosphere of Reduced	s (B9) (end 4B) (B13) or (C1) es along liron (C4)	Living Root	Secondary Water 4A Draina Dry-S Satura ts (C3) Geom	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C
DROLO  etland Hyd  mary Indic  Surface  High Wa  Saturatic  Water M  Sedimen  Drift Dep  Algal Ma  Iron Dep	GY  Irology Indicators: ators (minimum of o  Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4)	L WE	Check all that apply  Water-Stain  MLRA  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror	ned Leaves 1, 2, 4A, ar (B11) rertebrates Sulfide Odd hizosphere of Reduced	s (B9) (end 4B)  (B13)  or (C1)  es along  l Iron (C4)	Living Root	Secondary Water 4A Draina Dry-S Satura ts (C3) Geom Shallo	/ Indicators (2 or more required) -Stained Leaves (89) (MLRA 1, 2) , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3)
DROLO  etland Hyd  mary Indic  Surface  High Wa  Saturatio  Water M  Sedimen  Drift Dep  Algal Ma  Iron Dep  Surface	GY  Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	ne required	: check all that apply  Water-Stain MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or	ned Leaves 1, 2, 4A, ar (B11) rertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed F	s (B9) (end 4B)  (B13)  or (C1)  es along  I Iron (C4  n in Tille	Living Root 4) d Soils (C6)	Secondan  Water  4A  Draina  Dry-S  Satura  Shallo  FAC-N  Raise	/ Indicators (2 or more required) -Stained Leaves (89) (MLRA 1, 1, 2) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Corphic Position (D2) w Aquitard (D3) Neutral Test (D5)
DROLO  otland Hyd  mary Indic  Surface  High Wa  Saturatio  Water M  Sedimen  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) rosits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6)	ne required	: check all that apply  Water-Stain MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  Other (Exp	ned Leaves 1, 2, 4A, ar (B11) rertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed F	s (B9) (end 4B)  (B13)  or (C1)  es along  I Iron (C4  n in Tille	Living Root 4) d Soils (C6)	Secondan  Water  4A  Draina  Dry-S  Satura  Shallo  FAC-N  Raise	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
DROLO  otland Hyd  mary Indic  Surface  High Wa  Saturatio  Water M.  Sedimen  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial In Vegelated Concave	ne required	: check all that apply  Water-Stain MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  Other (Exp	ned Leaves 1, 2, 4A, ar (B11) rertebrates Sulfide Odo thizosphere of Reduced in Reduction Stressed F	s (B9) (end 4B)  (B13)  or (C1)  es along  I Iron (C4  n in Tille	Living Root 4) d Soils (C6)	Secondan  Water  4A  Draina  Dry-S  Satura  Shallo  FAC-N  Raise	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2) , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
DROLO  otland Hyd  mary Indic  Surface  High Wa  Saturatic  Water M  Sedimen  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatic  Sparsely	GY  Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial In Vegetated Concave vations:	ne required magery (B7 s Surface (E	: check all that apply  Water-Stain MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  Other (Exp	ned Leaves I, 2, 4A, and (B11) rertebrates Sulfide Odd chizosphere of Reduced in Reduction Stressed F lain in Rem	s (B9) (end 4B)  (B13)  or (C1)  es along  I Iron (C4  n in Tille	Living Root 4) d Soils (C6)	Secondan  Water  4A  Draina  Dry-S  Satura  Shallo  FAC-N  Raise	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2) , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
DROLO  etland Hyd mary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	GY Irology Indicators: ators (minimum of orwater (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) rosits (B3) it or Crust (B4) rosits (B5) Soil Cracks (B6) on Visible on Aerial Invegetated Concaverations: ar Present?	magery (B7 Surface (E	Check all that apply  Water-Stain MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iror  Stunted or  Other (Exp	ned Leaves 1, 2, 4A, and (B11) rertebrates Sulfide Odd hizosphere of Reduced in Reduction Stressed F lain in Rem	s (B9) (end 4B)  (B13)  or (C1)  es along  I Iron (C4  n in Tille	Living Root 4) d Soils (C6)	Secondan  Water  4A  Draina  Dry-S  Satura  Shallo  FAC-N  Raise	/ Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2) , and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) w Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
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DROLO etland Hydinary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely eld Observation Procludes cap	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) iosits (B3) it or Crust (B4) iosits (B5) Soil Cracks (B6) ion Visible on Aerial In Vegetated Concave vations: ar Present? Present? You	magery (B7 s Surface (E	Check all that apply  Water-Stain MLRA  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or Other (Exp  No X Depth (inc.) No Depth (inc.)	ned Leaves 1, 2, 4A, an (B11) rertebrates Sulfide Odd chizosphere of Reduced in Reduction Stressed F lain in Rem ches):	s (B9) (end 4B)  (B13)  or (C1)  es along  Hron (C4)  n in Tille  Plants (D  narks)	Living Roof 4) d Soils (C6) 1) (LRR A)  Wetla	Secondan  Water  4A  Draina  Dry-S  Satura  Geom  Shallo  FAC-I  Raise  Frost-	Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
DROLO etland Hydinary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely eld Observator Table atturation Procludes cap	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) iosits (B3) it or Crust (B4) iosits (B5) Soil Cracks (B6) ion Visible on Aerial In Vegetated Concave vations: ar Present? Present? You	magery (B7 s Surface (E	Check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or Other (Exp  No X Depth (inc.)	ned Leaves 1, 2, 4A, an (B11) rertebrates Sulfide Odd chizosphere of Reduced in Reduction Stressed F lain in Rem ches):	s (B9) (end 4B)  (B13)  or (C1)  es along  Hron (C4)  n in Tille  Plants (D  narks)	Living Roof 4) d Soils (C6) 1) (LRR A)  Wetla	Secondan  Water  4A  Draina  Dry-S  Satura  Geom  Shallo  FAC-I  Raise  Frost-	Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
DROLO etland Hydinary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely eld Observation Procludes cap	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) in (A3) arks (B1) it Deposits (B2) iosits (B3) it or Crust (B4) iosits (B5) Soil Cracks (B6) ion Visible on Aerial In Vegetated Concave vations: ar Present? Present? You	magery (B7 s Surface (E	Check all that apply  Water-Stain MLRA  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or Other (Exp  No X Depth (inc.) No Depth (inc.)	ned Leaves 1, 2, 4A, an (B11) rertebrates Sulfide Odd chizosphere of Reduced in Reduction Stressed F lain in Rem ches):	s (B9) (end 4B)  (B13)  or (C1)  es along  l Iron (Con in Tille  Plants (Donarks)	Living Roof 4) d Soils (C6) 1) (LRR A)  Wetla	Secondan  Water  4A  Draina  Dry-S  Satura  Geom  Shallo  FAC-I  Raise  Frost-	Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (Coorphic Position (D2) ow Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)

Sampling Date:  State:  State:  Sampling Point:  State:  Sampling Point:  State:  Sampling Point:  State:  State:  Sampling Point:  State:  State:  State:  Sampling Point:  State:  State:  State:  State:  State:  State:  State:  State:  Sampling Point:  Stope (%):  Datum:  NWI classification:  Yes No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes No  Patic?  (If needed, explain any answers in Remarks.)  Is the Sampled Area within a Wetland?  Yes No  Yes No  Yes No  The Salfmarks Sand Hankitan
ion, Township, Range:
Al relief (concave, convex, none): Convex Slope (%): O Datum: Datum: NWI classification: NWI classification: No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes No natic? (If needed, explain any answers in Remarks.)  Is the Sampled Area within a Wetland? Yes No
Long:
NWI classification:
NWI classification:
Yes No (If no, explain in Remarks.)  In bed? Are "Normal Circumstances" present? Yes No  In the complete of the complete
Is the Sampled Area within a Wetland?  Are "Normal Circumstances" present? Yes No
natic? (If needed, explain any answers in Remarks.)  mpling point locations, transects, important features, etc.  Is the Sampled Area within a Wetland?  Yes No
Is the Sampled Area within a Wetland?  We within a Wetland?  We within a Wetland?  We within a Wetland?
Is the Sampled Area within a Wetland?  Yes No
Is the Sampled Area within a Wetland? Yes No
within a Wetland? Yes No
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Contraction Date Services
THE BUILDING SECTION AND A PERSONAL SECTION OF THE PERSONAL PROPERTY OF
The special states and sales are the sales and the sales are the sales a
minant Indicator Dominance Test worksheet:  ecies? Status Number of Dominant Species t
Number of Dominant Species That Are OBL, FACW, or FAC: (A)
The state of the s
Total Number of Dominant Species Across All Strata: (B)
otal Cover Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Prevalence Index worksheet:
Total % Cover of: Multiply by:
OBL species x1 =
FACW species x2 =
FAC species x 3 =
FACU species x 4 =
otal Cover UPL species x 5 =
J FACIA Column Totals: (A) (B)
Y TALLAS ONWING TOWNS
Prevalence Index = B/A =
Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0 <sup>†</sup> 4 - Morphological Adaptations (Provide supporting
Prevalence Index = B/A =
Prevalence Index = B/A =
Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0³  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain)
Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0³  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must
Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0³  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Prevalence Index = B/A =
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Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0³  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  5 - Wetland Non-Vascular Plants¹  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Hydrophytic Vegetation
自作

SOIL	05-06-	- 2021	WRE	Southern	edge	an woman	Sampling Point: <u>L27</u>
Profile Des	cription: (Describe	to the dep	th needed to docu	ment the indicate	or or confirm	the absence	e of indicators.)
Depth	Matrix	1	Rede	ox Features			OUT THE TANK OF THE PARTY OF TH
(inches)	Color (moist)	%	Color (moist)	%Type	Loc <sup>2</sup>	Texture	Remarks
0-12	2.5 4 3/1	100	J- 6	Grant pulsus		SAND	encroaching beach
5,0	-42		ALAS I MARIN MA	department to the			cate expenses semilarity-inte
12-13	7.5 YR 2.5/1	85	5YR 4/6	15%	70.1	PEET -	Previous surface lay
14-16		- "		777		1001	
13-20	2.5 /3/1	Cla	7.5424/6	total -		_	Black decaying OM
<i>) w</i>	0.0 4 2 / 1	Ster Miling	7-3121/6	10 haustin	A Charter on	M. Addenied a	multiple to the common the section with
		Mark witnessing	mile make the par	Thousand	-	(51/4)	setting Sat nitration
/	Mariah II		AND COURSE III	Characterists	ero Alemana	mole	velore or restorate
AND THE RESERVE	Maria Maria	Stewart no	W. At Section and Printers of the	LOTAL SEASONS IN	Inches and Age	-11-7	Commenced and the same of
lype: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, C	S=Covered or Coa	ted Sand Gra		cation: PL=Pore Lining, M=Matrix.
	Indicators: (Applic	adie oj eide	LAVO NETA	ALCON CHENCE !		100	ors for Problematic Hydric Solis <sup>3</sup> :
Histosol	Tracket I	44	Sandy Redox (	Arthur (In the Late Late Late Late Late Late Late Lat	- 0.81		m Muck (A10)
and the second second second	pipedon (A2) stic (A3)		Stripped Matrix	• •	- DY		d Parent Material (TF2)
	n Sulfide (A4)			Mineral (F1) (exce	pt MLRA 1)		y Shallow Dark Surface (TF12)
	d Below Dark Surface	· /Δ11)	Loamy Gleyed			Oth	er (Explain in Remarks)
	ark Surface (A12)	= (ハリ) _	Depleted Matrix Redox Dark Su			31 - 11 - 1	are the Language
	lucky Mineral (S1)	•	Depleted Dark				ors of hydrophytic vegetation and
	leyed Matrix (S4)	Street Link	Redox Depress				and hydrology must be present,
	ayer (if present):	and the second	redux Depress	ions (F6)	Taken	unies	ss disturbed or problematic.
Туре:	QA'I î	A FOLLY	BO AND PROT				
Depth (inc						100000	
emarks:	A103).		194 (U())		N N	Hydric Soil	Present? Yes No
/DROLO	GY	N 1950F.	1,1791.				-6
etland Hyd	Irology Indicators:		AT COME DETC.	- 1			45
rimary Indic	ators (minimum of or	ne required:	check all that apply	()		Secon	ndary Indicators (2 or more required)
	Vater (A1)		CONTRACTOR OF STREET STREET, S	ned Leaves (B9) (	except		Vater-Stained Leaves (B9) (MLRA 1, 2
	ter Table (A2)		A STATE OF THE PARTY OF THE PAR	1, 2, 4A, and 4B)	oxoop:	— "	
Saturatio			Salt Crust				4A, and 4B)
	arks (B1)			ertebrates (B13)			rainage Patterns (B10)
	t Deposits (B2)			Sulfide Odor (C1)			ry-Season Water Table (C2)
	osits (B3)			hizospheres along	n Living Book		aturation Visible on Aerial Imagery (C9
	t or Crust (B4)			of Reduced Iron (C			eomorphic Position (D2)
	osits (B5)		1 April 1991				hallow Aquitard (D3)
	Soil Cracks (B6)	SILL SUVELLE		Reduction in Till	the second secon		AC-Neutral Test (D5)
	n Visible on Aerial In	(D7)	A COLOR OF THE PERSON NAMED IN COLOR OF THE P	Stressed Plants (I	DI) (LKK A)		aised Ant Mounds (D6) (LRR A)
	Vegetated Concave			lain in Remarks)		Fi	rost-Heave Hummocks (D7)
eld Observ		Surface (Bo	3)		1 -		191
	Mary or agreement	and week	AWA SI				
urface Wate	The section of the se	s N	Depth (inc				
ater Table f	ALIEN STATE OF	the second second	Depth (inc	· ·	_	The state of	
aturation Pro		s N	Depth (inc	hes):	Wetlan	nd Hydrology	/ Present? Yes No
escribe Rec	orded Data (stream o	gauge, mon	itoring well, aerial p	hotos, previous in	spections), if	available:	
			dyran et	-	- V	Santi.	
emarks:	OF I		77.000		-		
				in thirt	TEN B		
		-			14.54	A-1	The party of Supply and
					10		376

Project/Site: LIRE IN THE STATE OF THE STATE	Cit	y/County: Serve	sale.		Sampling Date: 5/6/21
Applicant/Owner: (w) 1/12/1/3 Canserva					
nvestigator(s): heten McDonald, Ro	The second secon	A SECTION AND A SECTION AND A SECTION ASSESSMENT AND A SECTION ASSESSMENT ASS	Concession with the Concession of the Concession	The second second	
andform (hillslope, terrace, etc.):					1 VC Sione (%): ()
Subregion (LRR):					
	Lat				cation:
Soil Map Unit Name:					
re climatic / hydrologic conditions on the site typical fo					
re Vegetation, Soil, or Hydrology			1000		present? Yes No
re Vegetation, Soil, or Hydrology	naturally proble	ematic? (If ne	eded, explain	any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing s	ampling point le	ocations, t	transects	s, important features, etc
Hydrophytic Vegetation Present? Yes	No	A Silver allegands	ME TO LETTE	I de of alo	varie Sai Indicators (April 18
	No	Is the Sampled	Area	Voc	No
The state of the s	No	105 000	480 H S-2540 M J J J J J J J J J J J J J J J J J J	-	m. Al Jana Alda - mark and
Remarks: Overwash dominal	tel bus	alterrass-	Charac	terriv	10 Saltmarsh1
Layer of sand overlying		CO STATE WILLIAM	3~ VCS 3	W TOCK	-1 2401 18 1500c.
/EGETATION – Use scientific names of p		(Parada hardalina)	Distribut	1	TEST STORES COLLYBORDS
Tree Stratum (Plot size:)		Dominant Indicator  Species? Status		100000	ksheet:
1			Number of I		
2.			Total Numb	er of Domi	nant Oneshi (Idea)
3.			Species Ac		and the second s
4.			Percent of I	Dominant S	Ineries
	=	Total Cover	That Are Of		
Sapling/Shrub Stratum (Plot size:)			Prevalence	Index wo	rksheet:
2			Total %	Cover of:	Multiply by:
3			OBL specie	s	program Marchaga (Propries and Allen Company)
4.		F. Amberto	FACW spec	Total Control of the Control	
5	Value of 8	division parties	FAC specie		x 3 =
19417 m All		Total Cover	FACU spec		M. DESPET CHARACTER
Herb Stratum (Plot size:)	20	111年	UPL specie		x 5 =
1. Disticulis spirata	<u></u>	Y FACU	Column Tol		(A)(B)
2. Atriplex proctrata	1Ø	A CTC			x = B/A = Malk college with the
3. 10m - E - 1 - 1				L I To and a second	on Indicators:
5. The structure of the section of t		na respective nod is			Hydrophytic Vegetation
	ASTRALLED T	dar Stragen Plan	and the second second		St IS >50%
7. Charlian mil eves 61214		the man of the start and a	Acres A		lex is ≤3.0 <sup>1</sup>
8			4 - Moi	ipnological a in Remark	Adaptations <sup>1</sup> (Provide supporting s or on a separate sheet)
9			5 - Wel	tland Non-\	/ascular Plants <sup>1</sup>
10		35 BC 1	Problem	matic Hydro	ophytic Vegetation <sup>1</sup> (Explain)
11		- 国籍政制			il and wetland hydrology must
- an. Sax introduction of a country	United & S	Total Cover	be present,	unless dis	turbed or problematic.
Woody Vine Stratum (Plot size:)	yn V goddage i	willing districting this	in Personal Comme	Tien de	marks and but most adopt
1	= 13 = 1	10	Hydrophyt		1
2	A/17 42	Tatal	Vegetation Present?		No
% Bare Ground in Herb Stratum 55 5200		Total Cover			4
Remarks:					

OIL Profile Desc	rintion: (Describe	to the de	pth needed to docur				a Ala a tamana	
Deoth	Matrix	to the de		nent the <u>x Fe</u> ature	HEART WILLIAM &	Of COMMIT	n the absence (	of indicators.)
(inches)	Color (moist)	- %	Color (moist)	x realure %	Type	Loc <sup>2</sup>	Texture	Remarks
つつて	104R3/1	100	7.17				SAND	BEACH
2.4	WYRZZ	100		-	William I	Tere wa	OVEGAN'C	
1-0			2 540 0/1	1 000	-	- 01		
9-8	2.5 43/1	85	2.5 YR 3/6	15	-	PL	EINERM	
4	the wa	AFT COME C	debt :				CLAYLDAN	area of the sale
3-13	2.5 Y 3/1	75	7.5 VR4/6	25	C	PL+M	LOAMY	SAMO
Tolerani.	Laby Comes			The same	المارقانا	SA Sent and Sense	Laboration	
3-20	2543/1	65	7.54R4/6	35	C	M	SILTYCH	A CHARLES AND A MAINT
511/1000	- The Late of the		7,372-110	200	MAN THE	Charles Harry	SILIYCA	4.7 may 100 ma
ARREST TOTAL	The state of the s		Water or the second	Company of the	-	1	100	LESS conditionates the same
ype: C=Co	oncentration, D=Dep	eletion, RM	=Reduced Matrix, CS LRRs, unless other	S=Covered	d or Coat	ed Sand Gr		ation: PL=Pore Lining, M=Matrix.
		able to all	The second secon		ea.)	TOP		's for Problematic Hydric Soils <sup>3</sup> :
_ Histosol	ipedon (A2)	100	Sandy Redox (S				100 81	Muck (A10)
_ Black His		+	Stripped Matrix Loamy Mucky M		1) (avcan	MI DA 4)	Red I	Parent Material (TF2)
	n Sulfide (A4)		Loamy Gleyed I			CHILICACI)		Shallow Dark Surface (TF12) r (Explain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Matrix		,		Oulei	· /=xhigin in i/giligiva)
_ Thick Da	rk Surface (A12)	4 4	Redox Dark Sur		BAREC	.4	3Indicator	s of hydrophytic vegetation and
	ucky Mineral (S1)		Depleted Dark S	Surface (F		107		d hydrology must be present,
	leyed Matrix (S4)	Who is too	Redox Depress	ions (F8)	BARRE 1	relicate.		disturbed or problematic.
-7	ayer (if present):	ingmi E3a	ACT OF THE PARTY OF THE PARTY OF	100	Ser.	Choke.	Section 1	The same of the sa
Type:	764	10/2014	Mariam 1981	4			TOTAL T	
Depth (inc	thes):							
	alt marsh	A A	beach conv	esiv		# T	Hydric Soil F	Present? Yes X No
έλ.	alt marsh	A A	eo aveluit	resion			Hydric Soil F	
DROLOG	alt marsh	A A	eo aveluit	res;w		9	Hydric Soil F	
DROLOG	alt Marsh  GY  rology Indicators:	Daw File	eo aveluit	Caver		8		
DROŁOG etland Hyd	alt Marsh  GY  rology Indicators:	Daw File	Section (Consequence)	navea ()		xcept	Second	dary Indicators (2 or more required
DROLOG etland Hyd imary Indica Surface V	GY irology Indicators: ators (minimum of o	Daw File	d: check all that apply Water-Stair	ned Leave	es (B9) (e	хсөрі	Second Wa	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1
DROLOG etland Hyd imary Indica Surface V	GY irology Indicators: ators (minimum of o Nater (A1) er Table (A2)	Daw File	d: check all that apply Water-Stair	ned Leave	es (B9) (e	хсөрt	Second	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B)
DROLOG etland Hyd imary Indica Surface V High Wat	rology Indicators: ators (minimum of o Nater (A1) er Table (A2) n (A3)	Daw File	d; check all that apply  Water-Stair	ned Leave 1, 2, 4A, a	es (B9) (e and 4B)	xcept	Second Wa	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10)
DROLOG etland Hyd imary Indica Surface V High Wat Saturatio Water Ma	rology Indicators: ators (minimum of o Nater (A1) er Table (A2) n (A3)	Daw File	d; check all that apply  Water-Stair  MLRA 1	ned Leave I, 2, 4A, a (B11) ertebrates	es (B9) (e and 4B) s (B13)	xcept	Second Wa Dra Dry	lary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2)
DROLOG etland Hyd imary Indica Surface V High Wat Saturatio Water Ma Sediment	arks (B1)	Daw File	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv	ned Leave 1, 2, 4A, a (B11) rertebrates Sulfide Od	es (B9) (e and 4B) s (B13) dor (C1)		Second Wa Dra Dry Sal	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (
DROLOG etland Hyd imary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) er Crust (B4)	Daw File	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv	ned Leave I, 2, 4A, a (B11) ertebrates Sulfide Od hizospher	es (B9) (e and 4B) s (B13) dor (C1) res along	Living Root	Second Wa Dra Dra Dry Sal ts (C3) X Gee	lary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2)
DROLOG etland Hyd imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5)	Daw File	d: check all that apply  Water-Stain  MLRA 1  Salt Crust ( Aquatic Inv Hydrogen S	ned Leave I, 2, 4A, a (B11) rertebrates Sulfide Od hizospher of Reduces	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4	Living Roof	Second Wa Dra Dry Sal ts (C3) X Geo	dary Indicators (2 or more required ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2) allow Aquitard (D3)
DROLOG  etland Hyd  imary Indica  Surface V  High Wat  Saturation  Water Ma  Sediment  Drift Depo  Algal Mat  Iron Depo  Surface S	rology Indicators: ators (minimum of o Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5) Soil Cracks (B6)	ne require	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of  Recent Iron	ned Leave 1, 2, 4A, a (B11) ertebrates Sulfide Od hizospher of Reduced	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tille	Living Roof I) d Soils (C6)	Second Wa Dra Dry Sal ts (C3) X Gee	dary Indicators (2 or more required ater-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2)
DROLOG etland Hyd imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) c or Crust (B4) posits (B5) coil Cracks (B6) n Visible on Aerial II	ne require	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or :  Other (Expl	ned Leave 1, 2, 4A, a (B11) ertebrates Sulfide Od hizospher of Reduced n Reduction	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roof I) d Soils (C6)	Second  Wa  Dra  Dry  Sal  ts (C3) X Gee  Sha  Rai	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
DROLOG etland Hyd imary Indica Surface V High Wat Saturatio Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely	GY  rology Indicators: ators (minimum of o  Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial II Vegetated Concave	ne require	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or :  Other (Expl	ned Leave 1, 2, 4A, a (B11) ertebrates Sulfide Od hizospher of Reduced n Reduction	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roof I) d Soils (C6)	Second  Wa  Dra  Dry  Sal  ts (C3) X Gee  Sha  Rai	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
DROLOG etland Hyd imary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4) osits (B5) soil Cracks (B6) n Visible on Aerial II Vegetated Concave ations:	ne require	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iron  Stunted or 1  Other (Expl	ned Leave I, 2, 4A, a (B11) ertebrates Sulfide Od hizospher of Reduced n Reduction Stressed lain in Rea	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roof I) d Soils (C6)	Second  Wa  Dra  Dry  Sal  ts (C3) X Gee  Sha  Rai	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
DROLOG etland Hyd imary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely	rology Indicators: ators (minimum of o Nater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial II Vegetated Concave	ne require	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or :  Other (Expl	ned Leave I, 2, 4A, a (B11) ertebrates Sulfide Od hizospher of Reduced n Reduction Stressed lain in Rea	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roof I) d Soils (C6)	Second  Wa  Dra  Dry  Sal  ts (C3) X Gee  Sha  Rai	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
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/DROLOG /etland Hyd /imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatio Sparsely eld Observ urface Water fater Table F	rology Indicators: ators (minimum of or Nater (A1) er Table (A2) in (A3) arks (B1) it Deposits (B2) osits (B3) cor Crust (B4) osits (B5) coil Cracks (B6) in Visible on Aerial II Vegetated Concave ations: r Present? Present? Yesent?	magery (B)	d: check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv  Hydrogen S  Oxidized R  Presence of Recent Iror  Stunted or S  Other (Expl	ned Leave 1, 2, 4A, a (B11) ertebrates Sulfide Od hizospher of Reduced on Reduction Stressed lain in Rea thes):	es (B9) (e and 4B) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Root I) d Soils (C6) 1) (LRR A)	Second  Wa  Dra  Dry  Sal  ts (C3) X Gee  Sha  Rai	dary Indicators (2 or more required ster-Stained Leaves (B9) (MLRA 1 4A, and 4B) sinage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
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Project/Site: WRE	to the Phase to 1/2	Sity/County:		Sa	impling Date: GIGD
Applicant/Owner:	SKALTTA	Error V	State:	Sa	mpling Point: L3WA
investigator(s): Kelsey Manald, Ros	e Dans s	Section, Township, Ra	nge:		VENTER OF
Landform (hillslope, terrace, etc.): \eve-e					Slope (%): 5
Subregion (LRR):		- 12			
Soil Map Unit Name:		100			n:
Are climatic / hydrologic conditions on the site typical fo	1				
Are Vegetation, Soil, or Hydrology	significantly d	listurbed? Are	'Normal Circu	mstances" pres	ent? Yes No
Are Vegetation, Soil, or Hydrology	naturally prob	elematic? (If ne	eeded, explain	any answers in	n Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing	sampling point l	ocations, t	ransects, in	nportant features, etc.
Hydrophytic Vegetation Present? Yes	No		HAN HAN	1-02	(NIV) . See Medical (NIV)
Hydric Soil Present? Yes	No	Is the Sampled	l Area	3	(vic) incurs
Wetland Hydrology Present? Yes	No	within a Wetlan	nd?	Yes	No
Remarks: Top ofterce-higher	st min	trough to	undac	.1	(SA STRUTATE)
De silial s	1-6-11	in the Creek	y wha	U	ngorngan Soffde, nu Det Jakot Rosen i no Sol
2-par wetland - R	SACX BUGG	ient .	A CHESTAN	Tring mag	CES FOR A MANAGE FORD 1962
VEGETATION – Use scientific names of p	lants.	191- Statute (F2)	O tricusions 7		continuo philip the a
in the stranger of the strain		Dominant Indicator	Dominance	Test workshe	et:) / Wish United Vinco
Tree Stratum (Plot size:) 1	% Cover	Species? Status		Dominant Speci BL, FACW, or F	ies (A)
2.				1.	Tanks in the after
3.		14		er of Dominant ross All Strata:	
4			1		
		= Total Cover		Dominant Speci BL, FACW, or F	
Sapling/Shrub Stratum (Plot size:)		/		Index worksh	
t <sub>-</sub>			1 31 7 4 4	Cover of:	
2.				s	THE PROPERTY OF THE
3.			FACW spec	1,000	x 2 =
4		1	FAC specie		
5.		AND SECRETAL SEC. OF	system and the second	ies	LUPIN STREET, STATING
Herb Stratum (Plot size:	4	= Total Cover	UPL specie		SAV SALE CONTRACTOR
1. Regularis softings X	06	Y 119	The state of the s	als.	(A) (B)
2. Porman hordes acus	75	Y FAW	300/7		_ (7)
3. Festica annoinacea	10	FAC			B/A = Pedyon 30 Submitted
4. Festuca bromoides	20	V CAC	100	ic Vegetation I	
5. Comex chispix	2 2 2	- FAC			rophytic Vegetation
6. a Management and animal	SK suran cras	MAN AND AND AND AND AND AND AND AND AND A	Cabacana and	ninance Test is valence Index is	>50%
7. Con a from more and all the of		(Enwhole materia)	- 10 T	DEFENDANCE VINE CE	MANAGE STREET VIOLENCE TO ALL THE PROPERTY OF THE PARTY O
8					otations <sup>1</sup> (Provide supporting on a separate sheet)
9.				land Non-Vascu	
10		(attack)			tic Vegetation <sup>1</sup> (Explain)
44		(Encoul.	The second second	Mary Contraction	d wetland hydrology must
Ent. Strange and Strange	en =	Total Cover			d or problematic.
Woody Vine Stratum (Plot size:)	A PONT	Sacrimia za distrib	a Tab Tens	from morning	more than the second
1	a balancame		Hydrophyti	ic	
2.		- market	Vegetation	V	No_V
W. S. C. L. H. J. S		Total Cover	Present?	165_	NO <u>V</u>
% Bare Ground in Herb Stratum Remarks:			<u> </u>		
Nemalks.					
	Fic				
	-				

STOPP wrong data diff. shept!

Depth	Matrix Calandaria	01		x Features		The state of the s		1 1 2 2 2 2 2 2		
(inches) クーろ	Color (moist)	- %	Color (moist)	- %	Type <sup>1</sup>	Loc	<u>Texture</u>	- No.	Remarks	Ebrien
)-)	7543/2	99	7.54R416	La late	2000	17 4	round	SAND)	Arthur Jack n	nieo)
-7	2.5/3/2	100%	7.57R4/6	0	PRODUCE.	das.	Loamy	SAW	TAN THE TANK	nous
	7	a Company	i.e			18	100		armid for	
-14	2.5 y 3/2	929	7.54R4/G	8%	A STATE OF THE SECOND S	Anadrah ya	LOAM	tudes	silty loan	viceral esterato
to and	ALE SIVERIOR MONEY		medica (Galeria III)	(E.)	Nueralden	attanides	(rnts	Share of	ion soil	ida da
	oncentration, D=Dep Indicators: (Applic					d Sand Gr	_		Pore Lining, M=Matri	
_ Histosol		able to all		Married Vortex (n)	.,	- 19	-0.5		lematic Hydric Soll	S .
	pipedon (A2)	:5Y	Sandy Redox (			-		n Muck (A10		5 horse
The state of the s	istic (A3)	-	Stripped Matrix		\ /awaant	MI DA A	The same of the sa	Parent Mat		
	en Sulfide (A4)		Loamy Mucky I Loamy Gleyed			MLKA 1)		y Shallow Da er (Explain i	ark Surface (TF12)	
	d Below Dark Surfac	e (A11)	Depleted Matrix	The state of the s			_ 000	- /rvhiani ii	ii i veillains)	
	ark Surface (A12)		Redox Dark Su		- 14		3Indicate	ors of hydron	hytic vegetation and	
_ Sandy N	Mucky Mineral (S1)		Depleted Dark		7)	2010		CONTRACTOR OF THE PARTY OF THE	y must be present,	ATA
	Gleyed Matrix (S4)	nhow/Ing/	Redox Depress	ions (F8)	United at	foliografia.			or problematic.	
	Layer (if present):	- Danign	Control of	THE LAND	SCOT - D	COPPE IN		1		-
Type:	ah a ah	P - CAMPAGA	- VI	120			37		V	
Depth (in	ciles).	1000	the last time the same	The second second		and the same of	Hydric Soil	Present?	YesX No_	
	blemere	turing the	WET_C	Ar	10	28/			old) dojiniyani	2014
PROLO	Market M. Jacks	Punyabil	WET C	Ar	10			11		E IN
DROLO detland Hyd	GY State	ne required	WET_C	Ar	D				्राह्म स्टब्स्ट स्टब्स स्टब्स्ट स्टब्स स्टब्	
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DROLO etland Hydinary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In v Vegetated Concave vations:	nagery (B7 Surface (B	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odi thizosphen of Reduced n Reductio Stressed F lain in Ren	nd 4B) i (B13) or (C1) es along L i Iron (C4) n in Tilled Plants (D1	iving Rool Soils (C6)	Secon W D D S S S S S F R	ndary indical Vater-Stained 4A, and 4I trainage Patt try-Season V aturation Vis teomorphic F hallow Aquit AC-Neutral T aised Ant M	lors (2 or more required Leaves (89) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{U}\) ounds (D6) (LRR A)	ed) A 1, 2,
DROLO etland Hydinary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II v Vegetated Concave vations:	magery (B7 Surface (E	Water-Sta MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odi thizosphen of Reduced n Reductio Stressed F lain in Ren	nd 4B) i (B13) or (C1) es along L i Iron (C4) n in Tilled Plants (D1	iving Rool Soils (C6)	Secon W D D S S S S S F R	ndary indical Vater-Stained 4A, and 4I trainage Patt try-Season V aturation Vis teomorphic F hallow Aquit AC-Neutral T aised Ant M	lors (2 or more required Leaves (89) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{U}\) ounds (D6) (LRR A)	<u>ed)</u> A 1, 2,
DROLO  etland Hydrimary Indic  Surface  High Wa  Saturatic  Water M  Sedimen  Drift Dep  Algal Ma  Iron Dep  Surface :  Inundatic  Sparsely  eld Observarface Water  ater Table	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations: er Present? Ye	magery (B7 Surface (E es N	Water-Sta MLRA Salt Crust Aquatic Inv Hydrogen Oxidized F Presence ( Recent Iro Stunted or Other (Exp 88)  Depth (inc	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odd thizosphen of Reduced n Reductio Stressed F tlain in Ren ches):	nd 4B) i (B13) or (C1) es along L i Iron (C4) n in Tilled Plants (D1	iving Rool Soils (C6) ) (LRR A)	Secon  W  D  Sis (C3) G  F  R  F	ndary Indical Vater-Stained 4A, and 4I Irainage Patt Iry-Season V aturation Vis Beomorphic F hallow Aquit AC-Neutral T aised Ant Morost-Heave F	lors (2 or more required Leaves (B9) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{D}\) Ounds (D6) (LRR A) Hummocks (D7)	ed) A 1, 2,
POROLO  Tetland Hydrimary Indic  Surface  High Wa  Saturatio  Water M  Sediment  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  eld Observation Proceed attraction Proceedings P	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II v Vegetated Concave vations: er Present? Present? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent?	magery (B7 Surface (E as N	Water-Sta  MLRA  Salt Crust  Aquatic Int  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  No Depth (inc	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odd thizosphere of Reduced n Reductio Stressed F clain in Ren ches):	nd 4B)  (B13)  or (C1)  es along L  I Iron (C4)  n in Tilled  Plants (D1)  narks)	iving Rook Soils (C6) ) (LRR A)	Secon  Vi  D  D  S  Is (C3)   F  R  F  In Fi	ndary Indical Vater-Stained 4A, and 4I Irainage Patt Iry-Season V aturation Vis Beomorphic F hallow Aquit AC-Neutral T aised Ant Morost-Heave F	lors (2 or more required Leaves (B9) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{D}\) Ounds (D6) (LRR A) Hummocks (D7)	ed) A 1, 2,
fetland Hydrimary Indice Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface: Inundatio Sparsely eld Observation Princludes cap	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations: er Present? Present? Yesent?	magery (B7 Surface (E as N	Water-Sta  MLRA  Salt Crust  Aquatic Int  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  No Depth (inc	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odd thizosphere of Reduced n Reductio Stressed F clain in Ren ches):	nd 4B)  (B13)  or (C1)  es along L  I Iron (C4)  n in Tilled  Plants (D1)  narks)	iving Rook Soils (C6) ) (LRR A)	Secon  Vi  D  D  S  Is (C3)   F  R  F  In Fi	ndary Indical Vater-Stained 4A, and 4I Irainage Patt Iry-Season V aturation Vis Beomorphic F hallow Aquit AC-Neutral T aised Ant Morost-Heave F	lors (2 or more required Leaves (B9) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{D}\) Ounds (D6) (LRR A) Hummocks (D7)	ed) A 1, 2,
POROLO  Tetland Hydrimary Indic  Surface  High Wa  Saturatio  Water M  Sediment  Drift Dep  Algal Ma  Iron Dep  Surface  Inundatio  Sparsely  eld Observation Procludes cap	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II v Vegetated Concave vations: er Present? Present? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent? Yesent?	magery (B7 Surface (E as N	Water-Sta  MLRA  Salt Crust  Aquatic Int  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  No Depth (inc	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odd thizosphere of Reduced n Reductio Stressed F clain in Ren ches):	nd 4B)  (B13)  or (C1)  es along L  I Iron (C4)  n in Tilled  Plants (D1)  narks)	iving Rook Soils (C6) ) (LRR A)	Secon  Vi  D  D  S  Is (C3)   F  R  F  In Fi	ndary Indical Vater-Stained 4A, and 4I Irainage Patt Iry-Season V aturation Vis Beomorphic F hallow Aquit AC-Neutral T aised Ant Morost-Heave F	lors (2 or more required Leaves (B9) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{D}\) Ounds (D6) (LRR A) Hummocks (D7)	ed) A 1, 2,
DROLO  Setland Hydrimary Indic Surface High Wa Saturatic Water M Sedimen Drift Dep Algal Ma Iron Dep Surface: Inundatic Sparsely eld Observarface Water Table Setlater Table Setlater Table Setlater Received Rece	drology Indicators: cators (minimum of o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations: er Present? Present? Yoursent? resent? Yoursent?	magery (B7 Surface (E es N es N	Water-Sta  MLRA  Salt Crust  Aquatic Int  Hydrogen  Oxidized F  Presence  Recent Iro  Stunted or  Other (Exp  No Depth (inc	ned Leave 1, 2, 4A, at (B11) vertebrates Sulfide Odd thizosphere of Reduced n Reductio Stressed F clain in Ren ches):	nd 4B)  (B13)  or (C1)  es along L  I Iron (C4)  n in Tilled  Plants (D1)  narks)	iving Rook Soils (C6) ) (LRR A)	Secondary  Secondary  D  D  S  S  S  F  R  F  Indianal Hydrology  f available:	ndary indical Vater-Stained 4A, and 4I trainage Patt try-Season V aturation Vis teomorphic F hallow Aquit AC-Neutral T aised Ant M rost-Heave i	lors (2 or more required Leaves (B9) (MLR/B) lerns (B10) Vater Table (C2) sible on Aerial Image Position (D2) lard (D3) Test (D5) \(\mathcal{D}\) Ounds (D6) (LRR A) Hummocks (D7)	ed) A 1, 2,

Project/Site: LIPC		City/Count	y:	<u>.</u>	Sampling Date: 5/6/21
Applicant/Owner:				State:	Sampling Point: 13 WV
Investigator(s): belsey Marald Ro	SEDANB	Section, To	ownship, Ra	nge:	1
Landform (hillslope, terrace, etc.): Lexee		Local relie	of (concave,	convex, none):	Slope (%):
Subregion (LRR):					
Soil Map Unit Name:					
Are climatic / hydrologic conditions on the site typical for					
Are Vegetation, Soil, or Hydrology			1.6		present? Yes No
Are Vegetation, Soil, or Hydrology				eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site ma				•	50
Hydrophytic Vegetation Present? Yes					
Hydric Soil Present? Yes			he Sampled hin a Wetlar		No
Wetland Hydrology Present? Yes		With	Alfi & Weuai	.10 f 1 es	
VEGETATION - Use scientific names of pla	ants.	4			
Tree Stratum (Plot size:)	Absolute % Cover			Dominance Test work	
1				Number of Dominant Sp That Are OBL, FACW, of	pecies or FAC: (A)
2				Total Number of Domina	
3.				Species Across All Stra	
4	_			Percent of Dominant Sp	norise
Control (Charles Charles (Clat sine)	_	_ = Total C	over	That Are OBL, FACW, of	
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worl	ksheet:
1				Total % Cover of:	Multiply by:
2. 3.			-	OBL species	x1=
4		-			x 2 =
5.					x 3 =
		= Total Ce	over		x 4 =
Herb Stratum (Plot size:	-				x5=
1. Poa pratensis	-10			Column Totals:	(A) (B)
2. Atriplex prostultà	-2	~	-	Prevalence Index	= B/A =
3. Festuca arealinacea	<u>\$5</u>	- Y	PAC	Hydrophytic Vegetatio	n Indicators:
4. Cerastim almoratim	<u>_</u>	4			lydrophytic Vegetation
5. Spenilaria marina			- —	✓ 2 - Dominance Test	
6 Juneus butonius	_ 41			3 - Prevalence Inde	
7. Sonchus Aspet		-	-	4 - Morphological A	Adaptations <sup>1</sup> (Provide supporting sor on a separate sheet)
8. Hordium marianum	- 3			5 - Wetland Non-Va	• •
9. Telfalium repers	- <del>1</del>	-			phytic Vegetation <sup>1</sup> (Explain)
11.			- —		l and wetland hydrology must
	92	= Total Co	wer	be present, unless distu	
Woody Vine Stratum (Plot size:)		100,00	) <b>V</b> G1		
1				Hydrophytic	
2				Vegetation	- Na
N/ Day On the State of A		_= Total Co	ver	Present? Yes	s No
% Bare Ground in Herb Stratum					
Noments.					

0 7	Matrix Color (moist)	%	Color (moist)	x Features %	Type	Loc <sup>2</sup>	Texture	Remarks
0-3	254R3/2	95	754246	5	C	PL	Lam	Aguag
	7 ( 40 - /-		naire states and	- Ann	Inour L			The so het made det op
3 - 5	2.5/K3/2	90	7.51R4/6	10		PLAM	SILTY CUTY LOA	194
5 - 14	2-5413/2	75	7.5784/6	20	C-	PL+M	SILT LOOM /	L-JAM
		-2-619	- Inches	461	y talk		n workfistein o	de m, kiden
		100	The state of the s	-	ubviolet.	r Williams	A wearnington	1. Hules
Dan 6-6	O BLOOK OF THE OWNER, WHILE		A service a service of	Si tra-	INCOME IN		100 100 100	Sept Security and some some some
lydric Soil	oncentration, D=Depl Indicators: (Applica	etion, RM= able to all	Reduced Matrix, CS	=Covered wise note	or Coate	ed Sand Gr		PL=Pore Lining, M=Matrix. roblematic Hydric Soils <sup>3</sup> :
_ Histosol			Sandy Redox (S		u.,	oli oli	St. Wall - Strain	SHEE CANDIDATE A
	pipedon (A2)	way.	Stripped Matrix			OM	2 cm Muck (	The second secon
	istic (A3)		Loamy Mucky M		\	4 BH DA 43		Material (TF2)
	en Sulfide (A4)		Loamy Gleyed N			CMLRA I)		v Dark Surface (TF12)
and the second	d Below Dark Surface	· (Δ11)	Depleted Matrix		30		Other (Expla	in in Remarks)
the second second	ark Surface (A12)		Redox Dark Sur		- 3	-	31111	A
48	fucky Mineral (S1)		Depleted Dark S		71	399		frophytic vegetation and
	Sleyed Matrix (S4)	Vocation.	Redox Depressi		CANCEL - B	and arts		ology must be present,
	Layer (if present):	a to high all	redux Depressi	ons (Fb)	NO CLASS	The sales	uniess disturd	ed or problematic.
Type:		1 11 11	EU - A 17 (7				4.	
Depth (inc	ches):		0.000				Hydric Soil Present	7 Yes X No
emarks:				printer.	-		The second of	14 0
YDROLO	Land world. The	Lamba Alla	Zerotke - T				1.75	THE STATE OF THE S
4 4 - 92	Term		HIA I DO TO			TE	American -	
	drology indicators:						-	
	ators (minimum of or	ne required	; check all that apply	)		o EL	Secondary Ind	icators (2 or more required)
Surface	Water (A1)		Water-Stair	ed Leave:	s (B9) (e	xcept	Water-Sta	ined Leaves (B9) (MLRA 1, 2
_ High Wa	ter Table (A2)		MLRA 1	, 2, 4A, ar	nd 4B)		4A, an	THE RESERVE OF THE PARTY OF THE
_ Saturation	on (A3)		Salt Crust (				LVC met. 4-1	Patterns (B10)
	arks (B1)		Aquatic Inve		(B13)			n Water Table (C2)
	it Deposits (B2)		Hydrogen S				7.1	A SECTION AND ADDRESS OF THE PARTY OF THE PA
	osits (B3)	135UT 14:				Lister Deed		Visible on Aerial Imagery (C
		STREET, STANK	Oxidized RI				the same of the same of the same of	ic Position (D2)
	t or Crust (B4)	3237	Presence of		and the same of th	•	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	quitard (D3)
-	osits (B5)		Recent Iron	012-204			The second secon	ral Test (D5)
Surface	Soil Cracks (B6)	oun sunes	Stunted or S			1) (LRR A)	Raised An	t Mounds (D6) (LRR A)
	on Visible on Aerial in Vegetated Concave	P. Carl China Contact	(8.19Ea	ain in Rem	narks)		Frost-Hear	ve Hummocks (D7)
	AGRICIAN CONTORAC	mention in the Co.	*184	_				
Sparsely	The second secon							
_ Sparsely ield Observ	/ations:	ASI W SAL	lo X Denth (incl	ancl:				40.7
Sparsely ield Observ urface Wate	vations: or Present? Ye	ghic I go	lo X Depth (incl			-		
Sparsely leld Observ urface Wate /ater Table	vations: er Present? Present? Ye	s N	lo Depth (incl	nes):	1970	—   —   Wetla	nd Hydrology Presen	t? Yes X No
Sparsely ield Observ iurface Wate Vater Table I iaturation Pr ncludes cap	vations: er Present? Present? Ye resent? Ye resent? Ye	s N	lo Depth (incl	nes): nes):	/ious ins	-	nd Hydrology Presen	t? Yes No No
Sparsely ield Observ iurface Wate Vater Table I iaturation Pr ncludes cap	vations: er Present? Present? Ye esent? Ye	s N	lo Depth (incl	nes): nes):	vious ins	-		t? Yes No
Sparsely ield Observ turface Water Vater Table I aturation Pr ncludes cap	vations: er Present? Present? Ye resent? Ye resent? Ye	s N	Depth (incl to Depth (incl nitoring well, aerial pl	nes): nes):	-	-		t? Yes No No

Project/Site: L.) R.G.	_ City/County: Ferndale Sampling Date: 7/23/2
Applicant/Owner:	State: CAA Sampling Point: U3=12
Investigator(s): M. McDonald, M. Schusez	Section Township Range
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none); Covex Slope (%):
	Long: Datum:
Soll Map Unit Name:	
Are climatic / hydrologic conditions on the site typical for this time of	
	tity disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	
Wetland Hydrology Present? Yes No Remarks: 1	
Remarks: In location of 2015 L	It's on level top.
Now appears to be wet	
VEGETATION – Use scientific names of plants.	
Absolut	e Dominant Indicator   Dominance Test worksheet:
	er Species? Status Number of Dominant Species
1	That Are OBL, FACW, or FAC: (A)
2	
3	Species Across All Strata: (B)
	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)	(1.5)
1,	Total W Course of Multi-lu hun
2	ORI appeign
3	EACINI species
4	FAC species 70 x 3 = 210
5,	= Total Cover FACU species 20 x 4 = 80
Herb Stratum (Plot size: 100	UPL species x 5 =
1 Rumex crispus 20	Y FAC Column Totals: 90 (A) 290 (B)
2 Festuca perchnis 40	Prevalence Index = B/A = 3.2
3 festica anndinaces 3	Hydrophytic Vegetation Indicators:
4 Gestuca myuras 15	1 - Rapid Test for Hydrophytic Vegetation
5 Lotus corntculation 8	2 - Dominance Test is >50%
6 Plantago lanceolata 5	— — FACU   \( \sqrt{2} \) 3 - Prevalence Index is ≤3 0¹
8	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
9,	
10	
11.	Indicators of hydric soil and wetland hydrology must
$\overline{a}$	= Total Cover be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	
1,	1.7
2	Vegetation Present? Yes No
% Bare Ground in Herb Stratum 1 C	_= Total Cover
Remarks: does not passFAC-neutral	

rofile Description	: (Describe	to the depti	h needed to docum	ent the i	ndicator	or confirm	the al	Sence	of indica	tore)	oint: US-
Jepth	Matrix			Features				2341106	OI HIGICA	itora.j	100
the second secon	or (moist)	- %	Color (moist)	%	Type	Loc2	Tex	ture		Rema	irks
0-5 2.5	3/2	70	7.5 YR 46	30	C	M	Sil	146	141		
5-16 2.5	Y3/2	80	104 R 416	20	C	M			Dam		
			30 17.18					<i>—</i>			
					7	250	VI.		- 1		
VDe: C=Concentra	tion D=Dani	mion DM-C	Induced Matrix CD	-24-1-1	P	Testa res	- 100		-		2.7
ydric Soil Indicate	rs: (Applica	ble to all Li	Reduced Matrix, CS=	Covered	or Coate	d Sand Gra		Loc	ation: PL	=Pore Linin	g, M=Matrix.
_ Histosol (A1)			_ Sandy Redox (St		,		in				lydric Solls <sup>3</sup> :
_ Histic Epipedon	(A2)	_	_ Stripped Matrix (S				-		Muck (A	10) aterial (TF2)	
Black Histic (A3)			Loamy Mucky Mi		(except	MLRA 1)	3			atenar (162 Dark Surfac	
_ Hydrogen Sulfide		_	_ Loamy Gleyed M	atrix (F2)		-,		Othe	r (Explain	in Remarks	S)
_ Depleted Below		(A11) _	_ Depleted Matrix (								
Thick Dark Surfa Sandy Mucky Mi		_	Redox Dark Surfa		PA.		3ln	dicator	s of hydro	phytic vege	etation and
Sandy Gleyed M		_	<ul><li>Depleted Dark St</li><li>Redox Depressio</li></ul>		)			wetlan	d hydrolo	gy must be	present,
			_ redox Depressio	118 (ГО)				unless	disturbed	or problem	natic.
svicuve Layer (if	Diesenc:										
	present):										
Туре:	presency.	in.	-				11			<b>x</b>	
Type: Depth (inches):	present).	- la-				7	Hydrid	c Soil F	Present?	Yes_/	No
Type: Depth (inches): emarks:		in.					Hydrid	c Soil F	Present?	Yes _X	No
Type: Depth (inches): emarks:  DROLOGY etland Hydrology	ndicators:	e required; c	theck all that apply)								
Type: Depth (inches): marks:  DROLOGY	ndicators: nimum of one	e required; o	theck all that apply) Water-Staine	d Leaves	: (B9) (ex	Capt		Second	lary Indica	ntors (2 or m	nore required)
Type:	ndicators: nimum of one	e required: c	Water-Staine			cept		Second Wa	lary Indica	ators (2 or n	
Type:	ndicators: nimum of one 1) (A2)	e required; c		2, 4A, an		cept		Second Wa	lary Indica iter-Staine	ators (2 or n ed Leaves (I	nore required) B9) (MLRA 1,
Type:	ndicators: nimum of one 1) (A2)	e required; c	Water-Staine MLRA 1,	2, 4A, an 11)	d 4B)	cept		Second Wa	lary Indica iter-Staine 4A, and 4 inage Pai	ators (2 or m ad Leaves (i B) aterns (B10)	nare required) B9) (MLRA 1,
Type:	ndicators: nimum of one 1) (A2) s (B2)	e required; c	Water-Staine MLRA 1, Salt Crust (B	2, 4A, an 11) tebrates (	d 4B) (B13)	cept		Second Wa Dra Dra	lary Indica iter-Staine 4A, and 4 inage Pat -Season N	ators (2 or m ad Leaves (I B) atterns (B10)	nore required) B9) (MLRA 1,
Type:	ndicators: nimum of one 1) (A2) s (B2)	e required: c	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver	2, 4A, an 11) tebrates ( lfide Odo	(B13) r (C1)		- 3	Second Wa Dra Dry Sat	lary Indica ster-Staine 4A, and 4 sinage Pai -Season V uration Vi	ators (2 or m ad Leaves (i B) iterns (B10) Water Table sible on Ae	nore required) B9) (MLRA 1,
Type:	ndicators: nimum of one 1) (A2) s (B2) )	e required; c	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz	2, 4A, an 11) tebrates ( lfide Odo zosphere: Reduced	d 4B) (B13) r (C1) s along Li Iron (C4)	iving Roots	- 3	Second Wa Dra Dry Sat	lary Indica iter-Staine 4A, and 4 linage Pat -Season V uration Vi omorphic	ators (2 or m ad Leaves (I B) atterns (B10)	nore required) B9) (MLRA 1,
Depth (inches):	ndicators: nimum of one 1) (A2) s (B2) ) (B4)	e required; o	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I	2, 4A, an 11) tebrates ( lfide Odo zosphere: Reduced Reduction	d 4B) (B13) r (C1) s along Li lron (C4) in Tilled	iving Roots Solfs (C6)	- 3	Second Wa Dra Dry Satt Gec Sha FAC	lary Indica iter-Staine 4A, and 4 inage Pal i-Season V uration Vi omorphic allow Aqui C-Neutral	ators (2 or ned Leaves (IB) Iterns (B10) Water Table sible on Aer Position (D3) Test (D5)	nore required) B9) (MLRA 1, a (C2) rial Imagery (C2)
Type:	ndicators: nimum of one 1) (A2) s (B2) ) (B4)		Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of i Recent Iron F	2, 4A, an 11) tebrates ( lfide Odo zosphere: Reduced Reduction ressed Pl	d 4B) (B13) r (C1) s along Li lron (C4) in Tilled lants (D1)	iving Roots Solfs (C6)	- 3	Second Wa Dra Dry Satt Gec Sha FAC	lary Indica iter-Staine 4A, and 4 inage Pal 2-Season V uration Vi uration Vi omorphic allow Aqui C-Neutral sed Ant M	ators (2 or ned Leaves (ile) Alterns (B10) Vater Table sible on Ae Position (D) tard (D3) Test (D5)	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one  1) (A2) s (B2) ) (B4) cs (B6) on Aerial Image	agery (B7)	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of i Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( lfide Odo zosphere: Reduced Reduction ressed Pl	d 4B) (B13) r (C1) s along Li lron (C4) in Tilled lants (D1)	iving Roots Solfs (C6)	- 3	Second Wa Dra Dry Satt Gec Sha FAC	lary Indica iter-Staine 4A, and 4 inage Pal 2-Season V uration Vi uration Vi omorphic allow Aqui C-Neutral sed Ant M	ators (2 or ned Leaves (IB) Iterns (B10) Water Table sible on Aer Position (D3) Test (D5)	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one  1) (A2) s (B2) ) (B4) cs (B6) on Aerial Image	agery (B7)	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of i Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( lfide Odo zosphere: Reduced Reduction ressed Pl	d 4B) (B13) r (C1) s along Li lron (C4) in Tilled lants (D1)	iving Roots Solfs (C6)	- 3	Second Wa Dra Dry Satt Gec Sha FAC	lary Indica iter-Staine 4A, and 4 inage Pal 2-Season V uration Vi uration Vi omorphic allow Aqui C-Neutral sed Ant M	ators (2 or ned Leaves (ile) Alterns (B10) Vater Table sible on Ae Position (D) tard (D3) Test (D5)	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one 1) (A2) s (B2) ) (B4) ks (B6) on Aerial Imaged Concave S	agery (B7) Surface (B8)	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates Ifide Odo zosphere: Reduced Reduction ressed PI n in Rema	d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled lants (D1)	iving Roots Soils (C6) (LRR A)	- 3	Second Wa Dra Dry Satt Gec Sha FAC	lary Indica iter-Staine 4A, and 4 inage Pal 2-Season V uration Vi uration Vi omorphic allow Aqui C-Neutral sed Ant M	ators (2 or ned Leaves (ile) Alterns (B10) Vater Table sible on Ae Position (D) tard (D3) Test (D5)	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one  1) (A2) s (B2) ) (B4) cs (B6) on Aerial Imaded Concave S	agery (B7) Surface (B8)	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of i Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( lfide Odo zosphere: Reduced Reduction ressed Pi n in Remands)	d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled lants (D1) arks)	iving Roots Soils (C6) (LRR A)	- 3	Second Wa Dra Dry Satt Gec Sha FAC	lary Indica iter-Staine 4A, and 4 inage Pal 2-Season V uration Vi uration Vi omorphic allow Aqui C-Neutral sed Ant M	ators (2 or ned Leaves (ile) Alterns (B10) Vater Table sible on Ae Position (D) tard (D3) Test (D5)	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one 1) (A2) s (B2) ) (B4) ks (B6) on Aerial Imaged Concave S	agery (B7) Gurface (B8)	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( Iffide Odo zosphere: Reduced Reduction ressed PI n in Rem:	d 4B) (B13) r (C1) s along Li lron (C4) in Tilled lants (D1) arks)	iving Roots Solls (C6) (LRR A)	(C3)	Second Wa Dra Dry Satt Gec Sha FAC Rais	lary Indica iter-Staine 4A, and 4 inage Pal i-Season V uration Vi omorphic allow Aqui C-Neutral sed Ant M st-Heave	ators (2 or ned Leaves (IB) Atterns (B10) Vater Table sible on Ae Position (D: tard (D3) Test (D5) Iounds (D6) Hummocks	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one 1) (A2) s (B2) ) (B4) cs (B6) on Aerial Image of Concave Services	agery (B7) Surface (B8) ——— No ——— No	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( Iffide Odo zosphere: Reduced Reduction ressed PI n in Remi	d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled lants (D1) arks)	iving Roots Soils (C6) (LRR A) Wetland	(C3)	Second Wa Dra Dry Sat Gec Sha FAC Rais Fros	lary Indica iter-Staine 4A, and 4 inage Pal 2-Season V uration Vi uration Vi omorphic allow Aqui C-Neutral sed Ant M	ators (2 or ned Leaves (IB) Atterns (B10) Vater Table sible on Ae Position (D: tard (D3) Test (D5) Iounds (D6) Hummocks	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Depth (inches): primarks:  DROLOGY  etland Hydrology I mary Indicators (m. Surface Water (A. High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3, Algal Mat or Crus Iron Deposits (B5, Surface Soil Crac Inundation Visible Sparsely Vegetate Id Observations: face Water Present? Juration Present? Juration Present? Juration Present?	ndicators: nimum of one 1) (A2) s (B2) ) (B4) cs (B6) on Aerial Image of Concave Services	agery (B7) Surface (B8) ——— No ——— No	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( Iffide Odo zosphere: Reduced Reduction ressed PI n in Remi	d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled lants (D1) arks)	iving Roots Soils (C6) (LRR A) Wetland	(C3)	Second Wa Dra Dry Sat Gec Sha FAC Rais Fros	lary Indica iter-Staine 4A, and 4 inage Pal i-Season V uration Vi omorphic allow Aqui C-Neutral sed Ant M st-Heave	ators (2 or ned Leaves (IB) Atterns (B10) Vater Table sible on Ae Position (D: tard (D3) Test (D5) Iounds (D6) Hummocks	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)
Type:	ndicators: nimum of one 1) (A2) s (B2) ) (B4) cs (B6) on Aerial Image of Concave Services	agery (B7) Surface (B8) ——— No ——— No	Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of I Recent Iron F Stunted or St Other (Explain	2, 4A, an 11) tebrates ( Iffide Odo zosphere: Reduced Reduction ressed PI n in Remi	d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled lants (D1) arks)	iving Roots Soils (C6) (LRR A) Wetland	(C3)	Second Wa Dra Dry Sat Gec Sha FAC Rais Fros	lary Indica iter-Staine 4A, and 4 inage Pal i-Season V uration Vi omorphic allow Aqui C-Neutral sed Ant M st-Heave	ators (2 or ned Leaves (IB) Atterns (B10) Vater Table sible on Ae Position (D: tard (D3) Test (D5) Iounds (D6) Hummocks	nore required) B9) (MLRA 1, e (C2) rial Imagery (C2)

Project/Site: URC	City	County Fern	401-6	maje yla	Sampling Date:	7123
Applicant/Owner:		1	State	PA	Sampling Point	QW10
Investigator(s): K. McDanald M	Selas acres	tion Toumship Pa	naa:	013	sampling Folia	P . 1
Landform (hillstone terrace etc.): 1200	37.041. M. 2.000	est selief (seeses	nge.	000.0		
Landform (hillstope, terrace, etc.): Becv						
Subregion (LRR):	Lat:	17 17 11	Long:		Dat	um:
Soil Map Unit Name:	U	2 4 4	N	WI classifica	tion: PCC	<u> </u>
Are climatic / hydrologic conditions on the site typical for	this time of year?	Yes No	(If no, e	explain in Re	marks.)	
Are Vegetation, Solt, or Hydrology	_ significantly dist	urbed? Are	Normal Circum	nstances" pro	esent? Yes	No
Are Vegetation, Soil, or Hydrology	_ naturally probler	natic? (If ne	eded, explain	any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site, ma			11 12 AV 11	10.00	,	eatures, e
Hydrophytic Vegetation Present? Yes		50 58 64			,	-
Hydric Soil Present? Yes		Is the Sampled		Yes /		
Wetland Hydrology Present?		within a Wetler	nd?	Yes	_ No	_
Remarks: withing tree-lined ed	ge of R	uss Cree	K-A	Ider	damina	7+
VEGETATION - Use scientific names of pla	ants.	06	4		24	TT-
	1.00	minant Indicator	Dominance	Test workel	neet:	Op.
Tree Stratum (Plot size: 500	% Cover Sp	ecies? Status	Number of D		171	7
1. Alnus riobra	_ (ac	Y FAC	That Are OB	L, FACW, or	FAC:	L (A)
2. Salix hookerlana	_10_	EACL	Total Numbe	e of Domina	at	4
3.	1	4	Species Acro			(B)
4.	12 11	Hazler III	Percent of D	aminant Can	olon I	4.
Pauling/Chash Ptentum //Distains 2	10 =T	otal Cover	That Are OB			OO (A/E
Sapling/Shrub Stratum (Plot size:)	113		Prevalence	Index works	heet:	
1		-	Total %	Cover of:	Multip	ly by:
2.			OBL species		x1=	
4.			FACW specie	es	x 2 =	
5.			FAC species		x 3 =	
t t		otal Cover	FACU specie	3S	x 4 =	
Herb Stratum (Plot size:)	4	otal Covel	UPL species		x 5 =	
1. Agrostis stolonifera		Y FAC	Column Tota	ls:	(A)	(B)
2. Holcus lanatus	15_	PAC	Prevels	ence Index =	DIA =	
3. Ranunculus repens	15_	- ac	Hydrophytic			
4. Festica perenni		EAC	100 - 600 Per		drophytic Vege	tation
5,	10 117		2 - Domi	1435 - 1 VIII 1445		
6	34 577		3 - Preva			
7		HTL Self-	4 - Morp	hological Ada	aptations1 (Prov	vide supportin
8.		market in	data i	n Remarks o	r on a separate	e sheet)
9			100000000000000000000000000000000000000	ind Non-Vas		
10		75. 5			ytic Vegetation	
11.			'Indicators of	hydric soil a	nd wetland hyd ed or problema	rology must
Woody Vine Stratum (Plot size:)	<u>∠7.</u> = To	tal Cover	oe present, u	uncaa ulatulu	en or bronsettis	illi.
		30 70	45 44 15			
12.	100000	6 5 636	Hydrophytic Vegetation	1		- 12
	- To	tal Cover	Present?	Yes	No	
% Bare Ground in Herb Stratum	1 14 20	ital Covel		=		
Remarks:		20 111				
	The said					

	cription: (Describ		A TEALTRACTE OF THE PARTY			OL COUNTY	II nie anseitce O	itiologioja,j
Depth (inches)	Color (moist)		Redo	x Feature	es	A STORE .		
-		%	Color (moist)		Type	Loc2	Texture _	Remarks
2-5	2.54R3/2		104R 4/6	20		M	Sil+	
5-12	2.54R3/2	92	104R 46	8_	<u> </u>	m	Silt	
		-						
 Гуре: C=Co	oncentration, D=De	oletion. RM=	Reduced Matrix, CS	SaCovarev	d or Contr	d Sood Co	21	
ydric Soil I	ndicators: (Appli	able to all I	RRs, unless other	wise not	ed.)	u Sanu Gr		on: PL=Pore Lining, M=Matrix, for Problematic Hydric Soils <sup>3</sup> :
_ Histosol	(A1)		Sandy Redox (S					luck (A10)
	ipedon (A2)		Stripped Matrix					rent Material (TF2)
_ Black His			Loamy Mucky M			MLRA 1)		hallow Dark Surface (TF12)
	n Sulfide (A4)	- (444)	Loamy Gleyed I		)			Explain in Remarks)
	l Below Dark Surfac rk Surface (A12)	æ (ATT)	Depleted Matrix				,	
	ucky Mineral (S1)	7	Redox Dark Sur Depleted Dark S	tace (F6)	70		*Indicators	of hydrophytic vegetation and
	leyed Matrix (S4)		Depleted Dark S Redox Depressi		0		wetland	hydrology must be present,
	ayer (if present):			Oria (F D)		<del></del>	uniess di	sturbed or problematic.
Туре:			<u></u>					
Depth (inc	hes):						200	
							Hydric Soil Pre	esent? Yes <u>V</u> No
DROLOG	GY						Hydric Soil Pre	esent? Yes <u>V</u> No
DROLOG	GY rology Indicators:	ne required:	check all that apply					
emarks:  'DROLOG etland Hydrimary Indica	GY rology Indicators: ators (minimum of o	ne required;	check all that apply				Secondar	y Indicators (2 or more required)
emarks:  'DROLOG etland Hydrimary Indica  Surface V	GY rology Indicators: ators (minimum of o Vater (A1)	ne required;	Water-Stain	ed Leave		cept	Secondar Water	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2,
DROLOG etland Hydi imary Indica Surface V High Wale	oy rology Indicators: ators (minimum of o Vater (A1) er Table (A2)	ne required;	Water-Stain MLRA 1	ed Leave , 2, 4A, ar		cept	Secondar Water	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2,
PROLOG etland Hydica Surface V High Wali Saturation	GY rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3)	ne required:	Water-Stain MLRA 1 Salt Crust (I	ed Leave , 2, 4A, ar 311)	nd 4B)	cept	Secondar Water 4A Drain	y Indicators (2 or more required) r-Stained Leaves (89) (MLRA 1, 2, 4, and 48) age Patterns (B10)
PROLOGICATION OF THE PROPERTY	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1)	ne required:	Water-Stain MLRA 1 Salt Crust (I	ed Leave , 2, 4A, ar 311) ertebrates	nd 4B) (B13)	cept	Secondar Water 4A Drain Dry-S	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, a, and 48) age Patterns (B10) eason Water Table (C2)
PROLOGICATION OF THE PROPERTY	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	ne required;	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve	ed Leave , 2, 4A, ar 311) ertebrates ulfide Odd	(B13) or (C1)	-	Secondar  Water  AA  Drain:  Dry-S  Satura	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 3, and 48) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9)
PROLOG  etland Hydrimary Indica  Surface V  High Walt  Saturation  Water Ma  Sediment  Drift Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2)	ne required;	Water-Stain MERA 1 Salt Crust (I Aquatic Inve	ed Leave , 2, 4A, ar 311) ertebrates ulfide Odd lizosphere	nd 4B) (B13) or (C1) es along L	iving Roots	Secondar  Water  4A  Drain  Dry-S  Satura  (C3) Geom	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, a, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2)
PROLOG  etland Hydrimary Indica  Surface V  High Walt  Saturation  Water Ma  Sediment  Drift Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	ne required;	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh	ed Leave, 2, 4A, ar 311) ertebrates ulfide Oddaizosphere Reduced	nd 4B) (B13) or (C1) es along L I fron (C4)	iving Roots	Secondar  Water  4A  Drain: Dry-S  Satura  (C3) Georr  Shallo	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) w Aquitard (D3)
PROLOCO Petland Hydica Surface V High Wale Saturation Water Ma Sediment Drift Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4)	ne required;	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduced Reduction	nd 4B)  (B13) or (C1) es along L I Iron (C4) n in Tilled	iving Roots Soils (C6)	Secondar  Water  AA  Drain  Dry-S  Satura  (C3) Geom  Shallo  FAC-N	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 48) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) tw Aquitard (D3) Neutral Test (D5)
DROLOG etland Hydi imary Indica Surface V High Wale Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5)		Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduced Reduction Stressed P	nd 4B)  (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1)	iving Roots Soils (C6)	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom  FAC-I Raiser	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
DROLOG etland Hydiomary Indica Surface V High Wale Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) psits (B3) or Crust (B4) sits (B5) oil Cracks (B6)	nagery (B7)	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduced Reduction Stressed P	nd 4B)  (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1)	iving Roots Soils (C6)	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom  FAC-I Raiser	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 48) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) tw Aquitard (D3) Neutral Test (D5)
PROLOC etland Hydiomary Indica Surface V High Wale Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatior Sparsely	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) nks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial In Vegetated Concave	nagery (B7) Surface (B8	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduced Reduction Stressed Pain in Rem	nd 4B)  (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1)	iving Roots Soils (C6)	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom  FAC-I Raiser	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
emarks:  DROLOG etland Hydi imary Indica Surface V High Wale Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatior Sparsely \ Id Observa	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) nrks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial In Vegetated Concave ations: Present?	nagery (B7) Surface (B8	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduced Reduction Stressed Pain in Rem	nd 4B)  (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1)	iving Roots Soils (C6)	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom  FAC-I Raiser	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
emarks:  DROLOG etland Hydi imary Indica Surface V High Wale Saturatior Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundatior Sparsely \ old Observa	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) nrks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial In Vegetated Concave ations: Present?	nagery (B7) Surface (B8	Water-Stain MLRA 1 Sait Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leave. 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduced Reduction Stressed F ain in Rem	nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1) narks)	iving Roots Soils (C6)	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom  FAC-I Raiser	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
PROLOGICATION OF THE PROCESS OF THE	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) nks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial In Vegetated Concave ations: Present? resent? yesent? sent?	nagery (B7) Surface (B8 es No es No	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch Depth (inch	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd aizosphere Reduction Bressed F ain in Rem es):	nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1) narks)	iving Roots Soils (C6) (LRR A)  Wetlan	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom Shallo FAC-I Raises Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A)
/DROLOG /etland Hyding Indication - Surface V - High Water - Saturation - Water Ma - Sediment - Drift Depo - Algal Mat - Iron Depo - Surface S - Inundation - Sparsely V - Sparsely V - State S - Interval of Sediment - Sparsely V - Sparsely V - State Sediment - Sparsely V -	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) nks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial In Vegetated Concave ations: Present? resent? yesent? sent?	nagery (B7) Surface (B8 es No es No	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain) Depth (inch	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd aizosphere Reduction Bressed F ain in Rem es):	nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1) narks)	iving Roots Soils (C6) (LRR A)  Wetlan	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom Shallo FAC-I Raises Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
/DROLOG /etland Hydinimary Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely \ eld Observater aler Table Percuration Precludes capill escribe Reco	rology Indicators: ators (minimum of o Vater (A1) er Table (A2) n (A3) nks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial In Vegetated Concave ations: Present? resent? yesent? sent?	nagery (B7) Surface (B8 es No es No	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch Depth (inch	ed Leave. , 2, 4A, ar 311) ertebrates ulfide Odd aizosphere Reduction Bressed F ain in Rem es):	nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1) narks)	iving Roots Soils (C6) (LRR A)  Wetlan	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom Shallo FAC-I Raises Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
/DROLOG /etland Hyding Indica Surface V High Water Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely \ eld Observa aler Table Percuration Precidudes capill	rology Indicators: ators (minimum of orvater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) osits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial Invegetated Concave ations: Present? resent? yeary fringe) rded Data (stream	magery (B7) Surface (B8 es No es No gauge, monif	Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain)  Depth (inch Depth (inch	ed Leave. 2, 4A, ar 311) ertebrates ulfide Odd izosphere Reduction stressed Pain in Rem es): es): es):	nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1) narks)	iving Roots Soils (C6) (LRR A)  Wetlan	Secondar  Water  AA  Draini Dry-S  Satura  (C3) Geom Shallo FAC-I Raises Frost-	y Indicators (2 or more required) r-Stained Leaves (B9) (MLRA 1, 2, 4, and 4B) age Patterns (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9) torphic Position (D2) aw Aquitard (D3) Neutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)

pplicant/Owner: HRCD				State Lyn S	ampling Point: WITI-
ovestigator(s): Jane Cipa, Matt Tolle	n	Section, 1	Fownship, Rai	nge:	
andform (hillslope_terrace, etc.):		Local reli	ef (concave, o	convex none):	Slope (%):
ubregion (LRR):	Lat			Long	Datum:
oil Map Unit Name:				NWI classificati	on:
re climatic / hydrologic conditions on the site typical for	this time of year	ar? Yes_	No	(If no, explain in Ren	narks.)
re Vegetation, Soil, or Hydrology	_ significantly	disturbed <sup>*</sup>	? Are	Normal Circumstances" pre	sent? Yes No
re Vegetation, Soil or Hydrology	_ naturally pro	blematic?	(If ne	eded, explain any answers	in Remarks.)
UMMARY OF FINDINGS - Attach site ma	p showing	sampli	ng point le	ocations, transects, i	mportant features, etc
Hydrophytic Vegetation Present? Yes	No V				H89 - 10
Hydric Soil Present? Yes	No		the Sampled		Ma
Wetland Hydrology Present? Yes		Wi	thin a Wetlan	nd? Yes	
Remarks:		1.41			
Low cover due to moved	grass,	litter	o miline		
/EGETATION – Use scientific names of pl	ants.				
	Absolute		nt Indicator	Dominance Test worksh	eet:
Tree Stratum (Plot size:)  1			7 Status	Number of Dominant Spe- That Are OBL, FACW, or	
2				Total Number of Dominan	it
3		03.		Species Across Ali Strata:	· U.
4				Percent of Dominant Spec	cies -7,-0/
Sapling/Shrub Stratum (Plot size:)		_= Total C	Cover	That Are OBL, FACW, or	
1.				Prevalence Index works	heet:
2.				Total % Cover of:	
3.				OBL species 7	
4.				FACW species	
5				FAC species // 24	
		= Total C	Cover	UPL species	
Herb Stratum (Plot size)	20	. 41	TALL		(A) 153 (B)
1. Rubus ursinus 2. Sciepus microcarpos		ws	PALU		2 10
3 Danens carota	2	-(1/3)	FACU	Prevalence Index =	
4. Festuca avendinacea	10	W5	FAC	Hydrophytic Vegetation	
5. Holcus Janatus		Lyes.	FAC	1 - Rapid Test for Hyd	
6. Equisetum telmateia		1	FALW	2 - Dominance Test is  3 - Prevalence Index	
7. Cardamine hirsuta	<u> </u>		FACU		is 53.0 aptations! (Provide supportin
8. Ocuanthe sarmentosa	2		ORI-	data in Remarks o	r on a separate sheet)
9. Achillea millefolia	2		FACU	5 - Wetland Non-Vas	cular Plants <sup>†</sup>
10 Torastrum glomeratum			FALU	Problematic Hydroph	ytic Vegetation1 (Explain)
11				Indicators of hydric soil a	nd wetland hydrology must
Mandy Mine Chelum (Blobeire	49	= Total C	over	be present, diffess distant	ed of problematic.
Woody Vine Stratum (Plot size)					
2				Hydrophytic Vegetation	
6.		= Total C	Cover	Present? Yes	No V
% Bare Ground in Herb Stratum		_ 10tm/	rse #Spl		
Remarks					-

rofile Description: (Describe to the de	pth needed to document the	indicator or co	nfirm the absence of indicators.)
Depth Matrix	Redox Feature		
inches) Color (moist) %	Color (moist) %		c <sup>2</sup> Texture Remarks
0.5 7.5.1 5/1 100	NA MA	_ NA _ A	of Gravelly Warm ENG File
5-10 25, 4/1	( ( -	(	MEN GRAV ENG ET /IM.
0-14 2.51 2.5/1	· · · · · · · · · · · · · · · · · · ·	_	LuAM 11 1.
Type: C=Concentration, D=Depletion, RM ydric Soil Indicators: (Applicable to a Histosol (A1)	II LRRs, unless otherwise not Sandy Redox (S5)	ed or Coated Sar	nd Grains.  2Location: PL=Pore Lfning, M=Matrix. Indicators for Problematic Hydric Soils3:  2 cm Muck (A10)
_ Histic Epipedon (A2)	Stripped Matrix (S6)		Red Parent Material (TF2)
Black Histic (A3) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11)	Loamy Mucky Mineral (F Loamy Gleyed Matrix (F2 Depleted Matrix (F3)		A 1) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Dark Surface (F6)	)	<sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Depleted Dark Surface (I	,	wetland hydrology must be present,
_ Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		unless disturbed or problematic
estrictive Layer (if present):			
Type:			
Depth (inches):emarks:		E	Hydric Soil Present? Yes No No
FAILD A-A TEST	e elle ( ) and and a		throst empherics Fill is primary
FATILD A-A TEST DID NOT MOET ANY HYDE DROLOGY	IC Soul INDICATE		The state of the s
FATICO A-A TEST  DID NOT MOST AND HYDE  /DROLOGY  /etland Hydrology Indicators:			TIME OF MATORA'.
FAILED A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require	ed. check all that apply)	Ma	Secondary Indicators (2 or more required)
FATILD A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  _ Surface Water (A1)	ed. check all that apply) Water-Stained Leav	res (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2
FATILD A-A TEST DID NOT MOET AND HYDE  DROLOGY  Setland Hydrology Indicators:  timary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A,	res (B9) (except	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)
FATILD A-A TEST DID NOT MOET AND HYDE  DROLOGY  Vetland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ed. check all that apply)  Water-Stained Leav  MLRA 1, 2, 4A,  Salt Crust (B11)	/es (B9) (except and 4B)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)
FATILD A-A TEST  DID NOT MOET AND HYDE  DROLOGY  Vetland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	ed. check all that apply)  — Water-Stained Leav  MLRA 1, 2, 4A,  — Salt Crust (B11)  — Aquatic Invertebrate	/es (B9) (except and 4B) es (B13)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)
FATICO A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ed. check all that apply)  — Water-Stained Leav  MLRA 1, 2, 4A,  — Salt Crust (B11)  — Aquatic Invertebrate  — Hydrogen Sulfide O	res (B9) (except and 4B) es (B13) dor (C1)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (CS
FATICO A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)
FATILED A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (CS)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
FATILED A-A TEST  DID NOT MOUT AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)
FATILID A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti	res (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) FAC-Neutral Test (D5)
FATILID A-A TEST  DID NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed	res (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  RAA)  Raised Ant Mounds (D6) (LRR A)
FATILD A-A TEST DIP NOT MOET AND HYDE  /PERIOD A-A TEST /	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed B7) Other (Explain in Re	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR emarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  RAA)  Raised Ant Mounds (D6) (LRR A)
FATILED A-A TEST DIP NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (I  Sparsely Vegetated Concave Surface ield Observations:  urface Water Present?  Yes	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed B7) Other (Explain in Re	ves (B9) (except and 4B) es (B13) edor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  RAA)  Raised Ant Mounds (D6) (LRR A)
FATILED A-A TEST DIP NOT MOET AND HYDE  /DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (I  Sparsely Vegetated Concave Surface ield Observations:  urface Water Present?  Yes	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed B7) Other (Explain in Re	ves (B9) (except and 4B) es (B13) edor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6)  FAC-Neutral Test (D5)  RAA)  Raised Ant Mounds (D6) (LRR A)
FATILID A-A TEST DIP NOT MOET AND HYPE  /PERIOD A-A TEST /PERIOD AND HYPE	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed Other (Explain in Ref (B8)  No Depth (inches): No Depth (inches):	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR emarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) FAC-Neutral Test (D5)  RA A) Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
FATILID A-A TEST DIP NOT MOET AND HYDE  /PROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (I  Sparsely Vegetated Concave Surface (Indicators)  Indicators (In	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed Other (Explain in Ref (B8)  No Depth (inches): No Depth (inches):	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR emarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) FAC-Neutral Test (D5)  RA A) Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
FATILID A-A TEST DIP NOT MOCT AND HYDE  //DROLOGY  /etland Hydrology Indicators: rimary Indicators (minimum of one require  Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (I Sparsely Vegetated Concave Surface ield Observations: urface Water Present? //ater Table Present? Yes	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed Other (Explain in Ref (B8)  No Depth (inches): No Depth (inches):	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR emarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) FAC-Neutral Test (D5)  RA A) Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
FATILID A-A TEST DIP NOT MOET AND HYPE  /PERIOD A-A TEST /PERIOD AND HYPE	ed. check all that apply)  Water-Stained Leav MLRA 1, 2, 4A, Salt Crust (B11) Aquatic Invertebrate Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Stunted or Stressed Other (Explain in Ref (B8)  No Depth (inches): No Depth (inches):	ves (B9) (except and 4B) es (B13) dor (C1) eres along Living ed Iron (C4) ion in Tilled Soils I Plants (D1) (LR emarks)	Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C9)  Roots (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  (C6) FAC-Neutral Test (D5)  RA A) Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

Lat	Section Local Local car? Year? Year disturbiblema sam	esNo_ esNo_ esNo_ ed? Are tic? (If no pling point I  Is the Sampled within a Wetlan inant Indicator ies? Status	
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Lat	ear? Ye disturb oblema   <b>sam</b>   Domi	es No _ ped? Are tic? (If no pling point I  Is the Sampled within a Wetlan inant Indicator ies? Status	
Lat	ear? Ye disturb oblema   <b>sam</b>   Domi	es No _ ped? Are tic? (If no pling point I  Is the Sampled within a Wetlan inant Indicator ies? Status	
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s time of ye ignificantly aturally prospective showing of the show	disturbiblema  J sam  Domi Spec	es No _ ped? Are tic? (If no pling point I  Is the Sampled within a Wetlan inant Indicator ities? Status	(If no, explain in Remarks )  Normal Circumstances" present? Yes No eeded, explain any answers in Remarks.)  locations, transects, important features, etc.  d Area nd? Yes No  Dominance Test worksheet:  Number of Dominant Species
ignificantly aturally pro showing  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Domi Spec	ped? Are tic? (If no pling point I  Is the Sampled within a Wetlan  inant Indicator ies? Status	Normal Circumstances" present? Yes No eeded, explain any answers in Remarks.) locations, transects, important features, etc d Area nd? Yes No  Dominance Test worksheet: Number of Dominant Species
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Absolute % Cover	Spec	ies? Status	Number of Dominant Species
Absolute % Cover	Spec	ies? Status	Number of Dominant Species
% Cover	Spec	ies? Status	Number of Dominant Species
			Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
			That Are OBL, FACW, or FAC: (A)
		741	Total Number of Dominant
			Species Across All Strata
		al Cover	Percent of Dominant Species /// "/
	1016	ai Cover	That Are OBL, FACW, or FAC:(A/B)
			Prevalence Index worksheet:
			Total % Cover of Multiply by.
			OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 = FACU species x 4 =
	= Tota	al Cover	UPL species x5 =
35	10.25	Ne.	Column Totals: (A) (B)
9.6	LVC	OBI	
	- Vic s		Prevalence Index = B/A =
	LA/ (		Hydrophytic Vegetation Indicators:
5	- C		1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01
3			4 - Morphological Adaptations (Provide supporting
			data in Remarks or on a separate sheet)
			5 - Wetland Non-Vascular Plants <sup>1</sup>
			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
			Indicators of hydric soil and wetland hydrology must
/00	= Total	Cover	be present, unless disturbed or problematic.
			Hydrophytic
		Causa	Vegetation Present? Yes No
,	= 1012	Cover	
	35 20 15 20 5 1 3 1	= Total	= Total Cover  = Total Cover  25

Profile Description: (Describe to the				or confirm	the absence	of indicators,)
Depth Matrix (inches) Color (moist)	% Color (mois	Redox Features t) %	Type	1 ====	To A	
201121	90 $3.54n$ $4/$			Loc*	Texture	Remarks
				<u>_M</u>	DATE: LU	
7.5.1 3/2	150 15-1n 3	74 28	_c		LOAM	Mens
Type: C=Concentration, D=Depletion ydric Soil Indicators: (Applicable	n, RM=Reduced Matri	x. CS=Covered	or Coate	d Sand Gra		ation: PL=Pore Lining, M=Matrix.
Histosol (A1)			10.)			rs for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)	Sandy Red Stripped M					Muck (A10)
Black Histic (A3)		cky Mineral (F1	) (excent	MI RA 1)		Parent Material (TF2) Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4) Depleted Below Dark Surface (A	Loamy Gle	yed Matrix (F2)		were if		r (Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Dar				3Indicate	rs of hydrophytic vegetation and
Sandy Mucky Mineral (S1)		Dark Surface (F)	7)			nd hydrology must be present
Sandy Gleyed Matrix (S4)		pressions (F8)	,			s disturbed or problematic
lestrictive Layer (if present):		<u> </u>	-			
Type						
Depth (inches).					Hydric Soil	Present? Yes No
	ics + Chroma a	f 2 or les	SS AN	b +5%	DISTIG	recon forth.
/DROLOGY '	cs + Chroma a	f 2 or les	SS AN	+5%	o Distica	THE DOT FEATLY.
YDROLOGY Vetland Hydrology Indicators:			SS AN	+5%		
PROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one re	equired, check all that	apply)			Secon	dary Indicators (2 or more required)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one re _ Surface Water (A1) _ High Water Table (A2)	equired; check all that	apply) -Stained Leave	s (B9) (ex		Secon	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2,
PROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	equired; check all that	apply) -Stained Leave -RA 1, 2, 4A, a	s (B9) (ex		Secon	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B)
PROLOGY  Vetland Hydrology Indicators:  rimary Indicators (minimum of one re  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	equired, check all that Water ML Salt C	apply) -Stained Leave -RA 1, 2, 4A, a	s (B9) (ex		<u>Secon</u> W Dr	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10)
Por Control of the Co	equired; check all that Water ML Salt C Aquat	apply) -Stained Leave -RA 1, 2, 4A, au	s (B9) (ex nd 4B) (B13)		Secon W Dr Dr	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
Por Control of the Co	equired; check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz	apply) -Stained Leave -RA 1, 2, 4A, and rust (B11) ic Invertebrates gen Sulfide Ode ded Rhizosphere	s (B9) (ex nd 4B) (B13) or (C1) es along L	cept	Secon W Dr Dr Sa	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2)
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/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	equired, check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz  Prese  Recer	apply) -Stained Leave -RA 1, 2, 4A, and rust (B11) ic Invertebrates gen Sulfide Ode red Rhizosphere nce of Reduced at Iron Reductio	s (B9) (ex nd 4B) (B13) or (C1) es along L I iron (C4) n in Tilled	ccept Living Roots Soils (C6)	Secon W Dr Dr Sa s (C3) Ge Sh FA	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
/ DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) _ Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	equired, check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz  Prese  Recer  Stunte	apply) -Stained Leave -RA 1, 2, 4A, and rust (B11) ic Invertebrates gen Sulfide Ode ted Rhizosphere nice of Reduced at Iron Reductio ted or Stressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1	ccept Living Roots Soils (C6)	Secon  W  Dr  Dr  Sa  S(C3)  Sr  FA  Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) iised Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Image	equired, check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz  Prese  Recer  Stunte	apply) -Stained Leave -RA 1, 2, 4A, and rust (B11) ic Invertebrates gen Sulfide Ode red Rhizosphere nce of Reduced at Iron Reductio	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1	ccept Living Roots Soils (C6)	Secon  W  Dr  Dr  Sa  S(C3)  Sr  FA  Ra	dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) ecomorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
/ DROLOGY / Vetland Hydrology Indicators: rimary Indicators (minimum of one re	equired, check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz  Prese  Recer  Stunte	apply) -Stained Leave -RA 1, 2, 4A, and rust (B11) ic Invertebrates gen Sulfide Ode ted Rhizosphere nice of Reduced at Iron Reductio ted or Stressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1	ccept Living Roots Soils (C6)	Secon  W  Dr  Dr  Sa  S(C3)  Sr  FA  Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) .C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
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Vetland Hydrology Indicators:  rimary Indicators (minimum of one research Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Yes	equired, check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz  Prese  Recer  Stunte ery (B7)  face (B8)  Depti	apply) -Stained Leave -RA 1, 2, 4A, and strust (B11) ic Invertebrates gen Sulfide Odded Rhizosphere nce of Reduced at Iron Reductioned or Stressed R (Explain in Ren in (inches):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	ccept Living Roots Soils (C6)	Secon  W  Dr  Dr  Sa  S(C3)  Sr  FA  Ra	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) .C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Virimary Indicators (minimum of one results)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Ves  Vater Table Present?  Ves  aturation Present?	equired, check all that  Water  ML  Salt C  Aquat  Hydro  Oxidiz  Prese  Recer  Stunte ery (B7)  face (B8)  Depti	apply) -Stained Leave -RA 1, 2, 4A, and trust (B11) ic Invertebrates gen Sulfide Odited Rhizosphere nce of Reduced at Iron Reduction at Or Stressed F (Explain in Ren in (inches): in (inches):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	scept Living Roots Soils (C6) ) (LRR A)	Secon  W  Dr  Dr  Sa  S(C3) — Ge  FA  FA  Fr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Vetland Hydrology Indicators:  Virinary Indicators (minimum of one results)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Vater Table Present?  Ves  aturation Present?  Ves  Includes capillary fringe)	equired; check all that  Water ML Salt C Aquat Hydro Oxidiz Prese Recer Stunte ery (B7) face (B8)  No Depti No Depti	apply) -Stained Leave -RA 1, 2, 4A, and struct (B11) ic Invertebrates gen Sulfide Odded Rhizosphere noe of Reduced at Iron Reduction ed or Stressed F (Explain in Ren in (inches): in (inches):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	Secon	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indicators:  Primary Indicators (minimum of one results)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surfled Observations:  Furface Water Present? Yes  Vater Table Present? Yes  Saturation Present? Yes  Includes capillary fringe)  Vescribe Recorded Data (stream gauge	equired; check all that  Water ML Salt C Aquat Hydro Oxidiz Prese Recer Stunte ery (B7) face (B8)  No Depti No Depti	apply) -Stained Leave -RA 1, 2, 4A, and struct (B11) ic Invertebrates gen Sulfide Odded Rhizosphere noe of Reduced at Iron Reduction ed or Stressed F (Explain in Ren in (inches): in (inches):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	Secon	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
Vetland Hydrology Indicators:  Virinary Indicators (minimum of one results)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surface Water Present?  Ves  Vater Table Present?  Ves  aturation Present?  Yes  Includes capillary fringe)  escribe Recorded Data (stream gauge	equired; check all that  Water ML Salt C Aquat Hydro Oxidiz Prese Recer Stunte ery (B7) face (B8)  No Depti No Depti	apply) -Stained Leave -RA 1, 2, 4A, and struct (B11) ic Invertebrates gen Sulfide Odded Rhizosphere noe of Reduced at Iron Reduction ed or Stressed F (Explain in Ren in (inches): in (inches):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	Secon	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Image  Sparsely Vegetated Concave Surfield Observations:  Surface Water Present?  Yes  Vater Table Present?	equired; check all that  Water ML Salt C Aquat Hydro Oxidiz Prese Recer Stunte ery (B7) face (B8)  No Depti No Depti	apply) -Stained Leave -RA 1, 2, 4A, and struct (B11) ic Invertebrates gen Sulfide Odded Rhizosphere noe of Reduced at Iron Reduction ed or Stressed F (Explain in Ren in (inches): in (inches):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	Secon	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) emorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)

Project/Site WRE	Cit	y/County: Counter	wille/Humboldt	Sampling Date: 4/27/2
Applicant/Oumas LECC D			- OA	1 10
Investigator(s): Jane C.p.a., Matt	Tolley se	ction, Township, Ra	ange	001
Landform (hilislope, terrace, etc.):	Lo	ical relief (concave	COUNTRY HOUSE	Sione /B( )
Subregion (LRR):	Lat		Long:	3iope (%):
Soil Man Linit Name	car		Long	Datum
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical				· ·
Are Vegetation Soil or Hydrology _				present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally proble	ematic? (If n	eeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sa	ampling point l	locations, transects	, important features, etc
Hydrophytic Vegetation Present? Yes				
Hydric Sail Present? Yes	No/	Is the Sample		
Wetland Hydrology Present? Yes	No	within a Wetla	nd? Yes	No
Remarks				
*:				
VEOCTATION III				
VEGETATION – Use scientific names o				
Tree Stratum (Plot size)		ominant Indicator pecies? Status	Dominance Test work	
1			Number of Dominant S That Are OBL, FACW,	pecies (A)
3.			Total Number of Domin Species Across All Stra	
4			Percent of Dominant Sp	nacios (-)
Sapling/Shrub Stratum (Plot size	=	lotal Cover	That Are OBL, FACW.	
1.			Prevalence Index work	
2.			Total % Cover of	
3			OBL species	x 1 =
4			FACW species 3	
5.				x3= <u>225</u> x4= <u>68</u>
Herb Stratum (Plot size)	= .	Total Cover		x4= \( \varphi_0 \) x5=
1. Holcus lanatus	75 4	ses FAC	Column Totals: 96	
2. Juneus Efficiens		FACW		
3 Eanisetum telmateia		FACW	1 TEVBIETICE THUEX	= B/A = 3.13
4. Arthoxanthum pdovata		FACU	Hydrophytic Vegetation	
5. Rubus ursinus	15	FACU		ydrophytic Vegetation
6. Achillea millefolia		FACU	2 - Dominance Test	
7. Scirpus Microcarpus		OBL	∆ 3 - Prevalence Inde	
8.			4 - Morphological A	daptations <sup>1</sup> (Provide supporting or on a separate sheet)
9.			5 - Wetland Non-Va	
10			1	hytic Vegetation <sup>†</sup> (Explain)
11.				and wetland hydrology must
		otal Cover	be present, unless distu	rbed or problematic.
Woody Vine Stratum (Plot size:)			g L	
1			Hydrophytic	/
2.			Vegetation	/
% Bare Ground in Herb Stratum		otal Cover	Present? Yes	No_V
Remarks:				

(inches)	Matrix		Red	ox Features	<u>.                                    </u>			ence of indicators.)
(inches)	Color (moist)	%		%		Loc²	<u>Textu</u>	re Remarks
0-6	25-1 3/1	100	NA				LUAN	STIALL GRAVE
-12	2.5-1 5/1	100	NA				ENLIN	SENCE FILL
2-14	2.57 5/1	9,5	7547/1	15				COMM FILL W/ REDOY.
ype: C=C	oncentration, D=Dep	pletion, RM=R	educed Matrix. C	S=Covered	or Coate	d Sand Gra		<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
_ Histoso			Sandy Redox (		ч.)		mu	icators for Problematic Hydric Soils <sup>3</sup> :
_	pipedon (A2)	_	Stripped Matrix				_	2 cm Muck (A10) Red Parent Material (TF2)
Black H	istic (A3)		_ Loamy Mucky i		(except	MLRA 1)	_	Very Shallow Dark Surface (TF12)
	en Sulfide (A4) d Below Dark Surfac	e (A11)	Loamy Gleyed Depleted Matri	Matrix (F2)			_	Other (Explain in Remarks)
	ark Surface (A12)		_ Redox Dark Su				3 Ind	licators of hydrophytic vegetation and
	Mucky Mineral (S1)	_	_ Depleted Dark	Surface (F7	7)			wetland hydrology must be present.
	Gleyed Matrix (S4)		Redox Depress	sions (F8)				inless disturbed or problematic.
	Layer (if present):							
Type	. 10	<u>-</u> -	_					
Depth (in emarks	ches)						Hydric	Soil Present? Yes No
	drology Indicators:	-						
mmary indi	antoni (minimum or or							
Surface	cators (minimum of o						<u>S</u>	econdary Indicators (2 or more required)
	Water (A1)		Water-Sta	ined Leave		cept	S	_ Water-Stained Leaves (B9) (MLRA 1, 2
_ High Wa	Water (A1) ater Table (A2)		Water-Sta	ined Leave 1, 2, 4A, ar		cept	<u>S</u>	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
_ High Wa _ Saturati	Water (A1) ater Table (A2) on (A3)		Water-Sta MLRA Salt Crust	ined Leave 1, 2, 4A, ar (B11)	nd 4B)	cept	<u>S</u>	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
_ High Wa _ Saturati _ Water M	Water (A1) ater Table (A2) on (A3) farks (B1)		Water-Sta MLRA Salt Crust Aquatic In	ined Leave 1, 2, 4A, ar (B11) vertebrates	(B13)	cept	S	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
_ High Wa _ Saturati _ Water M _ Sedimei	Water (A1) ater Table (A2) on (A3)		Water-Sta MLRA Salt Crust Aquatic In Hydrogen	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd	(B13) or (C1)			Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (CS
High Wa Saturati Water M Sedimer Drift Der	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)		Water-Sta MLRA Salt Crust Aquatic In: Hydrogen Oxidized F	ined Leave 1, 2, 4A, ar (B11) vertebrates	(B13) or (C1) es along L	iving Roots		Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep	Water (A1) after Table (A2) on (A3) flarks (B1) int Deposits (B2) posits (B3) aft or Crust (B4) posits (B5)		Water-Sta MLRA Salt Crust Aquatic In: Hydrogen Oxidized F Presence	ined Leave  1, 2, 4A, ar  (B11) vertebrates Sulfide Odd Rhizosphere	(B13) or (C1) es along L Iron (C4)	iving Roots	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3)
High Wa Saturati Water M Sedimer Drift Dej Algal Ma Iron Dep Surface	Water (A1) after Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) aft or Crust (B4) posits (B5) Soil Cracks (B6)	ne required, c	Water-Sta MLRA Salt Crust Aquatic In: Hydrogen Oxidized F Presence Recent Iro	ined Leave  1, 2, 4A, ar  (B11) vertebrates Sulfide Odd Rhizosphere of Reduced	(B13) or (C1) es along L Iron (C4)	iving Roots	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
High Waler Mater M	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial I	ne required, o	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced n Reduction	(B13) or (C1) es along L Iron (C4) n in Tilled	iving Roots	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
High Waler Maler Mater Maler M	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In	ne required, o	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave  1, 2, 4A, ar  (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed F	(B13) or (C1) es along L Iron (C4) n in Tilled	iving Roots	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations:	magery (B7)	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave  1, 2, 4A, ar  (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed F plain in Ren	(B13) or (C1) es along L Iron (C4) n in Tilled Plants (D1 narks)	iving Roots Soils (C6) ) (LRR A)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
High Waler Mater	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations:	magery (B7) e Surface (B8)	Water-Sta MLRA Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave  1, 2, 4A, ar  (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed F plain in Ren  ches):	(B13) or (C1) es along L Iron (C4) n in Tilled Plants (D1 narks)	Soils (C6)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
High Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely leld Obser urface Wat	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations: er Present? Yes	magery (B7) e Surface (B8) es No es No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed Folain in Ren ches):	(B13) or (C1) es along L Iron (C4) in in Tilled Plants (D1	Soils (C6)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely ield Obser urface Wat Vater Table aturation P	Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations: er Present? Present? Yeresent? Yeresent? Yeresent?	magery (B7) e Surface (B8) es No es No es No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed Folain in Rem ches): ches):	(B13) or (C1) es along L Iron (C4) in in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely ield Obser urface Wat Vater Table aturation P	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations: er Present? Present? Yeseent? Yeseent? Yeseent?	magery (B7) e Surface (B8) es No es No es No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed Folain in Rem ches): ches):	(B13) or (C1) es along L Iron (C4) in in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High Waler M Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely ield Obser urface Water Table atturation P ncludes cap escribe Re	Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations: er Present? Present? Yeresent? Yeresent? Yeresent?	magery (B7) e Surface (B8) es No es No es No	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed Folain in Rem ches): ches):	(B13) or (C1) es along L Iron (C4) in in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High Waler M Saturati Water M Sedimel Drift Del Algal Ma Iron Dep Surface Inundati Sparsely ield Obser urface Wat Vater Table aturation P ncludes cal escribe Re	Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial II y Vegetated Concave vations: er Present? Present? Yeresent?	magery (B7) e Surface (B8) es No es No gauge monit	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed Folain in Rem ches): ches):	(B13) or (C1) es along L Iron (C4) in in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
High Waler M Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely ield Obser urface Wat Vater Table atturation P noludes car escribe Re	Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aerial In y Vegetated Concave vations: er Present? Present? Yeresent? Yeresent? Yeresent?	magery (B7) e Surface (B8) es No es No gauge monit	Water-Sta MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave 1, 2, 4A, ar (B11) vertebrates Sulfide Odd Rhizosphere of Reduced in Reduction Stressed Folain in Rem ches): ches):	(B13) or (C1) es along L Iron (C4) in in Tilled Plants (D1 narks)	Soils (C6) ) (LRR A)	s (C3)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C3 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Centerville / Humboldt Sampling Date: 4/27/22
State: CA Sampling Point: W271-W Project/Site: WRE Applicant/Owner: HRCD Investigator(s) Jane Cipra, Matt Tolley Section Township, Range Local relief (concave, convex, none) \_\_\_\_\_\_ Slope (%) Landform (hillslope, terrace, etc.): Subregion (LRR) Lat \_\_\_\_\_\_ Long \_\_\_\_ \_\_\_\_ Datum: Soil Map Unit Name: \_\_\_\_ NWI classification: \_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes \_ V \_ No \_\_\_\_ Hydrophytic Vegetation Present? Hydric Soil Present?

Wetland Hydrology Present?

Yes

No

No Is the Sampled Area within a Wetland? Remarks: A lot of cover is dead Juneus. 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 That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size: \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of OBL species FACW species FAC species FACU species 33 x4= 132 \_\_\_\_ = Total Cover Herb Stratum (Plot size: UPL species 1. Vicia Maricans Column Totals Prevalence Index = B/A = 2.82 3. Juneus leffusus Hydrophytic Vegetation Indicators: 4. Emisetum telmateia FACW 1 - Rapid Test for Hydrophytic Vegetation 5. Seirous microcarpus OBL 2 - Dominance Test Is >50% 6. Kubus ursinus 30 WYS FACU ✓ 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must 5 6 = Total Cover be present, unless disturbed or problematic. Woody Vine Stratum (Plot size ) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum Remarks:

Profile Description: (Describe to the de		x Feature	is.			
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>4</sup>	Texture	Remarks
0-6 2.5-1 3/1 90	7.5-125/6	10		14	Lugan	
1-12 25.1 3/2 80	75.126/	20	_	M	,	Lugh Moister Mit-
12-14 GEII S/N 70	7.7 42 618	30				
		>0		<u></u>	-12-4	Luay
	<del> </del>					
Type: C=Concentration, D=Depletion, RN	M=Reduced Matrix, CS	=Covered	d or Coate	d Sand Gi		cation: PL=Pore Lining, M=Matrix.
ydric Soil Indicators: (Applicable to a			ed.)		Indicate	ors for Problematic Hydric Soils <sup>3</sup> :
_ Histosol (A1)	Sandy Redox (S					m Muck (A10)
_ Histic Epipedon (A2) _ Black Histic (A3)	Stripped Matrix		4) /			Parent Material (TF2)
_ Hydrogen Sulfide (A4)	Loamy Mucky M Loamy Gleyed M			MLRA 1)		y Shallow Dark Surface (TF12)
_ Depleted Below Dark Surface (A11)	Depleted Matrix		,		Oth	er (Explain in Remarks)
_ Thick Dark Surface (A12)	Redox Dark Sur				3Indicate	ors of hydrophytic vegetation and
_ Sandy Mucky Mineral (S1)	Depleted Dark 5					and hydrology must be present
_ Sandy Gleyed Matrix (S4)	Redox Depressi	ons (F8)				ss disturbed or problematic
estrictive Layer (if present):						
Type Nork		<b>V</b> :-				
Depth (inches): &		A read			Hydric Soil	Present? Yes No
vanne raws of 3 or less					DEDOK E	of was
MANY FALLS OF 3 OF LESS					DEDAK F	EFW1)
DROLOGY  /etland Hydrology Indicators:	" CWans 04 2	or les			- 40	
DROLOGY  Setland Hydrology Indicators: rimary Indicators (minimum of one require	* Cwanc or 2	or les	s + (	5%	Seco	ndary Indicators (2 or more required)
DROLOGY  Setland Hydrology Indicators:  Surface Water (A1)	* Cwanc of 2  ed. check all that apply  Water-Stain	or les	s (B9) (ex	5%	Seco	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)	* Cwanc of 2  ed. check all that apply  Water-Stair MLRA 1	or les	s (B9) (ex	5%	<u>Seco</u> V	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (	or les	es (B9) (es	5%	Secon	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10)
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Inve	or les	es (B9) (e) and 4B)	5%	Secon	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)	Cwanc of 2  ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S	or les	es (B9) (e) and 4B) ss (B13) dor (C1)	cept	Secon	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	ed. check all that apply Water-Stain MLRA 1 Salt Crust ( Aquatic Invented by Augustic Salt Crust ( Constituted by Augustic	or les	es (B9) (e) and 4B) s (B13) dor (C1) res along L	ccept	Secon  V  C  C  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
DROLOGY  etland Hydrology Indicators: imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)	- Wams of 2  ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o	or les	es (B9) (es and 4B) s (B13) for (C1) res along L d Iron (C4)	ccept	Secon V D S ts (C3) S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3)
PROLOGY  Tetland Hydrology Indicators:  Timary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)	- Cwams of 2  ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Invo.  Hydrogen S  Oxidized RI  Presence o  Recent Iron	or les	es (B9) (es and 4B) s (B13) dor (C1) res along L d Iron (C4 on in Tilled	ccept  Living Roo  Soils (C6	Secon V C C S sts (C3) G S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5)
TOROLOGY  Tetland Hydrology Indicators:  Timary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)	ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S	or les	es (B9) (example of the set (B13) of (C1) res along to diron (C4) on in Tilled Plants (D1	ccept  Living Roo  Soils (C6	Secon  V  C  C  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralnage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
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etland Hydrology Indicators: imary Indicators (minimum of one require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (E Sparsely Vegetated Concave Surface	ed. check all that apply  Water-Stair  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl	or les	es (B9) (example of the set (B13) of (C1) res along to diron (C4) on in Tilled Plants (D1	ccept  Living Roo  Soils (C6	Secon  V  C  C  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralnage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
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retland Hydrology Indicators:  imary Indicators (minimum of one require  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B  Sparsely Vegetated Concave Surface and Observations:  Inface Water Present?	ed. check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl	or les-	es (B9) (example of the set (B13) for (C1) res along to diron (C4) for in Tilled Plants (D1) marks)	ccept Living Roo Soils (C6	Secon  V  C  C  S  S  S  S  S  S  S  S  S  S  S	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralnage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
/ DROLOGY / Vetland Hydrology Indicators: rimary Indicators (minimum of one require	ed. check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl	or les-	es (B9) (example of the set of th	ccept Living Roo Soils (C6 ) (LRR A)	Secon  V  C  S  S  S  S  S  S  S  S  A  A  A  A  A	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralnage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Staised Ant Mounds (D6) (LRR A)
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High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B)  Sparsely Vegetated Concave Surface (B)  Indicated Water Present?  Ves  Vater Table Present?  Ves  Auturation Present?  Activation	ed. check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl	or les-	es (B9) (example of the set of th	ccept Living Roo Soils (C6 ) (LRR A)	Secon  V  C  S  S  S  S  S  S  S  S  A  A  A  A  A	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Saised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
/ DROLOGY / Vetland Hydrology Indicators: rimary Indicators (minimum of one require	ed. check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl	or les-	es (B9) (example of the set of th	ccept Living Roo Soils (C6 ) (LRR A)	Secon  V  C  S  S  S  S  S  S  S  S  A  A  A  A  A	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Saised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
rimary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B1) Sparsely Vegetated Concave Surface (B1) Indicator Visible on Aerial Imagery (B2) Sparsely Vegetated Concave Surface (B2) Indicator Visible on Aerial Imagery (B3) Indicator Visible on Aerial Imagery (B3) Indicator Visible on Aerial Imagery (B4) Indicator Visib	ed. check all that apply  Water-Stain  MLRA 1  Salt Crust (  Aquatic Inv.  Hydrogen S  Oxidized RI  Presence o  Recent Iron  Stunted or S  Other (Expl	or les-	es (B9) (example of the set of th	ccept Living Roo Soils (C6 ) (LRR A)	Secon  V  C  S  S  S  S  S  S  S  S  A  A  A  A  A	ndary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Oralinage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Seomorphic Position (D2) Shallow Aquitard (D3) AC-Neutral Test (D5) Saised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Centerille/Humboldtsampling Date 4/27/22 Project/Site WRE State: CA Sampling Point: W2-T2 Applicant/Owner HRCD Investigator(s) Tane Cipra, Matt Tollen Section, Township, Range Landform (hillslope, terrace, etc.): Local relief (concave, convex, none) Slope (%) Subregion (LRR): Lat \_\_\_\_\_ Long \_\_\_ Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_ Are Vegetation \_\_\_\_\_\_, Soil \_\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks ) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Hydric Soil Present? is the Sampled Area 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 That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of. OBL species FACW species FAC species FACU species 3 x4= 12 \_\_\_\_ = Total Cover 1 x5= 5 Herb Stratum (Plot size UPL species 1. Holcus lanatus Prevalence Index = B/A = 3 - 03 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation Vicia satira UPL √ 2 - Dominance Test is >50% 6 Achilles millefolia FACU N 3 - Prevalence Index is ≤3.01 7. Egnisetum tolmatein 1\_\_\_\_ \_\_\_ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants<sup>1</sup> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. \_ S S = Total Cover Woody Vine Stratum (Plot size \_\_\_\_\_) Hydrophytic Vegetation Present? \_\_\_\_= Total Cover % Bare Ground in Herb Stratum \_\_\_\_ Remarks:

		pth needed to docum	lettr rue i	ndicator (	or contism	i the absence (	of Indicators.)
	latrix	Redox	c Features				•
(inches) Color (mi	0/	Color (moist)	%	Type'	_Loc²	Texture	Remarks
0-6 2.51	2/1 140	NA	<u> 4u </u>	WH	_ ~	LUAM	CH & FOI
6-10 7.5-1	1 1000	NA	tru_		9	Granul	LANGE ENGE
11-14 524, 2	11 950	737h 5/c	20	_C_	M	V6 Com	i,
			_	74,01			
<del></del>	-						
<del></del>							
¹Type: C=Concentration	Deposition BM						
<sup>1</sup> Type: C=Concentration, Hydric Soil Indicators: (	Applicable to all	Reduced Matrix, CS	=Covered	or Coate	d Sand Gra		ation: PL=Pore Lining, M=Matrix.
Histosol (A1)	, pp. 12 2	Sandy Redox (S		· u. ,			s for Problematic Hydric Soils <sup>3</sup> : Muck (A10)
Histic Epipedon (A2)		Stripped Matrix (					Parent Material (TF2)
Black Histic (A3)		Loamy Mucky M		) (except	MLRA 1)		Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)		Loamy Gleyed M	Aatrix (F2)				(Explain in Remarks)
Depleted Below Dark		Depleted Matrix				•	
Thick Dark Surface (A Sandy Mucky Mineral	,	Redox Dark Surf		71			s of hydrophytic vegetation and
Sandy Gleyed Matrix		Redox Depression		()			d hydrology must be present, disturbed or problematic.
Restrictive Layer (if pres					<del></del>	dilless	disturbed of problematic.
Туре:							
Depth (inches):						Hydric Soil F	Present? Yes No
Remarks		<del></del>	Y)				
140st Balan 104	car No.	206-25			2		
YDROLOGY	•	arbali a we	Jhr.	<u>S </u>	7:		
YDROLOGY Wetland Hydrology Indic	ators:			S.a • • •	Ti .	-	
YDROLOGY Wetland Hydrology Indic Primary Indicators (minimu	ators:	d; check all that apply	)		<u> 10</u>		lary Indicators (2 or more required)
YDROLOGY Wetland Hydrology Indic Primary Indicators (minimu Surface Water (A1)	ators: im of one require	d; check all that apply)	) ned Leave	s (B9) (ex	cept	Wa	ter-Stained Leaves (B9) (MLRA 1, 2,
YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)	ators: im of one require	d; check all that apply Water-Stain MLRA 1,	ed Leave	s (B9) (ex	cept	Wa	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ators: im of one require	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I	) led Leave , 2, 4A, ai	s (B9) (ex nd 4B)	cept	Wa	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10)
YDROLOGY  Vetland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)	ators: im of one required	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I	ed Leave , 2, 4A, and B11) entebrates	s (B9) (ex nd 4B) (B13)	cept	Wa Dra Dry	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2)
YDROLOGY  Vetland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)	ators: im of one required	d; check all that apply  Water-Stain  MLRA 1;  Salt Crust (I)  Aquatic Inve	) ned Leave , 2, 4A, ar B11) entebrates sulfide Ode	s (B9) (ex nd 4B) (B13) or (C1)		Wa	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) suration Visible on Aerial Imagery (C9)
YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B)	ators: um of one required )	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (I  Aquatic Inve	ed Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphere	s (B9) (ex nd 4B) (B13) or (C1) es along L	iving Roots	Wa Dra Dry Sat s (C3) Ge	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2)
YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)	ators: um of one required )	d; check all that apply)  Water-Stain  MLRA 1,  Salt Crust (I  Aquatic Inve Hydrogen S  Oxidized Rh	ned Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphere f Reduced	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4)	iving Roots	Wa Dra Dry Sat s (C3) Gee Sha	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) suration Visible on Aerial Imagery (C9) comorphic Position (D2) sallow Aquitard (D3)
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YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4  Iron Deposits (B5)  Surface Soil Cracks (B1)	ators: am of one require  2) 36) Aerial Imagery (B	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain	ed Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphere f Reduced Reductio Stressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1	iving Roots	Wa Dra Dry Sat s (C3) Ge Sha FA( Rai	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) suration Visible on Aerial Imagery (C9) comorphic Position (D2) sallow Aquitard (D3)
YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimu  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Inundation Visible on A1  Sparsely Vegetated C	ators: am of one require  2) 36) Aerial Imagery (B	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain	ed Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphere f Reduced Reductio Stressed F	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1	iving Roots	Wa Dra Dry Sat s (C3) Ge Sha FA( Rai	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) surration Visible on Aerial Imagery (C9) somorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indic  Primary Indicators (minimus)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B4)  Inundation Visible on A4  Sparsely Vegetated Coileld Observations:	ators: am of one required  2)  36) Aerial Imagery (Bioncave Surface (I	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve Hydrogen S  Oxidized Rh Presence of Recent Iron Stunted or S  Other (Expla	ed Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphere f Reduced Reductio Stressed F ain in Ren	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	iving Roots Soils (C6) ) (LRR A)	Wa Dra Dry Sat s (C3) Ge Sha FA( Rai	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) surration Visible on Aerial Imagery (C9) somorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
YDROLOGY  Netland Hydrology Indic  Primary Indicators (minimus  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B1)  Sparsely Vegetated Collected Observations:  Surface Water Present?	ators:  Im of one require  2)  36)  Aerial Imagery (Boncave Surface (I	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve  Hydrogen S  Oxidized Rh  Presence of  Recent Iron  Stunted or S  Other (Explain	ned Leave , 2, 4A, and B11) entebrates outfide Ode nizosphere f Reduced Reductio Stressed F ain in Ren nes):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	iving Roots Soils (C6) ) (LRR A)	Wa Dra Dry Sat s (C3) Ge Sha FA( Rai	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) surration Visible on Aerial Imagery (C9) somorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
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Wetfand Hydrology Indic Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Coffield Observations: Surface Water Present? Water Table Present? Saturation Present? Includes capillary fringe) Describe Recorded Data (st	ators: am of one require  2)  36) Aerial Imagery (Boncave Surface (I	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve  Hydrogen S  Oxidized Rr  Presence of  Recent Iron  Stunted or S  Other (Explain  No  Depth (inch	ned Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphero f Reduced Reductio Stressed F ain in Ren nes):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	iving Roots Soils (C6) (LRR A)	Wa Dra Dry Sat s (C3) Gei Sha FAI Fro	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) suration Visible on Aerial Imagery (C9) comorphic Position (D2) sallow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Wetland Hydrology Indic Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Coffield Observations: Surface Water Present? Water Table Present? Saturation Present? Includes capillary fringe) Describe Recorded Data (sparse)	ators: am of one require  2)  36) Aerial Imagery (Boncave Surface (I	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve  Hydrogen S  Oxidized Rr  Presence of  Recent Iron  Stunted or S  Other (Explain  No  Depth (inch	ned Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphero f Reduced Reductio Stressed F ain in Ren nes):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	iving Roots Soils (C6) (LRR A)	Wa Dra Dry Sat s (C3) Gei Sha FAI Fro	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) suration Visible on Aerial Imagery (C9) comorphic Position (D2) sallow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
YDROLOGY  Vetland Hydrology Indic Primary Indicators (minimu Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (B1) Inundation Visible on A1 Sparsely Vegetated Collected Observations: Surface Water Present? Vater Table Present? Includes capillary fringe) Describe Recorded Data (stemarks)	ators: am of one require  2)  36) Aerial Imagery (Boncave Surface (I	d; check all that apply  Water-Stain  MLRA 1  Salt Crust (I  Aquatic Inve  Hydrogen S  Oxidized Rr  Presence of  Recent Iron  Stunted or S  Other (Explain  No  Depth (inch	ned Leave , 2, 4A, and B11) entebrates sulfide Odi nizosphero f Reduced Reductio Stressed F ain in Ren nes):	s (B9) (ex nd 4B) (B13) or (C1) es along L I Iron (C4) n in Tilled Plants (D1 narks)	iving Roots Soils (C6) (LRR A)	Wa Dra Dry Sat s (C3) Gei Sha FAI Fro	ster-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) suration Visible on Aerial Imagery (C9) comorphic Position (D2) sallow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: WRE City/County: Centervile thumb of Sampling Date 4/27/22

Applicant/Owner: +RCD State CA Sampling Point W2T2-W Investigator(s) Jane Cipra Mott Tolley Section, Township, Range Landform (hillslope terrace etc.): Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%). \_\_\_\_\_ Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long \_\_\_\_\_ Soll Map Unit Name: \_\_\_\_\_ NWI classification Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_\_, Soil \_\_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes // No\_\_\_\_ Hydric Soil Present? is the Sampled Area 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 That Are OBL FACW or FAC: Sapling/Shrub Stratum (Plot size ) Prevalence index worksheet: Total % Cover of: OBL species / D \_\_\_ x1= /D FACW species 2 x2= FAC species FACU species \_\_\_\_\_ 6 \_\_\_ x4 = \_\_\_ 24 \_\_\_\_ = Total Cover Herb Stratum (Plot size. UPL species 1. Scirous microcarous 2. Holan Janatus 30 Prevalence Index = B/A = 2.66 FACU Hydrophytic Vegetation Indicators: 4 Cardamine hirsuta 1 FACU 1 - Rapid Test for Hydrophytic Vegetation 5. Equisetny telyhateia 1 FACW 2 - Dominance Test is >50% 6. Stachus rigida | FACU V 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants1 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 46 = Total Cover Woody Vine Stratum (Plot size. \_\_\_\_) Hydrophytic Vegetation Present? \_\_\_\_ = Total Cover % Bare Ground in Herb Stratum \_\_\_\_ Remarks

Depth Mat (inches) Color (mois	rix		to document the				
(inches) Color (mois		Color (	Redox Feature moist) %	_Type <sup>1</sup>	Loc²	Texture	Remarks
0-9 2.51 3/1	95	7.51	5/6 5	C	М	MAUI	THE INSTRUMENTAL OF THE IN
9-12 618-11 25/			1/4 15		114	BRANNILY	The is
						DI M. 1 J	WALL INCOCKE MOISTON
Type. C=Concentration, D=	Depletion, R	M=Reduced I	Matrix, CS=Covere	d or Coate	d Sand Grain	ns <sup>2</sup> Loc	ation. PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Ap	plicable to a	II LRRs, uni	ess otherwise not	ed.)			rs for Problematic Hydric Soils :
Histosol (A1)			Redox (S5)				Muck (A10)
Histic Epipedon (A2) Black Histic (A3)			ed Matrix (S6)	4) /=	MI DA 45		Parent Material (TF2)
Hydrogen Sulfide (A4)		Loamy	y Mucky Mineral (F y Gleyed Matrix (F2	1) (except	MLRA 1)		Shallow Dark Surface (TF12)
Depleted Below Dark Su	urface (A11)		ted Matrix (F3)	-/		Out	r (Explain in Remarks)
Thick Dark Surface (A12	2)		Dark Surface (F6)			3Indicator	s of hydrophytic vegetation and
Sandy Mucky Mineral (S			ted Dark Surface (F	7)		wetlar	nd hydrology must be present
Sandy Gleyed Matrix (Sestrictive Layer (if preser		Redox	Depressions (F8)			unless	disturbed or problematic
TypeN							*
Depth (inches).	e)						
Remarks	114					Hydric Soil	Present? Yes No
YDROLOGY					_		
Vetland Hydrology Indicat	ors;						
		ed, check_all	that apply)			Secon	dary Indicators (2 or more required)
				es (B9) (ex	cept		dary Indicators (2 or more required) ater-Stained Leaves (89) (MLRA 1, 2
rimary Indicators (minimum Surface Water (A1) High Water Table (A2)			that apply) Vater-Stained Leav MLRA 1, 2, 4A, a		cept		dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3)		v	Vater-Stained Leav		cept	_ w	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
rimary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)		_ v _ s _ A	Vater-Stained Leav MLRA 1, 2, 4A, a Salt Crust (B11) equatic Invertebrate	and 48) s (B13)	cept	_ W	ater-Stained Leaves (B9) (MLRA 1, 2,
rimary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)		v s a H	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) quatic Invertebrate lydrogen Sulfide Od	and 4B) s (B13) dor (C1)		W	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2)
Crimary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)		v s a H	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Oc xidized Rhizosphe	and 48) s (B13) dor (C1) res along L	iving Roots	W Dr Dr Sa (C3) Ge	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		v s A H 0	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate hydrogen Sulfide Oct exidized Rhizosphe bresence of Reduce	s (B13) dor (C1) res along L	iving Roots	W Dr Dr Sa (C3) Ge	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	<u>of one requir</u>	V S A H O P R	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate dydrogen Sulfide Octobridized Rhizosphe dresence of Reduce decent Iron Reduction	s (B13) dor (C1) res along L d Iron (C4) on in Tilled	iving Roots Soils (C6)	W Dr Dr Sa Ge Sh FA	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6)	of one require	V S H O P R S	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octobridized Rhizosphe bresence of Reduce lecent Iron Reduction	s (B13) dor (C1) res along L dd Iron (C4) on in Tilled Plants (D1	iving Roots Soils (C6)	W Dr Dr Sa Sa Sh FA Ra	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae	of one require	V S A H O P R S 37) O	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate dydrogen Sulfide Octobridized Rhizosphe dresence of Reduce decent Iron Reduction	s (B13) dor (C1) res along L dd Iron (C4) on in Tilled Plants (D1	iving Roots Soils (C6)	W Dr Dr Sa Sa Sh FA Ra	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Con	of one require	V S A H O P R S 37) O	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octobridized Rhizosphe bresence of Reduce lecent Iron Reduction	s (B13) dor (C1) res along L dd Iron (C4) on in Tilled Plants (D1	iving Roots Soils (C6)	W Dr Dr Sa Sa Sh FA Ra	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations:	of one require  rial Imagery (I	V S A H O P R S 37) O (B8)	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octo oxidized Rhizosphe resence of Reduce lecent Iron Reducti litunted or Stressed other (Explain in Re	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	iving Roots Soils (C6)	W Dr Dr Sa Sa Sh FA Ra	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Contield Observations:	of one require  rial Imagery (I cave Surface	V S A H O P R S 37) O (B8)	Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate dydrogen Sulfide Octobridized Rhizosphe dresence of Reduce decent Iron Reductivitunted or Stressed Other (Explain in Re	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6)	W Dr Dr Sa Sa Sh FA Ra	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations: Surface Water Present? Vater Table Present? Saturation Present? includes capillary fringe)	rial Imagery (Icave Surface  Yes Yes Yes		Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octo oxidized Rhizosphe dresence of Reduce lecent Iron Reducti attunted or Stressed other (Explain in Re Depth (inches)	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6) ) (LRR A)  Wetlance	William Willia	ater-Stalned Leaves (89) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae	rial Imagery (Icave Surface  Yes Yes Yes		Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octo oxidized Rhizosphe dresence of Reduce lecent Iron Reducti attunted or Stressed other (Explain in Re Depth (inches)	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6) ) (LRR A)  Wetlance	William Willia	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Primary Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations: Surface Water Present? Vater Table Present? Saturation Present? includes capillary fringe)	rial Imagery (Icave Surface  Yes Yes Yes		Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octo oxidized Rhizosphe dresence of Reduce lecent Iron Reducti attunted or Stressed other (Explain in Re Depth (inches)	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6) ) (LRR A)  Wetlance	William Willia	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations: Surface Water Present? Vater Table Present? Saturation Present?	rial Imagery (Icave Surface  Yes Yes Yes		Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octo oxidized Rhizosphe dresence of Reduce lecent Iron Reducti attunted or Stressed other (Explain in Re Depth (inches)	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6) ) (LRR A)  Wetlance	William Willia	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Ae Sparsely Vegetated Confield Observations: Surface Water Present? Vater Table Present? Vater Table Present? includes capillary fringe) Describe Recorded Data (street	rial Imagery (Icave Surface  Yes Yes Yes		Vater-Stained Leav MLRA 1, 2, 4A, a salt Crust (B11) equatic Invertebrate lydrogen Sulfide Octo oxidized Rhizosphe dresence of Reduce lecent Iron Reducti attunted or Stressed other (Explain in Re Depth (inches)	s (B13) dor (C1) res along L d Iron (C4) on in Tilled Plants (D1 marks)	Soils (C6) ) (LRR A)  Wetlance	William Willia	ater-Stalned Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Pattems (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9) comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region Project/Site: WRF City/County: Centerville / Humbold + Sampling Date 4/27/22 State: <u>CA</u> Sampling Point: <u>W2T3</u> - U Applicant/Owner: HRCD Investigator(s). Jane Ciora, Matt Tolley Section, Township, Range Landform (hillslope, terrace, etc.): Local relief (concave, convex, none) Slope (%) Lat \_\_\_\_\_ Long.\_\_\_ Subregion (LRR): \_ \_\_ Datum Soil Map Unit Name: \_\_\_\_\_ \_\_\_\_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_\_, Soil \_\_\_\_\_\_ or Hydrology \_\_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_. Soil \_\_\_\_\_ or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes\_\_\_\_ No Hydric Soil Present? Yes \_\_\_\_\_ No 🗸 Is the Sampled Area 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: \_\_\_\_ (A) Total Number of Dominant Species Across All Strata Percent of Dominant Species That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size \_\_\_\_\_) Prevalence index worksheet: Total % Cover of OBL species FACW species FAC species FACU species = Total Cover Herb Stratum (Plot size: UPL species 1 Holans Comptus 40 yes FAC Column Totals: 2 Achillea milletoliata Prevalence Index = B/A = 3.3 3 Rangenculus repens Hydrophytic Vegetation Indicators: FALU \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation Rubus ursinus FALU \_\_\_ 2 - Dominance Test is >50% 6. Author authum oderatum FACU 3 - Prevalence Index is ≤3.0<sup>t</sup> 7. Poa GUNUA 2 FAC 4 - Morphological Adaptations (Provide supporting B. Vicia Sativa data in Remarks or on a separate sheet) UPL 9 Covastrium a omeratum \_ 5 - Wetland Non-Vascular Plants1 FACU 10 Scirous microcarpus OBL Problematic Hydrophytic Vegetation¹ (Explain) 11 Juines ofusus Indicators of hydric soil and wetland hydrology must FACU be present, unless disturbed or problematic. 79 = Total Cover Woody Vine Stratum (Plot size Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_ Remarks:

Profile Description: (D Depth	Matrix			x Feature:	s		
(inches) Color (r		% (	Color (moist)	%	Type1	Loc²	Texture Remarks
2-57	5/,	100	No	QUI.	W	N	GNALLY WALL / ENG FILL
6-12 2.57	4/,	100	NA	J	1.		
			7.0				VELY GRAVELLY LOAN / tNb Fill
Type: C=Concentration	. D=Depletio	 л. RM=Red	luced Matrix CS	=Covered	f or Coate	d Sand G	rains <sup>2</sup> Location: PL=Pore Lining, M=Matrix
lydric Soil Indicators:	(Applicable	to all LRR	s, unless other	wise note	ed.)	u Sanu Gi	Indicators for Problematic Hydric Solis <sup>3</sup> :
Histosol (A1)			Sandy Redox (S		,		2 cm Muck (A10)
Histic Epipedon (A2)			Stripped Matrix				Red Parent Material (TF2)
Black Histic (A3)		_	Loamy Mucky M	lineral (F1	) (except	MLRA 1)	Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A		—	Loamy Gleyed N		)		Other (Explain in Remarks)
Depleted Below Dark			Depleted Matrix	' '			•
Thick Dark Surface ( Sandy Mucky Minera	-		Redox Dark Sur Depleted Dark S		7.		Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix			Redox Depressi		()		wetland hydrology must be present,
lestrictive Layer (if pre			- Todox Depressi	0113 (1 0)			unless disturbed or problematic.
Туре							
Depth (inches)							
							Hydric Soil Present? Yes No S
Remarks  ND 516N > 05  END INDERNOR TO  NO REACTION +	> Gran	( F171	~/ oncoras	C Top	IA-for		Hydric Soil Present? Yes No
NO SIGNS OF ENGINEETH TO MERCHANT TO MERCHANT TO	AA b	( F171	n/ oncorns	C Top	lA-fa		Hydric Soil Present? Yes No
NO SIGNS OF ENGINEETH +  NO REACTION +  YDROLOGY  Vetland Hydrology Indi	cators:	FILL			lA-fee		Hydric Soil Present? Yes No
NO REACTION +  NO REACTION +  YDROLOGY  Yetland Hydrology Indi  rimary Indicators (minin	cators:	FILL			IA-fee		Secondary Indicators (2 or more required
NO REACTION +  NO REACTION +  YDROLOGY  Vetland Hydrology Indi  rimary Indicators (minin  Surface Water (A1)	Cators:	FILL		)		cept	
NO CLAND OF ENGINEERS OF THE PROLOGY  Vetland Hydrology Indirinary Indicators (mining Surface Water (A1)  High Water Table (A	Cators:	FILL	eck all that apply Water-Stair MLRA 1	ned Leave	es (B9) (ex	cept	Secondary Indicators (2 or more required
NO CLEND OF ENGINEERS PROPERTY AND MARKETON TO PROLOGY  /etland Hydrology Indirection (minimary Indicators (Minima	Cators:	FILL	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i	) ned Leave , 2, 4A, a B11)	es (B9) (ex nd 4B)	cept	Secondary Indicators (2 or more required Water-Stained Leaves (B9) (MLRA 1 4A, and 4B) Drainage Pattems (B10)
ND CIGNS OF ENGINEERS OF THE PROLOGY  Vetland Hydrology Individual Indicators (mining Surface Water (A1)  High Water Table (A Saturation (A3)  Water Marks (B1)	cators:	FILL	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i	ned Leave	es (B9) (ex nd 4B) s (B13)	cept	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Pattems (B10)  Dry-Season Water Table (C2)
NO NEACTION +  NO NEACTION +  /DROLOGY  Vetland Hydrology Indi- rimary Indicators (minin  Surface Water (A1)  High Water Table (A  Saturation (A3)  Water Marks (B1)  Sediment Deposits (I	cators:	FILL	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i  Aquatic Invi	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od	es (B9) (ex nd 4B) s (B13) or (C1)		Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1 4A, and 4B)  Drainage Pattems (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery
NO CLEND OF EMBLIANCE TO MO NEACTION +  /DROLOGY  /etland Hydrology Indirinary Indicators (mining Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	cators: num of one r	FILL	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i  Aquatic Inve	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphere	es (B9) (ex nd 4B) (B13) or (C1) es along L	iving Roo	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery ts (C3) Geomorphic Position (D2)
MO NEACTION +  MO NEACTION +  /DROLOGY  /etland Hydrology Indirimary Indicators (mining  Surface Water (A1)  High Water Table (A  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Agal Mat of Crust (B	cators: num of one r	FILL	eck all that apply Water-Stair MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized Ri	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reduced	es (B9) (ex nd 4B) (B13) or (C1) es along L d Iron (C4)	Living Roo	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)
VO NEACTION +  VOROLOGY  Vetland Hydrology Indirimary Indicators (minim  Surface Water (A1)  High Water Table (A  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Agal Mat of Crust (B  Iron Deposits (B5)	cators: num of one r	FILL	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i  Aquatic Invo  Hydrogen S  Oxidized Ri  Presence o	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reducer a Reductio	es (B9) (ex nd 4B) is (B13) or (C1) es along L d Iron (C4) in in Tilled	.iving Roo ) Soils (C6	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery  ts (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
VO REACTION + VOROLOGY Vetland Hydrology Individual Indicators (mining Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Agal Mat of Crust (B	A A b	equired, chi	eck all that apply Water-Stair MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized Ri	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphen f Reduced i Reductio Stressed I	es (B9) (ex nd 4B) or (C1) es along L d Iron (C4) on in Tilled	.iving Roo ) Soils (C6	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery ts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
PO PERSONS OF THE PROPERTY OF	icators:  1	equired, cha	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i  Aquatic Invi  Hydrogen S  Oxidized Ri  Presence of  Recent Iron  Stunted or S	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphen f Reduced i Reductio Stressed I	es (B9) (ex nd 4B) or (C1) es along L d Iron (C4) on in Tilled	.iving Roo ) Soils (C6	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery  ts (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)
MO Newerland +  MO Newerland +  /DROLOGY  /etland Hydrology Indirimary Indicators (mining  Surface Water (A1)  High Water Table (A  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Agal Mat of Crust (B  Iron Deposits (B5)  Surface Soil Cracks  Inundation Visible on  Sparsely Vegetated	icators:  1	equired, cha	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i  Aquatic Invi  Hydrogen S  Oxidized Ri  Presence of  Recent Iron  Stunted or S	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizosphen f Reduced i Reductio Stressed I	es (B9) (ex nd 4B) or (C1) es along L d Iron (C4) on in Tilled	.iving Roo ) Soils (C6	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery ts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
VD CLEND OF ENGLISH TO PROLOGY  Vetland Hydrology Indirimary Indicators (mining Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Agal Mat of Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated (eld Observations:	cators: num of one r  (B6) Aerial Imag Concave Su	equired, chi	eck all that apply Water-Stair MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized RI Presence or Recent Iron Stunted or S Other (Expl	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reduced Reductio Stressed F ain in Rer	es (B9) (ex nd 4B) (B13) or (C1) es along L d Iron (C4) in in Tilled Plants (D1 narks)	Living Roo ) Soils (C6 ) (LRR A)	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery ts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
VO NEACTION +  VOROLOGY  Vetland Hydrology Individual Indicators (minimum of the control of the	cators: num of one r  (B6) Aerial Imag Concave Su	equired, chi	eck all that apply  Water-Stair  MLRA 1  Salt Crust (i  Aquatic Invi  Hydrogen S  Oxidized Ri  Presence of  Recent Iron  Stunted or S	ned Leave , 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reduced Reductio Stressed F ain in Rer	es (B9) (ex nd 4B) (B13) or (C1) es along L d Iron (C4) in in Tilled Plants (D1 narks)	Living Roo ) Soils (C6 ) (LRR A)	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery ts (C3) — Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)
VD CACTOR +  YDROLOGY  Vetland Hydrology Indi Primary Indicators (minim Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Agal Mat of Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated (Control of the Control	icators: turn of one of  (B6) Aerial Imag Concave Su  Yes Yes Yes	equired, chi	eck all that apply Water-Stair MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl	ned Leave 1, 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reduced Reductio Stressed F ain in Rer hes) hes)	es (B9) (ex nd 4B) or (B13) or (C1) es along L d Iron (C4) in in Tilled Plants (D1 marks)	Living Roo ) Soils (C6 ) (LRR A)	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery  ts (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
YDROLOGY  Wetland Hydrology Indi Primary Indicators (minin Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Agal Mat of Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible on	icators: turn of one of  (B6) Aerial Imag Concave Su  Yes Yes Yes	equired, chi	eck all that apply Water-Stair MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl	ned Leave 1, 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reduced Reductio Stressed F ain in Rer hes) hes)	es (B9) (ex nd 4B) or (B13) or (C1) es along L d Iron (C4) in in Tilled Plants (D1 marks)	Living Roo ) Soils (C6 ) (LRR A)	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery  ts (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)
VD CLANS  ENDINCT  VDROLOGY  Wetland Hydrology Indi  Primary Indicators (minim  Surface Water (A1)  High Water Table (A  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Agal Mat of Crust (B  Iron Deposits (B5)  Surface Soil Cracks Inundation Visible on  Sparsely Vegetated (B1)  Surface Water Present?  Vater Table Present?  Saturation Present?  Includes capillary fringe)	icators: turn of one of  (B6) Aerial Imag Concave Su  Yes Yes Yes	equired, chi	eck all that apply Water-Stair MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (Expl	ned Leave 1, 2, 4A, a B11) ertebrates Sulfide Od hizospher f Reduced Reductio Stressed F ain in Rer hes) hes)	es (B9) (ex nd 4B) or (B13) or (C1) es along L d Iron (C4) in in Tilled Plants (D1 marks)	Living Roo ) Soils (C6 ) (LRR A)	Secondary Indicators (2 or more required  Water-Stained Leaves (B9) (MLRA 1  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery  ts (C3) Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC-Neutral Test (D5)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)

#### WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region City/County: Centerville/Humboldt Sampling Date 4/28/22 Project/Site: WRE State: CA Sampling Point W2T3 - W Applicant/Owner: HRCD Investigator(s) Jane Cipra, Matt Tolley Section, Township, Range Landform (hillslope, terrace, etc.): Local relief (concave, convex, none) \_\_\_\_\_\_ Slope (%) Subregion (LRR): \_\_\_ \_\_\_\_\_\_ Lat: \_\_\_\_\_\_ Long \_\_\_\_\_ Soil Map Unit Name: \_\_\_\_\_ NWI classification Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks ) Are Vegetation \_\_\_\_\_\_, Soil \_\_\_\_\_\_, or Hydrology \_\_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes V 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 1. Saliz hookeriana 20 ps FACW Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata Percent of Dominant Species \_\_\_\_\_ = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species FACW species x2= 106 FAC species FACU species 8 = Total Cover UPL species Herb Stratum (Plot size Stachus rivida Column Totals: 64 (A) 153 (B) 2. Emisetum telmateia Prevalence Index = B/A = 2.39 OBL Hydrophytic Vegetation Indicators: 15 yes FAC 1 - Rapid Test for Hydrophytic Vegetation 5. Rubus ursinus hes FACU √ 2 - Dominance Test is >50% 6. Operanthe sarmentos OBL √ 3 - Prevalence Index is ≤3.0<sup>†</sup> 7. Cardannine hirsuta FACU \_\_ 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) \_\_\_ 5 - Wetland Non-Vascular Plants<sup>†</sup> Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 44 = Total Cover Woody Vine Stratum (Plot size: \_\_\_\_\_) Hydrophytic Vegetation Present? = Total Cover

Remarks:

% Bare Ground in Herb Stratum

n gravelle lan
1 SANDY LOAIN
nd Grains <sup>2</sup> Location: PL=Pore Lining, M=Matrix,
Indicators for Problematic Hydric Solis <sup>3</sup> :
2 cm Muck (A10)
Red Parent Material (TF2)
Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Indicators of hydrophytic vegetation and
wetland hydrology must be present
unless disturbed or problematic.
Hydric Soil Present? Yes No
14
Connected testing (0 )
Secondary Indicators (2 or more required)
Water-Stained Leaves (B9) (MLRA 1, 2
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C Roots (C3)  Geomorphic Position (D2)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRR A)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRR A)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRR A)
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RRA) Raised Ant Mounds (D6) (LRR A)
Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  s (C6)  FAC-Neutral Test (D5)  RR A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C Geomorphic Position (D2) Shallow Aquitard (D3) S (C6) FAC-Neutral Test (D5) RR A) Frost-Heave Hummocks (D7)
Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  s (C6)  FAC-Neutral Test (D5)  RR A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  s (C6)  FAC-Neutral Test (D5)  RR A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No
Water-Stained Leaves (B9) (MLRA 1, 2  4A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C  Roots (C3)  Geomorphic Position (D2)  Shallow Aquitard (D3)  s (C6)  FAC-Neutral Test (D5)  RR A)  Raised Ant Mounds (D6) (LRR A)  Frost-Heave Hummocks (D7)  Wetland Hydrology Present? Yes No

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region City/County: Centerville / Humbodd sampling Date 4/27/22

State: CA Sampling Point U1 Project/Site: 1/2F Applicant/Owner HRCD Investigator(s) Jane Cipra / Matt Tollen Section, Township, Range Landform (hillslope, terrace, etc.) Local relief (concave, convex, none) Slope (%): Subregion (LRR): \_\_\_\_\_Lat:\_\_\_\_\_\_\_Long \_\_\_\_\_ Datum; Soil Map Unit Name: \_\_\_\_ NWI classification Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_ No \_\_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes \_\_\_\_\_ No \_\_/ Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Extra upland plot 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 \_\_\_\_ = Total Cover That Are OBL, FACW, or FAC: Sapling/Shrub Stratum (Plot size \_\_\_\_\_) Prevalence Index worksheet: Total % Cover of: OBL species \_\_\_\_ x1 = \_ FACW species FAC species FACU species = Total Cover Herb Stratum (Plot size: \_\_ UPL species 1. Holaus lamatus Column Totals: 99 (A) 2. Ranhanus sativus Prevalence Index = B/A = 3.23 FACU Hydrophytic Vegetation Indicators: Pubns ursinus FACU \_\_\_ 1 - Rapid Test for Hydrophytic Vegetation 5. Stacking Tinida 1 FACW N 2 - Dominance Test is >50% Trifolism repens FAC √ 3 - Prevalence Index is ≤3.0¹ 7. Browns dimprus 1 4 - Morphological Adaptations' (Provide supporting 8. Fostica bromoides data in Remarks or on a separate sheet) 9 Pag AUNUA . . \_ 1 \_\_\_ 5 - Wetland Non-Vascular Plants<sup>1</sup> 10 trifolium Lubium Problematic Hydrophytic Vegetation (Explain) 11. Clastonia perfoliata 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 99 = Total Cover Woody Vine Stratum (Plot size ) Hydrophytic Vegetation Present? = Total Cover % Bare Ground in Herb Stratum \_\_\_\_ Remarks:

Profile Description: (Describe to the depth needed to d		III (III abselice of fit	uicators.)
Depth Matrix (inches) Color (moist) % Color (mois	Redox Features t) % Type Loc²	Texture	Remarks
0-411 254 3/1 100 NA	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		High Chank compa
4-1-4 2.54 4/2 100 NA			3
£ /		Med Gorano 14	IZOAD FITT
10"-14 2.54 2/1 100 NS		LOMM	
			0 1 (0.5)
Warning and the state of the st		- 1	
	190	Car.	提 方
	7.27 N		1,687
			2.7
		2	
Type: C=Concentration, D=Depletion, RM=Reduced Matr Hydric Soll Indicators: (Applicable to all LRRs, unless			PL=Pore Lining, M=Matrix
			r Problematic Hydric Solis <sup>3</sup> :
Histosol (A1)	1.0	2 cm Muc	rk (A10) nt Material (TF2)
	icky Mineral (F1) (except MLRA 1		fit Material (1F2) flow Dark Surface (TF12)
	eyed Matrix (F2)		plain in Remarks)
<del></del>	Matrix (F3)	0000 (D	power or correcting/
— · · · · · — ·	rk Surface (F6)	3Indicators of	hydrophytic vegetation and 🐰
	Dark Surface (F7)		drology must be present.
	pressions (F8)	-	urbed or problematic.
Restrictive Layer (if present):			302
Type:			
Depth (inches):		Hydric Soil Pres	ent? Yes No
		ein (4-16"	) AUD non TS (10-H)
MATERY COMPRISED OF TOPSOIL (0-49)		Fi11 (4-16"	) AUD NOW TS (10-H)
MATEIN COMPRISED OF TOPSON (0-49) YDROLOGY Wetland Hydrology Indicators:	) AWO EN BILLEMED		****
MATER COMPRISED OF TOP SOUL (0 - 4 4 YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that	) AWO EN BLUGGED apply)	Secondary	Indicators (2 or more required)
MATE I COMPRISED OF TOP SOLI (0 - 4 4  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1) Wate	apply) r-Stained Leaves (B9) (except	Secondary Water-	Stained Leaves (B9) (MLRA 1, 2,
MATE I + COMPRISED OF TOPSON (0 - 4 1)  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1) Wate  High Water Table (A2) M	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B)	Secondary Water-	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B)
MATE I COMPRISE OF TOPSON (0 - 4 1)  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1) Wate  High Water Table (A2) M  Saturation (A3) Saturation	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11)	Secondary Water- 4A, Draina	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10)
MATEIN COMPRISED OF TOP SOUL (0 - 4 14  IYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1) Wate  High Water Table (A2) M  Saturation (A3) Salt (0  Water Marks (B1) Aqua	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13)	Secondary Water- 4A, Draina- Dry-Se	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required; check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1)	Secondary Water- 4A, Draina- Dry-Se Satura	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9)
MATE I + COMPRISED OF TOP SOUL (0 - 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro	Secondary Water- 4A, Draina: Dry-Se Satura:	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro	Secondary Water- 4A, Draina Dry-Se Satura oots (C3) Secondary Geomo	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3)
MATE I COMPRISED OF TOP SOLI (0 - 4 14  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro ence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C	Secondary  Water- 4A, Draina Dry-Se Satura Oots (C3) Geomo Shallow FAC-N	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5)
MATE I COMPRISED OF TOP SOLI (0 - 4 14  YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro ence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C) ed or Stressed Plants (D1) (LRR A)	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1) Wate  High Water Table (A2) M  Saturation (A3) Salt C  Water Marks (B1) Aqua  Sediment Deposits (B2) Hydro  Drift Deposits (B3) Oxidi  Algal Mat or Crust (B4) Prese  Iron Deposits (B5) Rece  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7) Other	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro ence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro ence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C) ed or Stressed Plants (D1) (LRR A)	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1) Wate  High Water Table (A2) M  Saturation (A3) Salt (C)  Sediment Deposits (B2) Hydro  Drift Deposits (B3) Oxidit  Algal Mat or Crust (B4) Prese  Iron Deposits (B5) Rece  Surface Soil Cracks (B6) Stunt  Inundation Visible on Aerial Imagery (B7) Other  Sparsely Vegetated Concave Surface (B8)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro ence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C ed or Stressed Plants (D1) (LRR A r (Explain in Remarks)	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Rolence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (Ced or Stressed Plants (D1) (LRR A) r (Explain in Remarks)	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
YDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Ro ence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (C) ed or Stressed Plants (D1) (LRR A r (Explain in Remarks)  th (inches):	Secondary  Water- 4A, Draina Dry-Se Satura Oots (C3) Geomo Shallov FAC-N A) Raised Frost-I-	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) or Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) leave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Rolence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (Ced or Stressed Plants (D1) (LRR Ar (Explain in Remarks)  th (inches): th (inches): Wet	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) v Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Rolence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (Ced or Stressed Plants (D1) (LRR Ar (Explain in Remarks)  th (inches): th (inches): Wet	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) or Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) leave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that  Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Rolence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (Ced or Stressed Plants (D1) (LRR Ar (Explain in Remarks)  th (inches): th (inches): Wet	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) or Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) leave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Rolence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (Ced or Stressed Plants (D1) (LRR Ar (Explain in Remarks)  th (inches): th (inches): Wet	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) or Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) leave Hummocks (D7)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one required, check all that Surface Water (A1)	apply) r-Stained Leaves (B9) (except LRA 1, 2, 4A, and 4B) Crust (B11) tic Invertebrates (B13) ogen Sulfide Odor (C1) zed Rhizospheres along Living Rolence of Reduced Iron (C4) nt Iron Reduction in Tilled Soils (Ced or Stressed Plants (D1) (LRR Ar (Explain in Remarks)  th (inches): th (inches): Wet	Secondary	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) or Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) leave Hummocks (D7)

Project/Site: WRE	c	ity/County Cent	erville/Humbold	Sampling Date 4/27/2
Applicant/Owner HRCD			State CA	Sampling Point U2
Investigator(s) Jane Cipra, Matt	Tollen s	Section, Township, Ra	inge	
Landform (hillstope, terrace, etc.):				
Subregion (LRR):				
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical for				
Are Vegetation Soil, or Hydrology				oresent? Yes No
Are Vegetation, Soil, or Hydrology			eeded, explain any answe	
SUMMARY OF FINDINGS – Attach site m	nap showing s	sampling point I	ocations, transects	, important features, et
Hydrophytic Vegetation Present? Yes				
	No V	is the Sampled	1 Area	
Wetland Hydrology Present? Yes	_ No	within a Wetiai	nd? Yes	No
Extra upland plot VEGETATION - Use scientific names of p	plants.			7
		Dominant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:) 1		Species? Status	Number of Dominant S That Are OBL, FACW,	
2.				
3.			Total Number of Domin Species Across All Stra	
4.			Percent of Dominant St	pecies 201
Sapling/Shrub Stratum (Plot size:)	——	- Total Cover	That Are OBL, FACW,	
1			Prevalence Index wor	Sneet: Multiply by:
2				x 1 =
3				x 2 =
4.				x3=
5		= Total Cover		x 4 =
Herb Stratum (Plot size:)				x 5 =
1. Festuca avendinacea			Column Totals:	(A)(B)
2. Iris pseudacorus	10	<u> 081</u>	Prevalence Index	= B/A =
3 Science microcarpus 4. Rubus ursinus		OBL	Hydrophytic Vegetation	
4. KOOUS ursinus	<u> </u>	yes FACU		lydrophytic Vegetation
5 Equisetum telmateia		FACW	✓ 2 - Dominance Tes	
6			3 - Prevalence Inde	
7			4 - Morphological A	daptations1 (Provide supporting or on a separate sheet)
9.			5 - Wetland Non-Va	
10.			Problematic Hydros	hytic Vegetation <sup>†</sup> (Explain)
11			Indicators of hydric soil	and wetland hydrology must
	=	Total Cover	be present, unless distu	rbed or problematic.
Woody Vine Stratum (Plot size)				
1			Hydrophytic Vegetation	
	_	Total Cover		No
% Bare Ground in Herb Stratum		, 5,6, 5576		
Remarks.				

Color (moist)   Secondary   Location: PL=Port Efring, Me-Matrix   Lo	Denth		to the depen	needed to docum			or confirm	the absence	3 OI Maicators	-)
Type: C=Concentration.D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains   Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*;   Histocol (A1)   Histocol (A2)   Sirped Matrix (S5)   Red Parent Material (TP2)   Yery Shallow Dark Surface (RTF12)   Cliher (Explain in Remarks)   Cli		Matrix Color (moist)	0/0				Loc²	Tevture		Remarks
Type: C=Concentration. D=Depletion, RM=Reduced Matrix. CS=Covered or Coated Sang Grains   Location: PL=Prere Living, M=Matrix. Plydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*;   Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*;   2 cm Muck (A10)   Red Parent Material (TF2)   Yes Black Histic (A3)   Loamy Mucky Minreral (F1) (except MLRA 1)   Yes Pstallow Dark Surface (TF12)   Yes Depleted Below Dark Surface (A11)   Depleted Matrix (F2)   Yes Pstallow Dark Surface (TF12)   Yes Collect Oark Surface (F7)   Yes Collect Oark Surface (F8)   Yes Collect Oark Surf						1100			Inch.	
Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains   Location: PL=Pore Lining, M=Matrix, Pydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)   Indicators for Problematic Hydric Soils*;   Histosof (A1)   Sandy Redox (S5)   Indicators for Problematic Hydric Soils*;   Loam Muck (A10)   Red Parent Matrix (F2)   Commy Mucky Mineral (F1) (except MLRA 1)   Red Parent Material (F72)   Very Shallow Dark Surface (F72)   Users Muck (A10)   Problematic Hydric Soils*;   Loamy Mucky Mineral (F1) (except MLRA 1)   Very Shallow Dark Surface (F72)   Users (E72)   User	0 - 414	261 41.	11 34	. 1011	112 9				-	
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histos (A1)  Histos (A1)  Histos (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (except MLRA 1)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Depleted Below Dark Surface (A12)  Sandy Medoy Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (F5)  Thick Dark Surface (A12)  Sandy Mucky Mineral (F1)  Sandy Mucky Mineral (F5)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F6)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F6)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Restrictive Layer (if present):  Type:  No  Depth (inches):  Remarks:  No  Track of OSSTIAT  FAI KED A-A DIT TECT  VP I AND SOLIS ACC I PECHW OF DIVINGED DIVINGE	95 14			73/11	10/0	<u></u>		COMM	Maistur	4
Remarks:  No hubbot destruct   FAIRD AADI TEST  VPIAND Soi Is ACC u   Redit of Disalmace Diff(  VAIL Test of Disalmace Sign Is ACC u   Redit of Disalmace Diff(  VAIL Test of Compand of Disal	Histosof Histosof Histosof Histosof Histosof Black H Hydroge Deplete Thick D Sandy N Sandy (Restrictive	Indicators: (Applications)  (A1)  pipedon (A2)  istic (A3)  en Sulfide (A4)  d Below Dark Surface  ark Surface (A12)  Mucky Mineral (S1)  Gleyed Matrix (S4)  Layer (if present):	e (A11)	RRs, unless other Sandy Redox (\$ Stripped Matrix Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Su Depleted Dark \$	wise note (S6) (S6) Mineral (F1) Matrix (F2) (F3) rface (F6) Surface (F	d.) ) (except		Indicat 2 c Re Ver Oth Indicat wett unle	ors for Proble m Muck (A10) d Parent Mater ry Shallow Dark ner (Explain in tours of hydrophe and hydrology ss disturbed or	matic Hydric Solls <sup>3</sup> :  ial (TF2) k Surface (TF12) Remarks)  ytic vegetation and must be present, problematic.
Netland Hydrology Indicators:  Primary Indicators (minimum of one required: check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Salt Crust (B11)  Sediment Deposits (B2)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Secondary Indicators (2 or more required)  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (MLRA 1,  Water-Stained Leaves (B9) (mLRA 1,  A, and 4B)  Drainage Patterns (B10)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C   E	Namaco Fil		FAILED A	A DI	TEST		n-owe l	•		
Primary Indicators (minimum of one required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9) (except  Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B)  Saturation (A3)  Salt Crust (B11)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Aguatic Invertebrates (B13)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C2)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Semarks:	- L J	Muistin @ 10	د وم "	UPIAND S	sals	ASS	-1 / B	56 IW 07	Drainn	e Ditch
Surface Water (A1)			د روط "	COLLECTED C	SOILS PENLL	ACC COG	1/B	56 IM 05	Drainn	e Dites
High Water Table (A2)  Saturation (A3)  Salt Crust (B11)  Drainage Patterns (B10)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Aquatic Invertebrates (B13)  Drift Deposits (B3)  Adjustic Invertebrates (B13)  Dry-Season Water Table (C2)  Saturation Visible on Aerial Imagery (C)  Drift Deposits (B3)  Adjusted Rhizospheres along Living Roots (C3)  Geomorphic Position (D2)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Shallow Aquitard (D3)  Iron Deposits (B5)  Recent Iron Reduction in Tilled Soils (C6)  FAC-Neutral Test (D5)  Surface Soil Cracks (B6)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Water Table Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Previous inspections), if available:  Remarks:	YDROLC	GY	,	COLLETED C	Sals PENL	ACS G	4 / R	70 WIDE	DISAINA	e Dites
Surface Water Present? Yes No 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 photos, previous inspections), if available:  Remarks:	YDROLC	OGY rdrology Indicators:	,	Colletted (	? PENL	ACC C	4 / R			
Nater Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Ves	YDROLO  Wetland Hy Primary Indi Surface High W. Saturati Water M. Sedime Drift De Algal M. Iron De Surface Inundat Sparsel	ody rdrology Indicators: cators (minimum of of of the Water (A1) ater Table (A2) ion (A3) Marks (B1) rnt Deposits (B2) rposits (B3) at or Crust (B4) posits (B5) at Soil Cracks (B6) ion Visible on Aerial In	one required;	check all that apple Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence of Recent Iro Stunted or Other (Exp	y) med Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduce n Reductio Stressed	es (B9) (e nd 4B)  or (C1) es along d Iron (C4) on in Tillee	xcept Living Rock ) d Soils (C6	Secc	ondary Indicato Water-Stained 4A, and 4B; Drainage Patte Dry-Season Wasaturation Visit Geomorphic Poshallow Aquital FAC-Neutral Te Raised Ant Mo	rs (2 or more required) Leaves (B9) (MLRA 1, 2, ) rns (B10) ater Table (C2) ble on Aerial Imagery (C9 bition (D2) rd (D3) est (D5) unds (D6) (LRR A)
Saturation Present? Yes No Depth (inches): 10" Wetland Hydrology 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:	YDROLO Vetland Hy Primary Indi Surface High W. Saturati Water M. Sedime Drift De Algal M. Iron De Surface Inundat Sparsei	device of the control	one required; Imagery (B7) e Surface (B8	check all that apple Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp.)	y) ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduce n Reduction Stressed plain in Red	es (B9) (e nd 4B) or (C1) es along d Iron (C4) on in Tilled	xcept Living Roc ) d Soils (C6	Secc	ondary Indicato Water-Stained 4A, and 4B; Drainage Patte Dry-Season Wasaturation Visit Geomorphic Poshallow Aquital FAC-Neutral Te Raised Ant Mo	rs (2 or more required) Leaves (B9) (MLRA 1, 2, ) rns (B10) ater Table (C2) ble on Aerial Imagery (C9 bition (D2) rd (D3) est (D5) unds (D6) (LRR A)
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	YDROLC Vetland Hy Primary Indi Surface High W. Saturati Water M. Sedime Drift De Algal M. Iron De Surface Inundat Sparsel Field Obser	rdrology Indicators: cators (minimum of of the Water (A1) ater Table (A2) ion (A3) Marks (B1) int Deposits (B2) iposits (B3) at or Crust (B4) posits (B5) is Soil Cracks (B6) ion Visible on Aerial inty Vegetated Concavervations: ter Present?	one required; Imagery (B7) e Surface (B8	check all that apple Water-Stai MLRA Salt Crust Aquatic Int Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	y) ned Leave 1, 2, 4A, a (B11) vertebrates Sulfide Od Rhizospher of Reduce n Reduction Stressed plain in Reduction	es (B9) (e nd 4B) or (C1) es along d Iron (C4) on in Tilled	xcept Living Roc ) d Soils (C6	Secc	ondary Indicato Water-Stained 4A, and 4B; Drainage Patte Dry-Season Wasaturation Visit Geomorphic Poshallow Aquital FAC-Neutral Te Raised Ant Mo	rs (2 or more required) Leaves (B9) (MLRA 1, 2, ) rns (B10) ater Table (C2) ble on Aerial Imagery (C9 bition (D2) rd (D3) est (D5) unds (D6) (LRR A)
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Project/Site WRE	City	/County	Laville Humboldts	ampling Date 4/27/3
Applicant/Owner: HRCD			State S	moling Point 1/3
nvestigator(s) Jane Cipra, Matt				
andform (hilistope, terrace, etc.):	Loc	al relief (concave,	convex none)	Slope (%)
Subregion (LRR):	Lat		Long:	Datum;
Soil Map Unit Name:				
Are climatic / hydrologic conditions on the site typical				
Are Vegetation, Soil or Hydrology			"Normal Circumstances" pres	
re Vegetation, Soil or Hydrology	naturally proble		eeded, explain any answers i	
SUMMARY OF FINDINGS - Attach site	map showing sa			•
	No V		Spirit Territoria	
	No	is the Sampled		
Wetland Hydrology Present? Yes	No	within a Wetla	nd? Yes	No
Remarks				
Extra upland plot				
EGETATION – Use scientific names of	•			
Tree Stratum (Plot size)		minant Indicator ecies? Status	Dominance Test workshe	
1			Number of Dominant Spec That Are OBL, FACW, or F	
2:				
3			Total Number of Dominant Species Across All Strata:	2 (B)
4			Percent of Dominant Speci	
Sapling/Shrub Stratum (Plot size	= T	otal Cover	That Are OBL, FACW, or F	AC 50% (A/B
1			Prevalence Index worksh	
2.			Total % Cover of.	Multiply by:
3.				_ x1= _ 5
4.			FACW species	_ x2=
5,			FAC species 45	
	= 7	otal Cover	FACU species 24	
Herb Stratum (Plot size)  1	45 ,	US FAC	UPL species Column Totals: 75	$\times 5 = \frac{\times 5}{(A)} = \frac{238}{(B)}$
2. Festuca my vos		FALU		and a man
3. Scirous interscarpus	5	OBL	Prevalence Index = E	
4. Privous ursinus	2.0	15 FACU	Hydrophytic Vegetation I	
5. Souchers asper	1	FACU	1 - Rapid Test for Hydr 2 - Dominance Test is	
Rumex acetosella		FACU	✓ 2 - Dominance Test is  ✓ 3 - Prevalence Index is	
. Egnisetum telmateia		FACW	The state of the s	as.u Itations¹ (Provide supporting
Galium aparine		FALU	data in Remarks or	on a separate sheet)
)			5 - Wetland Non-Vascu	
10			Problematic Hydrophyt	
11			<sup>1</sup> Indicators of hydric soil and be present, unless disturbe	d wetland hydrology must
Woody Vine Stratum (Plot size)	= To	ital Cover	be present, unless disturbe	o or problematic
1				
			Hydrophytic Vegetation	/
2 % Bare Ground in Herb Stratum	= To	ital Cover	Present? Yes	No

# Attachment C

**Plant Species Observed** 

Table C.1 All plant species observed in the PSB 2013-2022. Survey areas are Centerville Road (C. Rd), the Russ Ranch & Timber Properties (RR&T), and the Eel River Estuary Preserve (EREP).

Scientific Name	Common Name	Special Status	Native	Survey Area		Lifeform	
Abronia latifolia	sand-verbena		Native			EREP	Herb
Achillea millefolium	yarrow		Native	C. Rd	RR&T	EREP	Herb
Acmispon parviflorus	lotus		Native			EREP	Herb
Agrostis stolonifera	creeping bentgrass		Non-native			EREP	Herb
Aira caryophyllea	silver European hairgrass		Non-native	C. Rd		EREP	Herb
Alnus rubra	red alder		Native		RR&T	EREP	Tree
Alopecurus aequalis	short-awn foxtail		Native		RR&T	EREP	Herb
Alopecurus saccatus	Pacific foxtail		Native		RR&T	EREP	Herb
Ambrosia chamissonis	beach bur-sage		Native			EREP	Herb
Ammophila arenaria	European beach grass		Non-native			EREP	Herb
Anagallis arvensis	scarlet pimpernel		Non-native		RR&T	EREP	Herb
Angelica lucida	sea watch	CRPR 4.2	Native			EREP	Herb
Anthoxanthum odoratum	sweet vernal grass		Non-native	C. Rd		EREP	Herb
Aquilegia formosa	western columbine		Native	C. Rd			Herb
Arctotheca calendula	cape weed		Non-native		RR&T	EREP	Herb
Artemisia pycnocephala	coastal sagewort		Native			EREP	Herb
Athyrium felix-femina	lady fern		Native	C. Rd			Fern
Atriplex prostrata	fat-hen		Non-native		RR&T	EREP	Herb
Avena sativa	cultivated oat		Non-native	C. Rd		EREP	Herb
Baccharis pilularis ssp. consanguinea	coyote brush		Native	C. Rd		EREP	Shrub
Bellis perennis	English daisy		Non-native		RR&T	EREP	Herb
Bolboschoenus maritimus ssp. paludosus	saltmarsh bulrush		Native			EREP	Herb
Briza maxima	rattlesnake grass		Non-native	C. Rd	RR&T		Herb
Briza minor	lesser quaking grass		Non-native	C. Rd			Herb
Bromus diandrus	ripgut grass		Native	C. Rd		EREP	Herb
Bromus hordeaceus	soft chess		Native	C. Rd	RR&T	EREP	Herb
Bromus macrostachys	Mediterranean brome		Non-native		RR&T		Herb
Cakile maritima	sea rocket		Non-native			EREP	Herb

Scientific Name	Common Name	Special Status	Native		Survey Are	ea	Lifeform
Callitriche heterophylla	water-starwort		Native			EREP	Herb
Calystegia soldanella	beach morning-glory		Native			EREP	Herb
Camissoniopsis cheiranthifolia	beach evening-primrose		Native			EREP	Herb
Cardamine hirsuta	hairy bittercress		Non-native	C. Rd			Herb
Cardionema ramosissimum	sandmat		Native			EREP	Herb
Carex lyngbyei	Lyngby's sedge	CRPR 2B.2	Native			EREP	Herb
Carex obnupta	slough sedge		Native			EREP	Herb
Carex pansa	sanddune sdege		Native			EREP	Herb
Castilleja ambigua ssp. humboldtiensis	Humboldt Bay owl's-clover	CRPR 1B.2	Native			EREP	Herb
Cerastium fontanum ssp. vulgare	mouse-ear chickweed		Non-native			EREP	Herb
Cerastrium glomeratum	mouse-ear chickweed		Non-native	C. Rd			Herb
Circium arvense	Canada thistle		Non-native		RR&T	EREP	Herb
Cirsium vulgare	bull thistle		Non-native	C. Rd	RR&T	EREP	Herb
Claytonia perfoliata	miner's lettuce		Native	C. Rd		EREP	Herb
Claytonia rubra ssp. depressa	claytonia		Native			EREP	Herb
Conium maculatum	poison hemlock		Non-native	C. Rd	RR&T	EREP	Herb
Cotula coronopifolia	brass-buttons		Non-native		RR&T	EREP	Herb
Crassula connata	sand pygmyweed		Non-native	C. Rd			Herb
Cuscuta spp.	dodder		Native		RR&T	EREP	Herb
Cynosurus echinatus	bristly dogtail grass		Non-native			EREP	Herb
Cyperus eragrostis	tall flatsedge		Native			EREP	Herb
Dactylis glomerata	orchard grass		Non-native	C. Rd	RR&T	EREP	Herb
Danthonia sp.	oat grass		Non-native	C. Rd			Herb
Daucus carota	Queen Anne's lace		Non-native	C. Rd		EREP	Herb
Deschampsia caespitosa	tufted hairgrass		Native			EREP	Herb
Digitalis purpurea	foxglove		Non-native	C. Rd			Herb
Distichlis spicata	salt grass		Native		RR&T	EREP	Herb
Echinochloa crus- pavonis var. crus- pavonis	gulf cockspur grass		Non-native			EREP	Herb

Scientific Name	Common Name	Special Status	Native		Survey Are	ea	Lifeform
Eleocharis macrostachya (palustris)	spikerush		Native	C. Rd	RR&T	EREP	Herb
Elymus sp.	wild rye		Native		RR&T		Herb
Epilobium ciliatum	fringed willowherb		Non-native	C. Rd			Herb
Equisetum telmateia var. braunii	giant horsetail		Native	C. Rd		EREP	Fern ally
Erigeron glaucus	seaside daisy		Native		RR&T	EREP	Herb
Eriogonum latifolium	seaside wild buckwheat		Native			EREP	Herb
Erodium cicutarium	redstem filaree		Non-native			EREP	Herb
Festuca arundinacea	tall fescue		Non-native	C. Rd	RR&T	EREP	Herb
Festuca bromoides	brome fescue		Non-native	C. Rd			Herb
Festuca microstachys	Pacific fescue		Native		RR&T		Herb
Festuca myuros	rattail sixweeks grass		Non-native	C. Rd		EREP	Herb
Festuca octoflora	six week fescue		Non-native	C. Rd			Herb
Festuca perennis	rye grass		Non-native	C. Rd	RR&T	EREP	Herb
Festuca rubra	red fescue		Native			EREP	Herb
Foeniculum vulgare	fennel		Non-native			EREP	Herb
Fragaria vesca	wood strawberry		Native			EREP	Herb
Frangula purshiana	Cascara sagrada		Native	C. Rd			Tree
Galium aparine	cleavers		Non-native	C. Rd			Herb
Gaultheria shallon	salal		Native	C. Rd			Shrub
Geranium dissectum	cut-leaved cranesbill		Non-native	C. Rd	RR&T	EREP	Herb
Geranium molle	dove's-foot cranesbill		Non-native			EREP	Herb
Gilia millefoliata	dark-eyed gilia	CRPR 1B.2	Native			EREP	Herb
Glehnia littoralis ssp. leiocarpa	American glehnia	CRPR 4.2	Native			EREP	Herb
Grindelia stricta var. platyphylla	gumplant		Native			EREP	Herb
Helminthotheca echioides	bristly ox-tongue		Non-native			EREP	Herb
Helxia soleirolii	baby's tears		Non-native	C. Rd			Herb
Hirschfeldia incana	short pod mustard		Non-native		RR&T	EREP	Herb
Holcus lanatus	common velvet grass		Non-native	C. Rd	RR&T	EREP	Herb
Hordeum brachyyantherum ssp. brachyantherum	California meadow barley		Native			EREP	Herb

Scientific Name	Common Name	Special Status	Native		Survey Are	ea	Lifeform
Hordeum marinum ssp. gussoneanum	barley		Non-native		RR&T	EREP	Herb
Hydrocotyle ranunculoides	marsh pennywort		Native			EREP	Herb
Hypochaeris radicata	rough cat's-ear		Non-native	C. Rd	RR&T	EREP	Herb
Iris pseudacorus	bearded iris		Non-native	C. Rd			Herb
Isolepis cernua	low bulrush		Native	C. Rd			Herb
Jaumea carnosa	jaumea		Native			EREP	Herb
Juncus bolanderi	Bolander's rush		Native	C. Rd	RR&T	EREP	Herb
Juncus breweri	Brewer's rush		Native			EREP	Herb
Juncus bufonius var. bufonius	toad rush		Native	C. Rd	RR&T	EREP	Herb
Juncus bufonius var. occidentalis	western toad rush		Native	C. Rd			Herb
Juncus effusus	common rush		Native	C. Rd	RR&T		Herb
Juncus lescurii	San Francisco rush		Native			EREP	Herb
Juncus occidentalis	western rush		Native	C. Rd			Herb
Juncus patens	rush		Native		RR&T	EREP	Herb
Juncus tenuis	path rush		Native	C. Rd			Herb
Lathyrus littoralis	wild pea		Native			EREP	Herb
Layia carnosa	beach layia	FT, SE, CRPR 1B.1	Native			EREP	Herb
Lemna sp.	duckweed		Non-native		RR&T		Herb
Leontodon saxatilis	lesser hawkbit		Non-native	C. Rd			Herb
Lepidium virginicum	Virginia pepperweed		Non-native			EREP	Herb
Linum bienne	flax		Non-native		RR&T		Herb
Lonicera involucrata	twinberry		Native	C. Rd			Shrub
Lotus corniculatus	birdfoot trefoil		Non-native	C. Rd	RR&T	EREP	Herb
Lotus peduncularis	big trefoil		Non-native	C. Rd			Herb
Lupinus albifrons	lupine		Native			EREP	Herb
Lupinus polyphyllus	bigleaf lupine		Non-native	C. Rd			Herb
Lupinus rivularis X arboreus	hybrid lupine		Non-native			EREP	Herb
Lysichiton americanus	skunk cabbage		Native	C. Rd			Herb
Malva nicaeensis	bull mallow		Non-native		RR&T	EREP	Herb
Marah oregana	wild cucumber		Native	C. Rd			Herb

Scientific Name	Common Name	Special Status	Native		Survey Are	ea	Lifeform
Matricaria discoidea	pineapple weed		Non-native			EREP	Herb
Medicago lupulina	black medick		Non-native			EREP	Herb
Medicago polymorpha	burclover		Non-native		RR&T		Herb
Medicago sativa	alfalfa		Non-native	C. Rd			Herb
Mentha pulegium	pennyroyal		Non-native		RR&T	EREP	Herb
Mentha spicata	spearmint		Non-native	C. Rd			Herb
Mimulus guttatus	monkeyflower		Native			EREP	Herb
Morella californica	California wax myrtle		Native	C. Rd			Tree
Nuttallanthus texanus	blue toadflax		Native			EREP	Herb
Oenanthe sarmentosa	water parsley		Native	C. Rd	RR&T		Herb
Parapholis incurva	sickle grass		Non-native			EREP	Herb
Parentucellia viscosa	yellow bartsia		Non-native	C. Rd			Herb
Phalaris aquatica	Harding grass		Non-native			EREP	Herb
Plantago lanceolata	English plantain		Non-native	C. Rd	RR&T	EREP	Herb
Plantago major	common plantain		Non-native			EREP	Herb
Plantago maritima	sea plantain		Native			EREP	Herb
Plantago subnuda	plantain		Native			EREP	Herb
Poa annua	annual bluegrass		Non-native	C. Rd		EREP	Herb
Poa compressa	Canada bluegrass		Non-native		RR&T		Herb
Poa pratensis	Kentucky bluegrass		Non-native	C. Rd			Herb
Polycarpa tetraphyllum	fourleaf allseed		Non-native	C. Rd			Herb
Polygonum aviculare ssp. depressum	common knotgrass		Non-native			EREP	Herb
Polygonum paronychia	beach knotweed		Native			EREP	Herb
Polypodium calirhiza	California polypody		Native	C. Rd			Fern
Polypogon maritimus	Mediterranean beard grass		Non-native			EREP	Herb
Polystichum munitum	Western sword fern		Native	C. Rd			Fern
Polystichum munitum	Western sword fern		Native		RR&T		Fern
Portulaca oleracea	purslane		Non-native			EREP	Herb
Potentilla anserina ssp. pacifica	Pacific silverweed		Native	C. Rd	RR&T	EREP	Herb

Scientific Name	Common Name	Special Status	Native	Survey Area			Lifeform
Pseudognaphalium stramineum	cudweed		Native			EREP	Herb
Pteridium aquilinum	brackenfern		Native	C. Rd			Fern
Ranunculus muricatus	rough-fruited buttercup		Native			EREP	Herb
Ranunculus repens	creeping buttercup		Non-native	C. Rd	RR&T	EREP	Herb
Raphanus sativus	wild radish		Non-native	C. Rd	RR&T	EREP	Herb
Rosa californica	California wild rose		Native	C. Rd			Shrub
Rubus armenicus	Himalayan blackberry		Non-native	C. Rd			Shrub
Rubus parviflorus	thimbleberry		Native	C. Rd			Herb
Rubus ursinus	California blackberry		Native	C. Rd		EREP	Herb
Rumex acetosella	sheep sorrel		Non-native	C. Rd	RR&T	EREP	Herb
Rumex conglomeratus	dock		Non-native			EREP	Herb
Rumex crispus	curly dock		Non-native			EREP	Herb
Rumex salicifolius	willow dock		Native	C. Rd			Herb
Rumex transitorius (salicifolius)	Pacific willow dock		Non-native		RR&T		Herb
Ruppia maritima	ditch-grass		Native			EREP	Herb
Sagina maritima	sea pearlwort		Non-native	C. Rd			Herb
Salicornia depressa (Sarcocornia pacifica)	pickleweed		Native		RR&T	EREP	Herb
Salix hookeriana	coastal willow		Native	C. Rd		EREP	Tree
Schoenoplectus pungens var. longispicatus	common three-square bulrush		Native			EREP	Herb
Scirpus microcarpus	panicled bulrush		Native	C. Rd			Herb
Senecio glomeratus	fireweed		Non-native			EREP	Herb
Senecio sylvaticus	woodland ragwort		Non-native			EREP	Herb
Silene gallica	catchfly		Non-native			EREP	Herb
Silybum marianum	milk thistle		Non-native			EREP	Herb
Sisyrinchium californicum	golden blue-eyed grass		Native	C. Rd			Herb
Sonchus asper ssp. asper	prickly sow thistle		Non-native	C. Rd	RR&T	EREP	Herb
Spartina densiflora	cord grass		Non-native			EREP	Herb
Spergularia canadensis var. occidentalis	western sand-spurrey	CRPR 2B.1	Native			EREP	Herb

Scientific Name	Common Name	Special Status	Native	9	Survey Are	a	Lifeform
Spergularia macrotheca var. macrotheca	sticky sand-spurrey		Native		RR&T	EREP	Herb
Spergularia rubra	sand-spurrey		Non-native			EREP	Herb
Stachys rigida	rough hedgenettle		Native	C. Rd			Herb
Stellaria crispa	chickweed		Native		RR&T	EREP	Herb
Stellaria nitens	shining chickweed		Native			EREP	Herb
Symphoriotrichum chilensis	Pacific aster		Native			EREP	Herb
Tanacetum bipinnatum	dune tansy		Native			EREP	Herb
Taraxacum officinale	common dandelion		Non-native			EREP	Herb
Trifolium dubium	clover		Non-native	C. Rd		EREP	Herb
Trifolium fragiferum	strawberry clover		Non-native			EREP	Herb
Trifolium pratense	red clover		Non-native			EREP	Herb
Trifolium repens	white clover		Non-native	C. Rd	RR&T	EREP	Herb
Trifolium wormskioldii	cows clover		Native		RR&T	EREP	Herb
Triglochin maritima	common arrow-grass		Native			EREP	Herb
Triglochin striata	streaked arrow-grass		Native		RR&T		Herb
Urtica dioica	stinging nettle		Native		RR&T		Herb
Veronica americana	American brookline		Native			EREP	Herb
Vicia hirsuta	hairy vetch		Non-native	C. Rd			Herb
Vicia nigricans	giant vicia		Non-native	C. Rd			Herb
Vicia sativa	common vetch		Non-native	C. Rd	RR&T		Herb
Vicia tetrasperma	smooth vetch		Non-native	C. Rd			Herb
Vicia villosa ssp. villosa	hairy vetch		Non-native			EREP	Herb
Zostera maritima	eelgrass	NMFS	Native			EREP	Herb

Status abbreviations:

FT = Federal Threatened; SE = State Endangered

NMFS = The National Marine Fisheries Service has designated eelgrass as Essential Fish Habitat (EFH) and a Habitat of Particular Concern under the Magnuson-Stevens Fishery Conservation and Management Act in 1996.

California Rare Plant Ranks (CRPR), CNPS rankings for rare plants (CNPS 2022): 1B = Plants rare, threatened or endangered in California and elsewhere; 2 = Plants rare, threatened, or endangered in California, but more common elsewhere; 3 = Plants about which more information is needed (a review list); 4 = Plants of limited distribution (a watch list).

Threat Code extensions and their meanings: ".1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 – Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat); (CDFW 2021b).

# Appendix D

**Monitoring and Maintenance Plan** 



# Russ Creek & Centerville Slough Restoration Project

**Monitoring and Maintenance Plan** 

Humboldt County Resource Conservation District 24 May 2023

→ The Power of Commitment



**GHD Inc. 380** 

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Appendix A Potential Management Actions

# 1. Introduction

This Monitoring and Maintenance Plan (Plan) has been developed for the Russ Creek and Centerville Slough Restoration Project (Project). The Project includes goals and objectives related to protection of agricultural land and habitat restoration. Monitoring and maintenance following construction of the project is anticipated to be required to meet the long-term Project goals. This Plan was developed to cover specific aspects of managing natural resources and working lands within the Project Area. The Plan is limited in scope to the specific aspects discussed. While every attempt is made to be comprehensive in scope, every possible condition or need cannot be foreseen. Monitoring and maintenance actions described in this Plan will be covered in the CEQA document as well as other regulatory permits obtained for the Project. However, new, expanded, or unforeseen impacts to regulated habitats, waters, or wetlands may require modifications to permits or new permits in the future. The monitoring and maintenance activities defined in this Plan are intended to commence upon completion of Project construction and would continue for the minimum life of the Project, typically 20-25 years. Monitoring and maintenance activities may also be required by the Natural Resources Conservation Services (NRCS) Agricultural Conservation Easement Program - Wetland Reserve Easement (ACEP-WRE) beyond the term of the grant funding agencies.

# 1.1 Responsible Parties

The Project Area as defined in the CEQA document includes the Eel River Estuary Preserve (EREP) owned by The Wildlands Conservancy (TWC) and various parcels privately owned by Russ Ranch and Timber, L.L.C (RR&T), Linda S Russ Revocable Trust, and a small segment of existing berm located on the O'Rourke Foundation (ORF) and the segment of Russ Lane on Harville Ranch L.L.C. for which TWC has an access easement over. The Wildlands Conservancy will oversee implementation of the Plan on the EREP and RR&T will oversee implementation of the Plan on RR&T. Based on needs and available resources, each landowner may choose to collaborate with various partners to assist with the monitoring and maintenance such as the NRCS, HCRCD, U.S. Fish & Wildlife Services (USFWS), consultants, volunteers, and other specialists.

An NRCS Agricultural Conservation Easement Program - Wetland Reserve Easement (ACEP-WRE) exists over the entire Project Area on RR&T and a majority of the Project Area on EREP. The easement allows for periodic maintenance activities to be planned and implemented under a Compatible Use Authorization (CUA) between the NRCS and landowners. All monitoring and maintenance activities described in this Plan will be completed in accordance with the NRCS CUA process. As large portions of the Project Area would remain in use for agricultural purposes, management activities related to the agricultural lands will also be consistent with The Wildlands Conservancy's Grazing Management Plan (NRCS 2019). The Grazing Management Plan may need to be updated following Project implementation to reflect the grazing area and should be compatible with the existing drainage easement that may also need to be amended once the Project is implemented.

NRCS has a unique monitoring responsibility on the Project Area lands protected by its perpetual conservation easements. All ACEP-WRE easements are required by policy to be monitored annually in accordance with the Common Provisions Manual (440-CPM-527-P). Prior to the end of each federal fiscal year, monitoring information collected must be entered into NRCS' easement business tool, and a copy of the completed annual monitoring worksheet must be retained for the duration of the easement enrolment according to federal records management requirements. NRCS monitors the easements it administers to ensure that the integrity of the easements are being maintained, ensure that the goals and objectives for which the easements were purchased are being met, identify management or maintenance actions needed, and maintain a relationship with the landowner and, where applicable, other conservation partners. Monitoring ensures the terms and conditions of the easement deeds are being met and program objectives are being achieved in accordance with statutory and regulatory authorities and requirements. Additionally, the annual completion and reporting of the outcomes of monitoring allows the easement condition status to be determined in the easement business tool and reported as appropriate in the agency's annual accountability reporting.

Coordination and communication related to monitoring and maintenance activities described herein shall ensure that future actions are well coordinated among all parties and safely orchestrated, including activities specific to stockpiling and staging.

# 1.2 Drainage Easement

A formal drainage easement recorded on October 2008 exists on EREP and ORF, with TWC and Lytel (ORF) Foundation as grantors and Russ properties as grantees. The drainage easement allows the grantees (various Russ property owners, collectively "Russ") to enter and perform certain drainage maintenance functions on the EREP and ORF property, to the extent that these are legally permissible. Key actions include removal of sand and sediment from the Western Drainage Ditch when it becomes clogged, and maintenance of the Cut-Off Slough tide gate and perimeter dike in order to facilitate drainage when conditions in the Eel River estuary permit and as environmental regulations allow. Under the drainage easement, the grantees cannot increase the width of the ditch as it presently exists. While the drainage easement is specific to these three parties, the elements included in the drainage easement (tide gates, dikes and channels) are critical for providing drainage that support agricultural uses on multiple adjacent properties. The Project components proposed on EREP are in part intended to improve aquatic habitat access while not impacting drainage on adjoining properties. Once finalization of the design and prior to construction, it is understood the drainage easement will be amended to accommodate the reconfiguration of the Project components. The actions defined in this Plan are intended to be compatible with the drainage easement.

# 2. Overview of Project Components and Long-Term Management Needs

This Plan was developed to support post-construction ongoing management and maintenance activities that may be necessary to assure the long-term hydraulic and ecological functions of the Project and operational needs to protect land. The property owners and NRCS will regularly monitor the Project Area response relative to the restoration design intent. NRCS monitoring is primarily focused on easement compliance and will include a review of restoration objectives, management plans, vegetation, hydrology and any needs for additional enhancements. Maintenance activities will be prioritized and implemented based on the monitoring outcomes. Additional monitoring activities are to be determined but would generally include observations of physical character to determine whether the Project has been successful. The impacts associated with the anticipated operational and maintenance activities would be infrequent and short-term in nature. In addition, they are anticipated to be no greater than the traditional maintenance historically performed on these lands under existing conditions and far less than the impacts associated with Project construction as described in the CEQA document.

# 2.1 Description of Project Components and Potential Maintenance Needs

This section summarizes the functions and potential maintenance needs for the primary project components. Following construction, long-term maintenance will be required to ensure the Project design functions as intended. Maintenance needs will be primarily limited to the setback berm, drainage infrastructure (channels, ditches, and tide gates), back dunes and vegetation management.

#### 2.1.1 Russ Lane Maintenance

Russ Lane maintenance will be needed as a result of increased visitation levels. Maintenance of Russ Lane, including but not limited to periodic resurfacing, pothole treatment, turnout maintenance, and roadway shoulder maintenance, associated with increased visitation will be led by TWC under a future maintenance agreement between TWC and the Russ family. The maintenance agreement will detail the procedure for operations and a maintenance schedule.

#### 2.1.2 Setback Berm

An approximate four-mile-long agricultural protection and access setback berm would be located on the eastern side of the Centerville Slough marsh network to prevent the adjacent agricultural lands from tidal inundation and wave overwash. The set-back berm top would have a gravel surface to provide site access. The setback berm is designed to operate without extensive maintenance. Monitoring will consist of qualitative monitoring including visual inspections performed annually and after major storm and high tide events by an individual qualified to perform these inspections. Monitoring will look for evidence of obvious flooding and erosion or erosion resulting from wind generated waves. Maintenance of the setback berm would be triggered by observations of the physical character of the berm each year and following extreme storm events. If necessary, the setback berm would be mowed annually to discourage growth of woody vegetation and invasive plant species. Repair from erosion or burrowing animals would occur on an as-needed basis. Grading and/or re-graveling portions of the setback berm would occur following extreme storm events, if damage occurs, or once approximately every 10-15 years.

## 2.1.3 Tidal Wetlands (Channels, Habitat Ridges and Lagoons)

The Project area west of the setback berm will include a realigned and expanded Centerville Slough along former tidal channels. The re-established Centerville Slough connection to Eel River will increase the tidal prism within the Project Area. The Centerville Slough channel will be approximately four miles in length with an increasing depth and width in the northerly direction which will increase tidal exchange to restored tidal wetlands via dendritic inter-tidal channels. The increased tidal prism would increase sediment transport throughout the system and provide habitat variability and increased complexity, promoting sediment accretion in subsided areas through a network of inter-tidal lagoons and habitat ridges. The lagoons would passively evolve into inter-tidal salt marshes with sediment accretion from the Eel River and Russ Creek over time. The tidal wetland system of channels, ridges and lagoons have been designed in equilibrium with the restored tidal prism.

Debris and/or sediment accumulation within the tidal channels may occur overtime and could reduce tidal circulation within the tidal wetlands. Conversely, scour or erosion of the channels and ridges could also occur and thereby increase tidal prism. Under either scenario, if a change in tidal circulation and/or sediment transport from the original design intent occurs based on visual observations of water levels and vegetation composition, debris removal, and/ or re-contouring of the tidal channels, ridges or lagoons may be needed to achieve the desired function. Sediment placement on tidal wetlands would occur if wetland function would be unimpacted and the purpose of the reuse is to promote habitat restoration and/or sea level rise resiliency for habitat diversity purposes.

### 2.1.4 Tide Gates, Culverts and Perimeter Drainage Ditches

The Project proposes new culverts through the new set-back berm all equipped with flood gates. The culverts would vary in size and be equipped with side and/or top hinge gates. The gates would prevent tidal and river flood inundation landward and would open when the inboard water levels are higher relative to outboard which would typically occur daily, providing aquatic organism passage and drainage from adjacent agricultural land. Additionally, the six existing tide gates on the Cut-off Slough tide gate structure will be replaced as part of the Project.

The new gated culverts and perimeter drainage ditch on the outboard (east side) of the setback berm would be monitored regularly and following extreme storms to ensure proper functioning. The culvert and ditch elevations will be compared to the elevations on the Record Drawings. If needed, debris and sediment would be removed from culverts and/or ditches consistent with the Drainage Easement and CUA process to maintain the design function. Sediment removed would be reused throughout the Project Area as part of ongoing agricultural operations or placed in subsided tidal lagoons to increase pace of salt marsh accretion. Sediment reuse on wetland areas would only occur if wetland function would be unimpacted and the purpose of the reuse is to promote habitat restoration and/or sea level rise resiliency for habitat diversity purposes.

## 2.1.5 Russ Creek and Riparian Corridor

Approximately 1,500 linear feet of Russ Creek extending north of the RR&T-TWC property boundary to the new tide gate would be widened and deepened to meet the hydraulic and habitat objectives. A riparian corridor would be established adjacent to the restored Russ Creek channel. If needed, debris and sediment would be removed from the channel. Maintenance activities would also include vegetation management, i.e., selective thinning, flash grazing, invasive removal, and potential re-vegetation consistent with the Project goals. Sediment removed would be reused throughout the Project Area as part of ongoing agricultural operations or placed in subsided tidal lagoons to increase pace of salt marsh accretion. Sediment reuse on wetland areas would only occur if wetland function would be unimpacted and the purpose of the reuse is to promote habitat restoration and/or sea level rise resiliency for habitat diversity purposes.

#### 2.1.6 Back Dune Berms

The Project will include passive and active techniques to prevent further dune loss and migration of existing dunes into Centerville Slough. This would occur through the construction of approximately 8,000 feet of back dune berms to reduce wave over-wash, direct drainage, and capture sand to passively build up the foredune. The functionality of the dunes will be subject to coastal storm surge and transient dune processes. As such, maintaining the dune geometry to the as-built condition may not be feasible. To the extent practical and subject to available funding, the constructed back dunes and sand fencing would be reconfigured as needed and following extreme storm event to minimize future dune breaches and wave over-wash events. Native dune species would be planted along with construction of sand fencing to capture sand to prevent migration inland on an as needed basis following ongoing removal of European beach grass in the back dune creation areas.

### 2.1.7 Vegetation Management

Vegetation management would include the as needed removal of invasive vegetation and re-planting of native species. Through the Regional Eradication Program, Dense-flowered Cordgrass (Spartina) is currently being treated in the Outer Marsh using top mowing and grinding techniques. Additional removal is anticipated in the Outer Marsh as part of the Project in addition to long-term follow-up treatment/maintenance. The methods utilized to control Dense-flowered cordgrass would utilize series of treatments implemented over time based on seasonality, weather, tides, labor availability, and other factors. Proposed treatment methods would generally be consistent with those outlined in the Humboldt Bay Regional Spartina Eradication Plan (H.T. Harvey and GHD 2013). Vegetation management would occur on an as-needed basis and pending available funding.

# 3. Monitoring

Given the current Project partnerships and anticipated regulatory requirements, this Plan has defined three types of post-construction monitoring including 1) Regulatory, 2) Performance, and 3) Maintenance. Post-construction regulatory monitoring will be required under Project permits, primarily associated with

documentation of wetland re-establishment. Performance monitoring would be conducted by NRCS in accordance with existing statute, regulation, and policy. Data will be collected using the Annual Monitoring Worksheet (form NRCS-CPA-1251) to ensure the proper implementation of planned conservation practices, components, measures, and activities and to evaluate the efficacy of the Project design as a whole or specific subcomponents thereof. Maintenance monitoring would occur to ensure the long-term operation of the Project is successful, consistent with the overall goals of the Project. Each of the three types of monitoring are further described below.

# 3.1 Regulatory Monitoring

Anticipated regulatory monitoring will be required to ensure wetland creation targets were achieved, consistent with the project permit conditions. Costs for associated with regulatory monitoring would be estimated as part of the construction budget. Regulatory monitoring typically occurs for a period of up to five years post-construction. Regulatory monitoring will focus on the success of the agricultural wetland creation area (approximately 19 acres) on TWC necessary to achieve a no-net loss of wetlands from the new berm footprint. The post-construction regulatory monitoring period will likely be a minimum of five years and will be determined in final permits from jurisdictional resource agencies. Regulatory monitoring would be completed by TWC in collaboration with project partners and grant funders.

# 3.2 Performance Monitoring

Performance monitoring will be completed annually by NRCS to monitor the condition of easement lands and the Project Area. Performance monitoring is intended to observe, document and track the outcomes of the Project site restoration and its long term stewardship. Monitoring results will be used to inform Project performance and efficacy. Performance monitoring activities will include onsite monitoring and review of conservation planning documents, and the following activities:

- Annual verification of legal ownership of the easement lands within the Project Area. Allowable
  verification methods include but are not limited to onsite visits, phone calls, emails, letters, or by
  obtaining a copy of a public record for an ownership change.
- Annual review of Stewardship Lands Imagery (SLI). SLI is defined as direct digital, high-resolution, 15cm spatial resolution ground sample distance, 4 band data that is acquired by NRCS yearly to detect qualitative changes in hydrology, vegetation, and to detect unauthorized uses such as grading, encroachment, roads, structures, parked equipment, dumping, or other unauthorized uses.
- Annual onsite monitoring requiring the review of Project planning and other conservation documents
  (e.g., conservation easement deed, restoration and management plans, compatible use
  authorizations, or other long-term agreements), an inspection of the most recent SLI (as outlined
  above) of the property, contact with the current landowner, and an onsite inspection. NRCS will notify
  the landowner prior to the onsite inspection of the easement area and provide the landowner an
  opportunity to participate.
- Review the prior year Annual Monitoring Worksheet, conservation assistance notes, and correspondence since the last monitoring event.
- Obtain information and input from other NRCS staff or partners that have been on the Project site or in contact with the landowner since the last monitoring event.

When completing onsite monitoring, NRCS will:

- Walk the entire easement perimeter to check for boundary issues, such as encroachments or trespassing.
- Verify boundary signage. Note if signs are missing or need replacing.

- Walk the interior of the easement property, focusing on visually assessing habitat types, restoration infrastructure, or other areas of concern or interest.
- Determine if installed conservation practices are being properly operated and maintained (e.g., in accordance with NRCS job sheets, O & M plans, implementation requirements, etc.). Inspect all conservation practices, such as water control structures or other restoration infrastructure to determine if management, repairs, or replacement are needed.
- Determine if planned restoration objectives are being met through a visual assessment, including if:
  - Acceptable hydrology is present.
  - o Acceptable vegetation is present.
  - Threatened or endangered species are present, proximal to the site, or if suitable habitat exists. Identify if habitat elements are being provided for these species to the extent possible.
  - Noxious plant or pest species problems exist that need to be addressed.
  - Habitat enhancements, management, or maintenance activities are necessary to improve the Project site and ensure its successful restoration and stewardship.
- Determine if the objectives of conservation planning documents for the Project are being met (e.g., restoration plans, management and grazing plans, compatible use authorizations, etc.).
- Determine if easement maintenance activities are required by NRCS.
- Determine if easement maintenance activities are required by the landowner.
- Confirm compliance with any existing compatible use authorization or other long-term agreements, as applicable.
- Review easement, restoration, and landowner objectives to determine if other compatible use agreements or long-term agreements, as applicable, are needed to meet management objectives.
- Ensure all fencing within or directly adjacent to the easement is operable and wildlife friendly.
- Document findings through photo monitoring and GPS locations of monitoring items included on the Annual Monitoring Worksheet.

# 3.3 Maintenance Monitoring

Maintenance monitoring will assess change in the above-described Project components and will be used to inform the timing and extent of maintenance actions. Maintenance monitoring will be completed by NRCS as part of its annual monitoring and site inspection. Maintenance monitoring by the landowners is considered voluntary and will be completed by the property owners or their designated agents on a minimum frequency of once per year and/or following major storm events. Although voluntary, it is fully expected that the landowners will take an active role in maintenance monitoring as part of their ongoing land stewardship and to protect their interest in the integrity and success of the Project. Maintenance monitoring is intended to support decision making and justification to conduct maintenance actions. The monitoring and maintenance activities defined in this Plan would commence upon completion of Project construction and would continue for a minimum project life, typically 20-25 years, or as required by the NRCS WRE program and drainage easement. Described below are the proposed maintenance monitoring methods and frequencies with corresponding maintenance triggers and actions.

# 4. Maintenance Monitoring, Triggers and Actions

This section defines the maintenance monitoring (type and frequency), triggers, and corresponding actions that support achievement of the Project goals. The maintenance monitoring is focused primarily on visual observations to assess and document physically observable trends. Some observations may result in need to increase monitoring frequency, while others may result in the need to take action. This will be determined through the evaluation of visual triggers. Maintenance triggers define the specific point or a range of values where monitoring data indicate that the Project may be developing along an unexpected or unfavorable trajectory and where maintenance actions are necessary to ensure that the Project goals are achieved.

Once a maintenance trigger is activated, there are a range of possible maintenance options. For example, 1) it may be determined that no maintenance action is indicated or that additional (or modified) monitoring may be required to make a decision on whether or not maintenance action is required, 2) monitoring results indicate that a maintenance action is required, or 3) careful consideration of monitoring results (likely over several years) indicate that the original goal was unrealistic or unattainable and that the goal may need to be modified. In the case of the latter this is considered a last resort and would require careful consideration and consensus by the property owners, NRCS, HCRCD, and parties to the drainage easement.

Once maintenance needs are identified, potential actions identified in Table 1 will be implemented. Parameters required for potential maintenance actions are included in Appendix A (Table A-1) and include location, work window, work duration, anticipated frequency, equipment and methods to be used, quantities and materials, and impact avoidance measures. Impact avoidance measures are consistent with mitigation measures included in the CEQA Environmental Impact Report (EIR) prepared for the Project and anticipated regulatory requirements under the Project's permits.

Potential maintenance actions listed in Table 1 are not intended to be an exhaustive list. Rather, they represent a likely range of options given the current knowledge of the system and anticipated maintenance actions. Actual actions may deviate from this list given unforeseen monitoring results and/or site performance. Additionally, the details on the timing and degree of each of these actions are equally dependent upon the monitoring results. Final decisions of a course of action will be made annually with the property owners and parties to the drainage easement. If the proposed actions are not defined in this Plan, consultation with the regulatory agencies and NRCS to ensure compliance with existing permits is recommended.

Table 1 Summary of Potential Maintenance Actions Resulting from Maintenance Monitoring

Project Component	Monitoring Method & Frequency	Maintenance Trigger	Potential Maintenance Actions <sup>1</sup> (Subject to NRCS Easement and Drainage Easement)
Setback Berm	Visual inspection annually and following extreme events to observe evidence of obvious flooding, erosion, settling or cracking to ensure that erosion from any flooding or wind generated waves are not compromising berm stability	Evidence of berm erosion, cracking, slumping, or animal borrowing holes.  Woody vegetation establishment	Repair eroded sections and employ erosion control measures (protecting bare soil, stabilizing banks, dissipating concentrated flows)  Raise or lower height of berms  Maintain or repair access ramps and road surface atop berm  Mow, graze or remove woody / weedy vegetation
Tidal Wetlands (Channels, Habitat Ridges, Lagoons)	Visual inspection annually and following extreme events supplemented as needed with topo/bathy survey cross-sections and longitudinal profiles to observe change in channel geometry, marsh plain elevation, tidal ridge geometry and vegetation cover	Channel geometry has been reduced or enlarged compared to as-built conditions  Erosion of tidal ridge  Increase or decrease in tidal circulation relative to design conditions  Vegetation composition varies from analogous estuarine habitats	Follow up assessment of rates/causes of erosion or sedimentation, evaluation of effects relating to structure and function of tidal wetland  Remove sediment / debris jams  Apply erosion control fabrics, coconut fiber rolls, or other BMPs to redirect or reduce the energy of flows over erosion area.  Regrade tidal channels, ridges and lagoons to improve tidal wetland function
Tide Gates, Culverts and Perimeter Drainage Ditch	Visual inspection annually and following extreme events to observe evidence of obvious changes compromising function from design intent or as-built conditions	Culverts and drainage ditches are plugged, damaged or are not conveying flow as designed	Remove debris / sediment in drainage ditch to as-built conditions  Excavate plugged culverts, or replace or enlarge culverts as needed  Replace or repair damaged tide gates / structures  Implement site specific erosion control BMPs to protect culvert functions while minimizing channel and wetland habitat benefits
Russ Creek and Riparian Corridor	Visual inspection annually and following extreme events supplemented as needed with topographic cross-sections and longitudinal profiles to observe change in channel geometry, vegetation cover relative to asbuilt conditions	Reduction in channel capacity, or observed sedimentation relative to as-built conditions  Streambank erosion  Vegetation hinders sediment transport capability or hydraulic conveyance	Assess channel geometry for adequate slope, cross-sectional area for maintaining channel conditions  Selected sediment removal from channel to achieve desired / design conditions  Implement site specific erosion control BMPs to repair eroded sections and employ erosion control measures  Thin or remove vegetation

Project Component	Monitoring Method & Frequency	Maintenance Trigger	Potential Maintenance Actions <sup>1</sup> (Subject to NRCS Easement and Drainage Easement)
Back Dima Barras	Visual inspection annually and following extreme events to observe change in dune geometry, vegetation cover and	Dune fencing buried / damaged  Dune is flattened or breached	Install additional sand fence to replace existing or increase height of dune Replant native dune plants for sand trapping and habitat benefit
Back Dune Berms	sand fence conditions relative to as-built conditions	Native dune plants fail to establish	Evaluate goals and need. If dune rebuilding is still needed, rebuild dune before overwash area becomes attractive Snowy Plover habitat.  Reconstruct dune using mechanical means
Vegetation	Visual observations of vegetation composition relative to past year and trends	Invasive vegetation dominates restoration area and spread threatens critical native habitat	Continue monitoring  Weed management/and or invasive species control
Management		esponding impact avoidance measures	Continued/increased frequency of monitoring until infestation is under control  Replant with desired vegetation

# 4.1 Emergency Repairs

Unique circumstances may arise that require emergency maintenance actions. The threshold for determining if these actions should occur includes these questions:

- Does the delay threaten human life or safety?
- Does the delay threaten property or risk other imminent liabilities?
- Would the delay trigger endangered species or other environmental enforcement actions?
- Emergency actions are also those actions that meet the CEQA definition of emergency:

Section 21060.3. EMERGENCY

"Emergency" means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage.

CEQA Emergency Project Exemptions (Section 15269)

The following emergency projects are exempt from the requirements of CEQA.

- a) Projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster-stricken area in which a state of emergency has been proclaimed by the Governor pursuant to the California Emergency Services Act, commencing with Section 8550 of the Government Code. This includes projects that will remove, destroy, or significantly alter an historical resource when that resource represents an imminent threat to the public of bodily harm or of damage to adjacent property or when the project has received a determination by the State Office of Historic Preservation pursuant to Section 5028(b) of Public Resources Code
- b) Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare.
- c) Specific actions necessary to prevent or mitigate an emergency. This does not include long-term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short-term but this exclusion does not apply (i) if the anticipated period of time to conduct an environmental review of such a long-term project would create a risk to public health, safety or welfare, or (ii) if activities (such as fire or catastrophic risk mitigation or modifications to improve facility integrity) are proposed for existing facilities in response to an emergency at a similar existing facility.
- d) Projects undertaken, carried out, or approved by a public agency to maintain, repair, or restore an existing highway damaged by fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide, provided that the project is within the existing right of way of that highway and is initiated within one year of the damage occurring. This exemption does not apply to highways designated as official state scenic highways, nor any project undertaken, carried out, or approved by a public agency to expand or widen a highway damaged by fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide.
- e) Seismic work on highways and bridges pursuant to Section 180.2 of the Streets and Highways Code, Section 180 et Seg.

The U.S. Army Corps of Engineers (USACE), which has jurisdiction within the channel, defines an emergency separately from CEQA and states:

An emergency situation is present where there is a clear, sudden, unexpected, and imminent threat to life or property demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property or essential public services (i.e., a situation that could potentially result in an unacceptable hazard to life or a significant loss of property if corrective action requiring a permit is not undertaken immediately).

Emergency actions / repairs shall be implemented on an as-needed basis using the best judgement of the property owners. If repair of maintenance activities are needed in response to an emergency or to avoid an emergency, regulatory agencies should be contacted as soon possible for emergency permit authorization steps.

# 5. Reporting and Documentation

Reporting and documentation for each of the three types of post-construction monitoring is summarized below.

## 5.1.1 Regulatory

As described above, monitoring of the agricultural wetland creation area on TWC is anticipated. Documentation will include methods and a summary of results submitted to the regulatory agencies for a minimum of 5 years.

#### 5.1.2 Performance

Outcomes from performance monitoring will be documented by NRCS in accordance to the Annual Monitoring Worksheet (form NRCS-CPA-1251). Reporting associated with performance monitoring will be shared with property owners and any other party identified in the specific funding agreement, if any.

#### 5.1.3 Maintenance

Maintenance monitoring and associated maintenance actions would be documented by the property owners or their agents by December 31 of each year. If maintenance activities are performed, documentation will include pre- and post-maintenance photographs with captions, identify the location(s) of maintenance actions, and describe the maintenance action taken, referencing potential maintenance actions included in Appendix A, Table A-1. Reporting will include documentation of conformity with criteria in Appendix A, Table A-1, including work window, work duration, description of equipment and methods, materials used, and avoidance measures implemented. Documentation of maintenance and associated maintenance actions will be retained by property owners for record keeping and shared with jurisdictional agencies to the extent required under Project permits.

# Appendices

# Appendix A

Potential Maintenance Actions and Impact Avoidance Measures

Table A-1 Potential Maintenance Actions and Impact Avoidance Measures

POTENTIAL MAINTENANCE ACTIONS <sup>1</sup>	LOCATION	WORK WINDOW <sup>2</sup>	WORK DURATION	ANTICIPATED FREQUENCY <sup>4</sup>	DESCRIPTION OF EQUIPMENT / METHODS	DESCRIPTION OF QUANTITIES <sup>3</sup> / MATERIAL	IMPACT AVOIDANCE MEASURE <sup>5</sup> AND BEST MANAGEMENT PRACTICES <sup>6</sup>
1 Implement site specific erosion control BMPs such as soil bioengineering and vegetative revetments	Project-wide	June 1 – October 15	0-120 days	Frequent	Heavy equipment and hand crews	0-10 Acres of Erosion Control BMPs using vegetation, soil bioengineering	FEIR MMRP BMP: a, b, k
Repair eroded sections and employ erosion control measures (protecting bare soil, stabilizing banks, armoring, geotechnical bank protection, dissipating concentrated flows)	n Project-wide	June 1- October 15	0-120 days	Moderate	Heavy equipment and hand crews	0-1,000 CY of Rock Fill 0-10,000 CY of Grading/Excavation	FEIR MMRP BMP: k, I
Remove obstructions if deemed necessary to maintain habitat and hydrologic function	Project-wide	June 1 – October 15	0-60 days	Frequent	Heavy equipment and hand crews	0-50 obstructions including debris jams, drift wood, sediment plugs (0-10,000 CY)	FEIR MMRP BMP: c, d, k
4 Sediment excavation to improve channel function	In channel, Project- wide	June 1 – October 15	0-120 days	Moderate	Heavy equipment for excavation	0-25,000 CY of Sediment and 2,000 LF of sediment Removal	FEIR MMRP BMP: d, f, k
5 Additional berm / tidal ridge breaches and/or lowering	Project-wide	June 1 – October 15	0-60 days	Infrequent	Heavy equipment for grading and excavation	0-5,000 CY of Excavation	FEIR MMRP BMP: k
Fill subsided lagoons to elevate tidal wetlands	Tidal Wetlands	June 1 – October 15	0-120 days	Infrequent	Heavy equipment for grading	0-100,000 CY of Sediment	FEIR MMRP BMP: d, f, g, k
7 Excavate plugged culverts and conduct maintenance on tide gates Replace or enlarge culverts and tides gates as needed	Within 100 feet of existing culverts	June 1 – October 15	0-30 days	Moderate	Heavy equipment and hand crews	0-10 Culverts 0-1,000 CY Excavation/Grading/Crossing 0-500 CY Rock Fill/Crossing	FEIR MMRP BMP: d, f, g, k
8 Excavation of tidal channels and/or re-fill or plugged drainage ditches to improve hydrologic connectivity	Project-wide	June 1- October 15	0-90 days	Infrequent	Heavy equipment and hand crews	0-5,000 LF of tidal channels/ditches 0-10,000 LF of berm outboard ditch	FEIR MMRP BMP: d, g, k
9 Raise height of berms without expanding footprint and/or filling wetlands	Existing berm locations only	June 1- October 15	0-120 days	Infrequent	Heavy equipment for grading	0-9,000 LF of Berm	FEIR MMRP BMP: k, I
Maintain or repair (as-built) access ramps, access roads and road atop berms	Existing berm locations and other access road ramps	June 1- October 15	0-60 days	Moderate	Heavy equipment for grading and repairs	0-1,000 CY of Road Base 0-1,000 CY of Grading	FEIR MMRP BMP: d, k, I
Provide additional revegetation with native plants	Project-wide	Year-round	0-60 days	Moderate	Hand tools and possibly small augering devices/light equipment	0-1,000 plants	FEIR MMRP BMP: k
12 Apply/place excavated sediment on Agricultural Lands	Agricultural Lands	April 1- Nov. 30	0-120 days	Moderate	Heavy/farm equipment	0-100,000 CY of Sediment	BMP: d
13 Raise/Re-configure back dunes	Over-wash areas	Year round with exception of active nesting season	0-30 days	Moderate	Heavy equipment and hand crews	0-10 Acres	FEIR MMRP BMP: m, n
14 Install Sand Fencing	Over-wash areas	Year round with exception of active nesting season	0-30 days	Moderate	Heavy equipment and hand crews	0-10 Acres	FEIR MMRP BMP: m, n
Mow, trim, thin or remove vegetation and/or invasive vegetation as necessary to maintain function per project design plans	For maintenance access and maintenance of Russ Creek channel	Year-round, with the exception of the bird breeding and nesting season between 1 March and 1 July.	0-120 days	Frequent	Herbicides, flash grazing, hand pruning tools and possibly chainsaws and brush cutter/mowing or other light equipment	0-10 Acres Trees no larger than 6" dbh	FEIR MMRP BMP: c, I, k, m
	Removal of non- native species Project-Wide	Year-round	0-120 days	Frequent		0-500 Acres	

- <sup>1</sup> Potential Maintenance Actions subject to NRCS Easement and consistency with drainage easement.
- <sup>2</sup> Work window subject the agency requirements and expanded if necessary for "Emergency" conditions.
- <sup>3</sup> Quantities given and a maximum, not-to-exceed value for any given year. Quantities beyond what is specified here would require additional regulatory review/approval.
- <sup>4</sup> Anticipated Frequency categories include: Frequent (every 1-2 years), Moderate (every 2-5 years), Infrequent (every 5-15 years), and Rare (15+ years, or not at all)
- <sup>5</sup> See FEIR MMRP
- <sup>6</sup> BMP Notes
- a Utilize onsite native soil to the extent practical
- b Design techniques and standards shall be similar to those in project plans
- c Chip debris and utilize for onsite mulch to the extent practical
- d Dispose in uplands
- e Under the direction of a qualified biologist
- f Avoid removal of mature (>10 year) riparian vegetation
- g Avoid permanent placement of fill in wetlands
- h Removal of vegetation will be limited to excavation areas
- i Per local invasive removal plans (e.g. Spartina Eradication Plan)
- j Shall not block public access
- k Conduct pre-construction surveys performed by a qualified biologist
- I Upon completion of ground disturbance activities and prior to the onset of the rainy season, all bare soil areas shall be seeded in compliance with native seed mix.
- m- Survey results must indicate that no nesting habitat for any bird species is present in the area
- n Pre-construction rare plant surveys shall be conducted in suitable rare plant habitat

# Appendix E

Mitigation Monitoring and Reporting Program

# Mitigation Monitoring and Reporting Program Humboldt County Resource Conservation District (HCRCD) - Russ Creek and Centerville Slough Restoration Project

SCH No. 2022040559

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
Aesthetics			
N/A			
Agriculture and Forestry Resources			
N/A			
Air Quality			
<ul> <li>Mitigation Measure AQ-1: Dust Control Measures During Construction         The contractor shall implement the following BMPs during construction; the BMPs shall be included as notes on final construction plans:     </li> <li>All exposed surfaces (e.g., parking areas, staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered in areas of active construction or as necessary in conjecture with other dust suppression methods (such as gravel application) to appropriately control dust. The County or NCUAQMD may require additional treatment in periods of high wind or other circumstances causing visible dust to be generated by the construction site.</li> <li>All vehicle speeds on unpaved roads shall be limited to 15 mph, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures.</li> <li>All haul trucks transporting soil, sand, or other loose material off-site on public roads shall clean all side boards and headboards of material and be adequately wetted and covered.</li> <li>Use of mud rumbler mats will be required to reduce off-site tracking of mud and dirt. All visible mud or dirt track-out onto adjacent paved public roads shall be removed using wet power vacuum street sweepers at least once per day, as necessary. The use of dry power sweeping is prohibited.</li> <li>All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.</li> </ul>	HCRCD and HCRCD's contractor	Reporting actions – Verify requirements are included in final plans and specifications  Schedule – Pre and during construction, check jobsite compliance as necessary	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
<ul> <li>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.</li> </ul>			
<ul> <li>All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications.</li> </ul>			
<ul> <li>Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The NCUAQMD's phone number shall also be visible to ensure compliance with applicable regulations.</li> </ul>			
Biological Resources			
<ul> <li>Mitigation Measure BIO-1: Avoidance, Minimization, and Mitigation for Tidewater Goby         To mitigate for direct and indirect impacts on Tidewater Goby, the following avoidance and minimization measures will be incorporated into the Project:     </li> <li>Construction activities will be phased and conducted in a sequence that minimizes impacts to Tidewater Goby. Construction also will be limited to dry-season work windows (June 15 through October 15) to reduce the amount of goby habitat affected and minimize the impact on water quality. Although dry-season work windows may coincide with spawning and larval development, the footprint of available Goby habitat may be smaller because summer conditions typically are drier, reducing the area in which Tidewater Goby may be present. In addition, conducting work during the dry season will minimize the impact on water quality from sediment generated by construction activities and from spills that could occur during construction and maintenance of the Project (e.g., oil, fuel, hydraulic fluid).</li> </ul>	HCRCD and HCRCD's biologist and contractor	Reporting actions –Verify completion and documentation of fish relocation, if necessary; verify protection measures are implemented  Schedule – During construction	
Phase Project construction so Tidewater Goby can be relocated to sites in the Project Area but away from areas targeted for restoration. During excavation, Tidewater Goby may be crushed by equipment or debris or may be removed from channels or marshes unintentionally by equipment. Mortality can be minimized by capturing and relocating Tidewater Goby out of construction areas. Relocating Tidewater Goby from areas targeted for restoration to habitat outside of the immediate restoration area before construction begins is intended to protect individual fish; however, improper capture and handling may result in injury or mortality. In addition, Tidewater Goby that need to be relocated should be taken to areas that have suitable habitat (e.g., where Tidewater Goby are known to thrive). Therefore, the capture and handling of Tidewater Goby will be conducted by qualified biologists, and suitable habitats for relocation will be identified before construction begins.			
Where dewatering needs to occur, all pump intakes will be screened with 1.6 mm (1/16 inch) screen, and only qualified biologists will conduct Goby rescue during dewatering.		Annahina Daninah   Mikimakina Manikarina and	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
Passerine Birds and Avian Species of Special Concern  To mitigate for direct and indirect impacts on nesting birds, the following avoidance and minimization measures will be incorporated into the Project:  Clearing of shrubs or other vegetation, if necessary for construction or maintenance, shall be conducted during the fall and/or winter months from August 16 to March 14, outside of the active nesting season for migratory bird species (i.e., March 15 to August 15) if feasible. No trees will be removed for this Project. If vegetation removal or ground disturbance cannot be confined to the non-breeding season, the applicant shall have a qualified biologist conduct preconstruction surveys within the impact area for ground disturbance, vegetation removal and/or maintenance activities, to check for nesting activity of migratory, raptors, and special-status bird species. The biologist shall conduct the preconstruction surveys within the 7-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance and vegetation removal work lapses for 15 days or longer during the breeding season, a qualified biologist shall conduct a supplemental avian preconstruction survey before Project work may be reinitiated.  If active nests are detected within the construction or maintenance (operation) footprint or within 500 feet of construction activities, the applicant shall flag the buffers that are supporting breeding and will not begin ground disturbing work or vegetation removal inside the buffers until the nests have fledged. Construction activities shall avoid nest sites until the biologist determines that the young have fledged, or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers will be implemented if deemed appropriate in coordination with CDFW. In general, the buffer for common species would be a minimum of three feet, the buffer for sensitive species would be 300 feet, and the buffer	HCRCD and HCRCD's biologist and contractor	Reporting actions – Verify completion and documentation of surveys; verify disturbance buffers and protection measures are implemented Schedule – Preconstruction and during construction if needed	
Mitigation Measure BIO-3: Avoid, Minimize, and Mitigate for Potential Impacts to Western Snowy Plover  To mitigate for direct and indirect impacts on Snowy Plover, the following avoidance and minimization measures will be incorporated into the Project:  Construction and maintenance activities associated with the construction of Back Dune Berms would be conducted between September 1 and March 1, outside of the plover nesting season. The area of impact, defined as permanent or semi-permanent change in elevation or conversion to > 30 percent vegetation cover, would also occur outside of USFWS-designated critical habitat for Snowy Plover. This would result in no net loss nor temporal loss of suitable Western Snowy Plover breeding habitat.	HCRCD and HCRCD's biologist and contractor	Reporting actions – Verify that protection and avoidance measures are in final specifications; verify protection measures are implemented  Schedule – Preconstruction and during construction if needed	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
Mitigation Measure BIO-4: Mitigate for Potential Impacts to Northern Red-legged Frog and Western Pond Turtle  Although direct impacts to Northern Red-legged Frog breeding habitat are not anticipated because the duckponds will remain in freshwater conditions, measures for this species are included because individual frogs may disperse for considerable distances and could enter construction areas.  A qualified biologist will perform a pre-construction survey for the Northern Red-legged	HCRCD and HCRCD's biologist and contractor	Reporting actions – Completion and documentation of surveys, if necessary; verify protection measures are implemented Schedule – Pre-	
Frog, and Western Pond Turtle within seven days prior to commencement of ground disturbance. The survey shall be limited to within 50 feet of suitable habitat within the Project footprint. Suitable habitat would be determined by the qualified biologist. The qualified biologist would inspect any work areas containing fresh surface water (not including puddles resulting from rainfall) to ensure tadpoles or frogs are not present. If they are present, the qualified biologist would implement a rescue and relocation operation to move any tadpoles or frogs to a safe location in nearby suitable habitat.		construction and during construction	
In the event that a Northern Red-legged Frog or Western Pond Turtle is observed in an active construction zone, the contractor shall halt construction activities in the area and the frog and/or turtle shall be moved to a safe location in similar habitat outside of the construction zone.			
Construction within areas of standing fresh water shall be limited to the period of the year between July 1 and October 30 to avoid disturbance to breeding frogs unless a qualified biologist evaluates the areas of standing water and determines they are not suitable habitat, or the absence of eggs and tadpoles is confirmed.			
Mitigation Measure BIO-5: Mitigate for Potential Impacts to Salmonid Species  To mitigate for direct and indirect impacts on salmonid species, the following avoidance and minimization measures will be incorporated into the Project:	HCRCD and HCRCD's biologist and contractor	Reporting actions –Verify completion and documentation of fish	
The in-water construction and maintenance work window will be limited to June 15th through October 15th to avoid or minimize impacts to juvenile salmonids. Before potential de-watering activities begin in creeks or channels within the Project Area, the qualified Biologist shall ensure that native aquatic vertebrates and larger invertebrates, if feasible, are relocated out of the construction footprint into a flowing channel segment by a qualified fisheries biologist. In deeper or larger areas, water levels shall first be lowered to manageable levels using methods to ensure no impacts to fisheries and other special status aquatic species. A qualified fisheries biologist or aquatic ecologist shall then perform appropriate seining or other trapping procedures to a point at which the biologist is assured that almost all individuals within the construction area have been caught. These individuals shall be kept in buckets with aerators to ensure survival. They shall then be relocated to an appropriate flowing channel segment or other appropriate habitat		relocation, if necessary; verify protection measures are implemented Schedule – During construction	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
as identified by the qualified Biologist in consultation with NOAA Fisheries and CDFW. Federally threatened salmonid species that occur within the Project Area include natal or non-natal Coho Salmon, Steelhead, and Chinook Salmon.			
Mitigation Measure BIO-6: Mitigate Impacts to Sensitive-Listed Plant Species  The following mitigation is addressed collectively for all special status plant species.  Significant impacts to special-status plant species present or likely to be present in the Project Area shall be avoided or minimized by complying with the following requirements for all special status plant species:  Pre-construction and maintenance surveys: Potential habitat for special-status plant species shall be surveyed in appropriate seasons prior to temporary road construction, excavation/dredging, fill, drainage, or flooding activities associated with Project construction and maintenance. Surveys shall be performed by a qualified field botanist. Populations shall be mapped and flagged if the population is located adjacent to or within construction areas and avoidance is feasible.  The locations of any special status plant populations to be avoided shall be clearly	HCRCD and HCRCD's biologist and contractor	Reporting actions – Completion and documentation of surveys, verify requirements are in final specifications; verify applicable mitigation and monitoring is implemented Schedule – Pre- construction, during construction, and post- construction	
identified in the contract documents (plans and specifications).  Mitigation Measure BIO-7: Mitigate Impacts to Beach Layia	HCRCD and HCRCD's	Reporting actions –	
The following measures shall be implemented to mitigate impacts to the federally listed beach layia during construction and operation/ongoing maintenance of the Project, primarily associated with the temporary haul route to be placed between the back dune and the Outer Marsh.	biologist and contractor	Completion and documentation of surveys; verify requirements are in final specifications; verify mitigation and monitoring is	
A pre-construction survey shall be conducted between March 1 and July 31, prior to the beginning of ground disturbing work to verify the extent of known beach layia occurrences and to identify new occurrences in the area of the proposed temporary haul route. The route shall be placed a minimum of 10 feet from any beach layia occurrences to the extent feasible. At the beginning of construction, flagging or exclusion fencing shall be installed around all known occurrences of beach layia within 20 feet of construction limits. Locations of fencing shall be identified and flagged by a qualified biologist and installed while the biologist is present. The fencing shall be inspected weekly for the duration of construction to ensure that the fencing remains installed properly. Direct impacts to beach layia shall be avoided.		implemented  Schedule – Pre- construction, during construction, and post- construction	
If any new or existing occurrences of beach layia cannot be avoided by the placement of the temporary haul route, then mitigation will be employed that includes one or more of the following mechanisms: seed collection from the Project Area and/or nearby known occurrences so that seeds can be dispersed into the area of the temporary haul route post-construction or replacement plants can be grown out at a nursery and replaced at a stable portion of the Project Area (2:1 planting ratio), plant relocation, and/or preparation			

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
of a sensitive species management plan (SSMP) that provides further details about the above options in cooperation with USFWS as to which mechanism(s) are preferred option(s) at the time of impact. The triggering mechanism for seed banking would be if this plant species is identified within the footprint of the proposed temporary haul route and cannot be avoided. If an SSMP is deemed appropriate by jurisdictional agencies, the report would lay out specific timing and details of seed collection, mitigation site identification (within the Project Area), substrate preparation, monitoring and maintenance. If replanting is employed, a 2:1 planting ratio includes built in overplanting in order to meet success criteria and no net loss.			
Mitigation Measure BIO-8: Mitigate Impacts to Sensitive Listed Habitats Through Avoidance and Re-establishment  Intact Dune Mat vegetation will be protected during construction primarily by preconstruction surveys and avoidance. A qualified biologist will survey sandy habitats in and around ground disturbance and staging areas for intact Dune Mat vegetation. Dune Mat vegetation will be flagged and avoided by all vehicles and personnel. If high quality Dune Mat cannot be avoided, it will be mitigated at a ratio of no less than 1:1 in a suitable location.	HCRCD and HCRCD's biologist and contractor	Reporting actions – Completion and documentation of surveys Schedule – Pre- construction	
Mitigation Measure BIO-9: Mitigate Impacts to Sensitive Listed Habitats Through Control of Invasive Species  In order to reduce the likelihood of dense-flowered cordgrass (Spartina) colonizing restored tidal marsh, existing populations in and adjacent to (north of the tide gates) the Project footprint shall be controlled prior to construction using manual, mechanical, and/or approved chemical methods, and in compliance with appropriate methods analyzed and disclosed in the Regional Invasive Spartina Management Plan and the associated EIR (HTH 2013b). During the operation period of the Project, removal of cordgrass would be conducted under the authority of the Regional Invasive Spartina Management Plan and the associated PEIR.  All vehicles and equipment would be required to be cleaned and weed-free before entering the Project Area.	HCRCD and HCRCD's biologist and contractor	Reporting actions – Verify requirements are in final specifications Schedule – During construction	
Mitigation Measure BIO-10: Mitigate Temporary and Short-term Impacts to Wetlands Through Construction Minimization and Avoidance Measures  At least 0.85 acre of uplands will be seeded with hydrophytic vegetation (FAC, FACW, OBL ratings according to the WMVC wetland plant list) to create one-parameter wetlands in the Project Area. Up to 0.41 acre will be seeded around the margin of the upland pasture and up to 0.44 acre will be seeded on the east side of the new levee (Figure 3.4-5). Straw mulch will be placed on seeded areas.	HCRCD and HCRCD's biologist and contractor	Reporting actions – Verify requirements are in final specifications; verify completion and documentation of training; verify applicable compensatory mitigation is	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
The locations of sensitive habitats including wetlands to be avoided shall be clearly identified in the contract documents (plans and specifications).  Before clearing and grubbing commences, disturbance areas shall be flagged to clearly define the limits of the work area. These areas shall be clearly identified on the contract documents (plans and specifications).  Selected contractors shall sign a document stating that they have read, understand, and agree to the required resource avoidance measures, and shall have construction/maintenance crews participate in a training session on sensitive resources.  A qualified biologist shall be on-site to observe activities, as appropriate, when construction or maintenance in or adjacent to sensitive habitat including wetlands occurs. Site disturbance shall be minimized to the greatest extent feasible by using existing disturbed areas for access roads and staging areas and concentrating the area of disturbance associated with restoration actions within the minimum space(s) necessary to complete the Project. Where feasible, temporary measures for access or construction, such as the use of temporary tracks or pads, shall be used to minimize impacts.  Revegetation activities shall take place at seasonally appropriate times based on habitat types, and as soon as feasible following habitat disturbance, to restore disturbed areas to pre-Project conditions or better.		implemented; check jobsite compliance as necessary  Schedule – Pre- construction, during construction, and post- construction	
Cultural Resources	HODOD HUODODI		
If cultural or historic-era resources (for example: chipped or ground stone, historic debris, building foundations, or bone) are encountered during construction activities, work shall be stopped within 20 meters (66 feet) of the discovery, per the requirements of CEQA (Title 14 CCR 15064.5 (f)). Project representatives shall be immediately notified and work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action. The qualified archaeologist shall evaluate the discovery and, in consultation with the landowner and lead agency, develop a plan for treatment of the resources that is deemed appropriate and feasible. Such treatment may include avoidance, curation, documentation, excavation, preservation in place, or other appropriate measures. If the archaeological resources are Native American, representatives of the appropriate culturally affiliated tribe shall also be enlisted to help evaluate the find and suggest appropriate treatment.	HCRCD and HCRCD's archaeologist and contractor	Reporting actions – Verify requirements are in final specifications; documentation of inadvertent discoveries, if any Schedule – During construction	
litigation Measure CR-2: Protocols for Inadvertent Discovery of Human Remains  If human remains are discovered during project construction, work will stop at the discovery location, within 20 meters (66 feet), and any nearby area reasonably suspected	HCRCD and HCRCD's archaeologist and contractor	Reporting actions – Verify inclusion of language in final plans and specifications;	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
to overlie adjacent to human remains (Public Resources Code, Section 7050.5). Project representatives shall be immediately notified. The Humboldt County coroner will be contacted to determine if the cause of death must be investigated. If the coroner determines that the remains are of Native American origin, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (Public Resources Code, Section 5097). The coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in Public Resources Code, Section 5097.98.		documentation of inadvertent discoveries, if any Schedule – Pre and during construction	
Energy			
N/A			
Geology and Soils			
Mitigation Measure GEO-1: Implement Recommendations in the Geotechnical Report  The Humboldt County Resource Conservation District shall ensure that the Project is designed to comply with the recommendations in the Project's geotechnical report (LACO 2022) to ensure seismic stability, implementation of recommendation specific to grading and excavation, erosion control protections, and adherence to the California Building Code (CBC). The geotechnical recommendations are proposed to be incorporated in the final plans and specifications and implemented during construction. Professional inspection by a qualified engineer or geologist of foundation and excavation, earthwork and other geotechnical aspects of site development shall be performed during construction in accordance with the current version of the CBC.	HCRCD and Engineer of Record	Reporting actions – Verify requirements are included in final plans and specifications  Schedule – Preconstruction	
Mitigation Measure Spartina PEIR WQ-6: Designate Ingress/Egress Routes  Temporary ground disturbance associated with site ingress/egress, staging, stockpiling, and equipment storage areas could occur in areas outside and adjoining work areas. Where areas adjacent to staging and stockpile areas are erosion prone, the extent of staging and stockpile shall be minimized by flagging their boundaries. An erosion/sediment control plan shall be developed for erosion prone areas outside the work area where greater than 0.25 acre (0.1 hectare) of ground disturbance may occur as a result of ingress/egress, access roads, staging and stockpile areas. The erosion/sediment control plan shall be developed by a qualified professional and identify BMPs for controlling soil erosion and discharge for Project-related contaminants. The erosion/sediment control plan shall be prepared prior to any ground disturbing activities	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Develop erosion and sediment control plan; check jobsite compliance as necessary Schedule – Pre and during construction	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
and implemented during construction (H.T. Harvey & Associates and GHD 2013, page 128).			
Mitigation Measure GEO-2: Protect Paleontological Resources during Construction Activities  If fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities within 50 feet (15 meters) of the find shall be stopped. The HCRCD and property owners shall be immediately notified, and a professional paleontologist shall be retained to evaluate the potential resource, assess the nature and importance of the find, and document the discovery as needed. Based on the scientific value or uniqueness of the find, the HCRCD may allow work to continue after the paleontologist has recorded the find or may recommend salvage and recovery of the material if it is determined that the find should, but cannot, be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. The HCRCD will work with a qualified paleontologist to determine the appropriate final disposition for any fossils found onsite. The final disposition of any paleontological resources recovered on state lands under the jurisdiction of the State Lands Commission must be approved by the State Lands Commission.	HCRCD and HCRCD's construction contractor	Reporting actions – Document inadvertent discovery, if any, and notify State Lands Commission as needed Schedule – During construction	
Greenhouse Gas Emissions			
N/A			
Hazards and Hazardous Materials			
Mitigation Measure Spartina PEIR HHM-1: Worker Injury from Accidents Associated with Use of Manual and Mechanical Equipment  A health and safety plan shall be developed to identify and educate workers engaged in activities that involve heavy equipment associated with construction or invasive plant management activities under the Project. Appropriate safety procedures and equipment, including hearing, eye, hand and foot protection, and proper attire, shall be used by workers to minimize risks associated with use of heavy equipment. Workers shall receive safety training appropriate to their responsibilities prior to engaging in such work.	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Develop health and safety plan; verify completion and documentation of training; check jobsite compliance as necessary Schedule – Pre and during construction	
Mitigation Measure Spartina PEIR HHM-3: Worker Health Effects from Herbicide Application  Appropriate health and safety procedures and equipment, as described on the herbicide or surfactant label, including personal protective equipment (PPE) as required, shall be used by workers to minimize risks associated with herbicide application methods. Mixing	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Check jobsite compliance as necessary Schedule – During construction	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
and applying herbicide will be done in accordance with label directions and shall be conducted or supervised by certified or licensed herbicide applicators.			
Mitigation Measure Spartina PEIR HHM-4: Avoid Health Effects to the Public and Environment from Herbicide  For areas targeted for application of herbicide that are within 500 feet (152 meters) of	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Prepare a herbicide drift management plan; verify public notification as needed Schedule – During construction	
human sensitive receptors (i.e., houses, schools, hospitals), prepare and implement a herbicide drift management plan to reduce the possibility of chemical drift into populated areas. The Plan shall include the elements listed below. To minimize risks to the public, mitigation measures for herbicide application methods related to timing of herbicide use, area of treatment, and public notification, shall be implemented by entities engaging in treatment activities as identified below:			
Herbicide will be applied in accordance with the manufacturer's label.			
<ul> <li>CDFW will coordinate with the County Agricultural Commissioner to identify and avoid impacts to any nearby sensitive areas (e.g., schools, hospitals) that require notification prior to herbicide applications.</li> </ul>			
<ul> <li>CDFW will identify nearby sensitive habitat and, where feasible, establish buffer zones to avoid affecting sensitive receptors.</li> </ul>			
Herbicide will be applied using the coarsest droplet size possible that maintains sufficient plant coverage while minimizing drift into adjacent areas.			
Herbicide shall not be applied when winds exceed 10 miles per hour or when inversion conditions exist (consistent with the herbicide labels); or when wind could carry spray drift into inhabited areas. Refer to Section 3.3 (Air Quality) for discussion on inversions.			
Public access to treatment sites will be restricted during treatment windows.			
No surfactants containing nonylphenol ethoxylate will be used.			
Hydrology and Water Quality			
Mitigation Measure HWQ-1: Manage Construction Storm Water	Reporting actions – Submit Notice of Intent to the NCRWQCB; prepare a Storm Water Pollution Prevention Plan (SWPPP) or Project specific Water Pollution Control Plan; stormwater monitor reporting as needed; check		
The Project and operations shall obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. In compliance with the NPDES requirements, a Notice of Intent (NOI) shall be prepared and submitted to the NCRWQCB, providing notification and intent to comply with the State of California General Permit. In addition, a Project specific Water Pollution Control Plan or functional equivalent will be prepared for pollution prevention and control prior to initiating site construction activities. The Project specific Water Pollution Control Plan shall identify and specify the use of erosion sediment control			

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
measures for avoidance of pollutants in stormwater runoff during construction related activities, and will be designed to address water erosion control, sediment control, off-site tracking control, wind erosion control, non-stormwater management control, and waste management and materials pollution control. A sampling and monitoring program shall be included in the Project specific Water Pollution Control Plan that meets the requirements of the NCRWQCB to ensure the included measures are effective. A Qualified Storm Water Pollution Prevention Plan Practitioner shall oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensuring overall compliance.		jobsite compliance as necessary Schedule – Pre and during construction	
The operations associated with the Monitoring and Maintenance Plan include but not limited to activities associated with sediment management and channel maintenance are not anticipated to require preparation and implementation of the Project specific Water Pollution Control Plan as per section I (C) of Order No. 2009-0009 DWQ ,which lists activities that are not covered under the general permit: (24) Routine maintenance to maintain the original line and grade, hydraulic capacity, or original purpose of the facility and (25) Disturbance to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and levelling and soil preparation.			
Mitigation Measure HWQ-2: Implement Contractor Training for Protection of Water Quality  All contractors performing demolition, construction, grading, operations or other work that could cause increased water pollution conditions at the site (e.g., dispersal of soils) shall receive training regarding the environmental sensitivity of the site and need to minimize impacts prior to the commencement of ground disturbing activities. Contractors also shall be trained in implementation of stormwater measures included in the Project specific Water Pollution Control Plan and other Project permits for protection of water quality. The training shall be provided by a qualified Project engineer, water quality specialist, and/or biologist.		Reporting actions – Verify completion and documentation of training Schedule – Immediately prior to construction	
Mitigation Measure HWQ-3: In-Stream Erosion and Water Quality Control Measures During Channel Excavation and Operations  Where excavation occurs to widen, deepen, construct, or maintain Project channels, ditches, drainage structures, and gated culverts, in-stream erosion and turbidity control measures shall be implemented. These measures include installation and maintenance of in-stream turbidity curtains, cofferdams and silt-fence along channel banks as specified in Project designs, specifications and erosion control plans. Additionally:  Sufficient erosion control supplies will be maintained on site at all times, available for		Reporting actions – Verify requirements are in final specifications; verify completion; check jobsite compliance as necessary Schedule – During construction	
prompt use in areas susceptible to erosion during rain events;  - Disturbance of existing vegetation will be minimized to only that necessary to complete the work;			

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
<ul> <li>The contractor will make adequate preparations, including training and providing equipment, to contain oil and/or other hazardous materials spills;</li> <li>Dewatering operations will be conducted where needed, with water disposed of appropriately (e.g., allowed to settle in an isolated area, or discharged to an upland location where it will not discharge back to surface waters);</li> <li>Vehicle and equipment maintenance will be performed off-site whenever practical; and</li> </ul>			
<ul> <li>All erosion and sediment control measures shall be maintained until disturbed areas are stabilized.</li> </ul>			
Mitigation Measure Spartina PEIR WQ-1: Managed Herbicide Control  Herbicides shall be applied directly to plants and at low or receding tide to minimize the potential application of herbicide directly on the water surface, as well as to ensure proper dry times before tidal inundation. Herbicides shall be applied by a certified applicator and in accordance with application guidelines and the manufacturer label. The Control Program shall obtain coverage under the statewide General NPDES Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States.	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Verify requirements are in final specifications  Schedule – Pre and during construction	
Mitigation Measure Spartina PEIR WQ-2: Minimize Herbicide Spill Risks  Herbicides shall be applied by or under the direct supervision of trained, certified or licensed applicators. Herbicide mixtures shall be prepared by, or under the direct supervision of trained, certified or licensed applicators. Storage of herbicides and surfactants on or near project sites shall be allowed only in accordance with a spill prevention and containment plan approved by the NCRWQCD; on-site mixing and filling operations shall be confined to areas appropriately bermed or otherwise protected to minimize spread or dispersion of spilled herbicide or surfactants into surface waters.	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Verify requirements are in final specifications  Schedule – Pre and during construction	
Mitigation Measure Spartina PEIR WQ-3: Minimize Fuel and Petroleum Spill Risks  Fueling operations or storage of petroleum products shall be maintained off-site, and a spill prevention and management plan shall be developed and implemented to contain and clean up spills. Transport vessels and vehicles, and other equipment (e.g., mowers) shall not be serviced or fueled in the field except under emergency conditions; hand-held gas-powered equipment shall be fueled in the field using precautions to minimize or avoid fuel spills within the marsh. For example, gas cans will be placed on an oil drip pan with a PIG® Oil-Only Mat Pad placed on top to prevent oil/gas contamination. Only vegetable oil-based hydraulic fluid will be used in heavy equipment and vehicles during Spartina control efforts. When feasible, biodiesel will be used instead of petroleum diesel in heavy equipment and vehicles during Spartina control efforts. Other, specific BMPs shall be specified as appropriate to comply with the Basin Plan and the other applicable Water Quality Certifications and/or NPDES requirements.	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Verify requirements are in final specifications  Schedule – Pre and during construction	

Mitigation Measures (MM)	Monitoring Responsibility	Monitoring/Reporting Action & Schedule	Verification (Initials/Date)
Mitigation Measures Spartina PEIR WQ-7: Removal of Wrack  Tidal flushing is anticipated to alleviate wracking throughout the Project Area. During site specific planning, tidal circulation will be visually assessed. In areas with relatively low tidal circulation, it will either be assumed that dissolved oxygen levels are depressed or monitoring will be conducted to determine if dissolved oxygen levels are depressed. In treatment areas located within or adjacent to waters known or expected to have depressed dissolved oxygen, if wrack greater than ¼ acre is generated during Project implementation, the wrack shall be removed from the treatment areas subject to tidal inundation or mulched finely and left in place.	HCRCD and HCRCD's Spartina removal contractor	Reporting actions – Verify removal of wrack in qualifying areas Schedule – During construction	
Land Use and Planning			
N/A			
Noise			
N/A			
Public Services			
N/A			
Recreation			
N/A			
Transportation			
N/A			
Tribal Cultural Resources			
See Cultural Resources			
Wildfire			
N/A			